# ESSIF-Lab - Verifier Universal Interface - interop WG

### Relevant links

- Participants spreadsheet
- Universal Verifier APIs (draft)
  - o <u>Documentation on github</u>
  - o <u>Documentation on gitlab</u>
- Related specifications used in this draft:
  - o <a href="https://identity.foundation/presentation-exchange/">https://identity.foundation/presentation-exchange/</a>
  - https://identity.foundation/credential-manifest/
  - https://w3c-ccg.github.io/did-resolution/
  - https://w3c-ccg.github.io/vp-request-spec/
  - https://github.com/hyperledger/aries-rfcs/tree/master/concepts/0430-machi ne-readable-governance-frameworks

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# Feb 7th, 2022

### **Attendees**

- José San Juan (GATACA)
- Peter Langenkamp (TNO)
- Niels Klomp (Sphereon)
- Jan Lindquist (iGrant.io) Just to say goodbye

- Updates on relevant progress?
- Connections to DIF. DIF F2F Event?
- Feedback on VUI specs/library

- VUI repo renamed
  - All links and examples have been fixed
  - o Links in mail and documents have changed -> Gataca is fixing it
- Data Agreements pushed to DIF
  - o Jan will stop joining this meetings. Effort keep on DIF
- DIF is tracking VUI.
  - Donation in progress
  - o Expect to present VUI on DIF's F2F workshop depend on timing
- No updates on PEX or Data Agreements
- IssuerResolution:
  - Interesting feedback on SSI Governance by Rieks on Essiflab meeting
  - Reviewing ssi governance guidelines focused on scalability
  - o Implementation of Verifiable Attestations in progress
- No feedback on VUI Specs or Library received yet
  - Broken links
  - When moving to DIF, much noise may be received
  - Useful to get related feedback beforehand

### Agreements / Tasks

- Send new mail with fixed links to repo
- Review spec and provide feedback

# Jan 20th, 2022

### **Attendees**

- José San Juan (GATACA)
- Peter Langenkamp (TNO)
- Niels Klomp (Sphereon)
- Jan Lindquist (iGrant.io)

- Progress update since last meeting (if any)
  - PEX lib 1.0.2 working on React Native!
- Presentation of vui core library
- Presentation of ReSpec Draft:
  - o PEX
  - o Data Agreement
  - o Issuer Resolution

- APIs:
  - PEX+Data Agreement
  - IssuerResolution

- Sphereon release of PEX stable version: 1.0.0-1.0.2
  - Compatibility of PE v1 model and v2 with credential schemas
  - Support of challenges
- Discussion on licensing: not use of GPL in the lib because it would force devs to open their libraries
- Data agreement: Reviewed wg proposal with Juan Caballero
  - Kantara Demo on Feb 16th
- Presentation on the VUI updated Draft:
  - Quick overview on the rationale behind each interface
    - PEX extensions:
      - Inclusion of data agreements
      - Support for proofing
      - Support for subject and holder binding
    - Data Agreement:
      - ADA/Kantara consent receipts data model adaptation
      - Proposed lifecycle management mechanisms
  - Open source golang implementation available in lib
  - Could be shared under DIF as implementation for data agreements
  - Remaining work:
    - IR implementation (with possible draft corrections) depending ebsi
    - Data contexts not provided
    - Adaptation of VUI PEX to dif PEv2
    - Reviews, corrections

### Agreements / Tasks

- DIF meetings suggested to be on Thursday's at 14:00
- Send an email to request feedback on the interfaces
- Provide feedback either by email or issues

### Jan 5th, 2022

#### **Attendees**

- José San Juan (GATACA)
- Niels Klomp (Sphereon)
- David Chadwick (Crossword Cybersecurity)
- Irene Hernandez (GATACA)
- Jan Lindquist (iGrant.io)

### Agenda

• Progress update since last meeting (if any)

#### Minutes

- Presentation Exchange:
  - GATACA finished implementation and currently testing Sphereon's PE library and has integrated SIOPv2 to pass WCT, but WTC endpoints are down
  - Expectation for GATACA is to have documentation ready next week.
  - Added PEX v2 support as part of the 0.6.X release of the library, which contains feature detection to determine whether v1 or v2 should be used (explicit v1 and v2 support is also available)
  - Sphereon has its REST API almost complete
  - o David presenting DIF PE v3 simplified version
    - Optional/mandatory fields simplified to allow non-selective disclosure
    - Overview of support of PE protocols and versions over DID-SIOP (PE v1) and DIDComm (WACI -> Which version of PE?)
- Data Agreement
  - No feedback received from DIF on Work Item proposal
  - Goals to consider: avoid / simplify dependency of communication protocol to not have the same issues as happening with DIF PE
- Issuer Resolution:
  - o Implemented core services from EBSI
  - Struggling to match EBSI reqs with agreed specs/API

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### Agreements / Tasks

- Gataca to Review Work item presentation document for DIF
- Work on the interoperability reports for the essiflab

### Dec 23th, 2021

### **Attendees**

- José San Juan (GATACA)
- Hafeez ur Rehman (Sphreon)
- Niels Klomp (Sphereon)
- Jan Lindquist (iGrant.io)

- Updates on implementations/definitions progress. Issues?
- Check on testing
- Wishing happy holidays to participants

- Data Agreement
  - After presentation (video available) w3C accepted work item
  - Jan is working on the work item presentation document
    - https://docs.google.com/document/d/1w3iQE2wtMWcfDnMhn9TRbd-\_zcf 78vXA9BbM\_xJ9eBY/edit?usp=sharing
    - Goals, deliverables
    - Gataca to collaborate (offline discussion)
    - Presentation to DIF on January 19th
  - Demonstration to Kantara on next monthly call (choice between Jan 19th/Feb 16th, 18 CET)
- Linkage of Data Agreements and Presentation Exchange:
  - Gataca is implementing now
  - Spec is being built to explain the connection
- Presentation Exchange:
  - Sphereon is working on allowing both v1 and v2 version of DIF PE
  - Working on Did-siop next phase
- Issuer Resolution:
  - Advances on the presence of Issuers inside the Registry. Gataca has introduced some demo issuers to test with
  - o Currenty working with the relation of those issuers with the credential schemas

### Agreements / Tasks

- Gataca: Share EBSI DID SIOP spec with the group
- Move next meeting to Wednesday Jan 5th

# Dec 9th, 2021

### **Attendees**

- José San Juan (GATACA)
- Hafeez ur Rehman (Sphereon)
- Irene Hernandez (GATACA)
- Peter Langenkamp (TNO)
- Oskar van Deventer (TNO)
- Jan Lindquist (iGrant.io)

- Data Agreement presentation in DIF (Friday 10th) with Demos
- Checkup on updates on each of the working packages

- The Sphereon's primary contact can be updated: Hafeez will be the main contact. And Niels will be the fall back contact.
- Intro to presentation and demo to DIF by Jan
  - o Irene shows overview of Gataca's demo
- Data Agreement working package will be disaggregated from the repo from IGrantio due to their deliverables
  - A new working package is being created
  - Gataca is started implementing the API using the multipurpose data model.
     IGrantios implementation will be slightly different not to alter their existing implementation.
  - o The documentation will be available at most by the end of essif lab
- Issuer resolution:
  - Implementation ongoing from GATACA
  - Blocked by EBSI Registries
- Presentation Exchange:
  - Sphereon:
    - Release 0.5.1 Supporting singing
    - BBS+ support
    - PE-JS\_Consumer Project (example) ... Updated
    - PE-MS (REST API) ... 1st few APIs are already merged.
    - PE-OpenAPI (Swagger specs) ... DIF V2 ... Update models in progress.
    - Interop Test in GitLab Repo ... This may need a slight update. This will probably be done at the start of next year.
  - o GATACA:
    - Currently implementing SIOPv2

### Agreements / Tasks

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### Nov 25th, 2021

### **Attendees**

- José San Juan (GATACA)
- Peter Langenkamp (TNO)
- Jan Lindquist (IGrant.io)

### Agenda

Checkup on updates

- Data Agreement presentation to DIF on Monday December 6th (16:00 pm)
  - Pending discussions on going:
    - Multiple purposes on DID
    - Showcase to demonstrate
    - Signing protocol of the data agreement
  - Meeting to be hold the next day (friday 26th)
- Presentation Exchange:
  - Possible change for phase v2: switch DIDComm for DID SIOP
  - Drawbacks:
    - DIDComm provides compatibility with Hyperledger Aries
    - DID SIOP implementation (v1 vs v2) may be still evolving
  - o Pros:
    - DID SIOP compatibility with EBSI Framework
    - Small increment for the next phase (almost exclusively relying on DIF PE Data model)
  - Currently analyizing what the show case could be and how it could be tested to decide if it should be included in phase 2 and change the original roadmap
- Jan: suggest to check on IGrantio DID Method to support DIDComm
- Peter: In the next weeks documentation on how to build a connector on TNO will be made public

### Agreements / Tasks

• No specific agreements

# Nov 11th, 2021

#### **Attendees**

- Irene Hernandez (GATACA)
- Samuel Gómez Escalante (GATACA)
- Joris Nijman (Sphereon)
- Jan Lindquist (iGrant.io)

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- Review DIF donation initiative
- Progress on Data Agreement WP
- Comments on any working package updates

#### **Donation to DIF**

- Gataca has prepared a list of "significant" contributors, those that have actively contributed historically to discussions, documentation or coding. Resulting organizations are: Ubicua, Verifiable Credentials Ltd., iGrant.io, Fraunhofer, TNO, Sphereon and GATACA.
- A simple letter of consent has been sent to all those contributors to agree on the donation to DIF.
- Next steps: the list of contributors will be sent to DIF's Operation Manager Balazs Némethi who will be reaching out directly to such contributors for next steps (joining DIF if not already members and joining DIF's Claims & Credentials Group that will host VUI)
- PLEASE SEND CONSENTS BEFORE NOV 12th 2pm CET.
- IF SOMEONE IS AGAINST DONATING THE WORK TO DIF, PLEASE CONTACT irene@gataca.io ASAP.

#### **Data Agreement WP**

- Finalizing schema structure and adding advancing conversations to include multi-purpose as per GATACA's suggestion
- Jan They proposed to organize an event for the week of Dec 6th to showcase together with Human Colossus what has been accomplished. Hopefully this may serve as input to EBSI v2.2
  - Objective is only how each organization has implemented the Data Agreements, interoperability tests is out of scope for this demo

#### PE WP

- Working intensively on the PE JS version for the past month. Not fully finished, but it is already functional and published, only improvements and spec changes need to be included, together with better doc.
- BBS+ signatures for selective disclosure in prototype stage
- Just started with the REST API this week, expected the first version ready in 3-4 weeks.
- Pending: documentation and interop test suite

### Agreements / Tasks

 Meeting between Gataca and iGrant.io to discuss what and when could be showcased in December

### Oct 14th, 2021

#### **Attendees**

- José San Juan (GATACA)
- Joris Nijman (Sphereon)
- Peter Langenkamp (TNO)

### Agenda

- Review DIF's IPR policies:
  - IPR included in WG C&C's Charter are:
    - The CopyRight Policy: "Creative Commons Attribution 4.0" http://creativecommons.org/licenses/by/4.0/legalcode
    - The Patent Mode is "W3C Mode": "For materials other than source code developed by the Working Group, each Working Group Participant agrees to make available any of its Essential Claims, as defined in the W3C Patent Policy (available at <a href="http://www.w3.org/Consortium/Patent-Policy-20040205">http://www.w3.org/Consortium/Patent-Policy-20040205</a>), under the W3C RF licensing requirements Section 5 (<a href="http://www.w3.org/Consortium/Patent-Policy-20040205">http://www.w3.org/Consortium/Patent-Policy-20040205</a>), in Approved Deliverables adopted by that Working Group as if that Approved Deliverable was a W3C Recommendation."
    - Source code is subject to the "Developer Certificate of Origin version 1.1" available at <a href="http://developercertificate.org/">http://developercertificate.org/</a> and under Apache 2.0 License (<a href="http://www.apache.org/licenses/LICENSE-2.0.html">http://www.apache.org/licenses/LICENSE-2.0.html</a>)
  - Process for each Organization/individual:
  - Sign a consent from all contributors to agree that the work is donated to DIF (working on a template with DIF)
  - Join DIF. For this, each organization or individual will have to sign the DIF Membership Charter.
    - https://drive.google.com/file/d/1wTu7kbtPqwBii1MtjoR1-QYemaUlhcZl/view
  - Sign the Working Group Claims & Credentials Charter.
     https://github.com/decentralized-identity/org/blob/master/Org%20documents/WG %20documents/DIF CC WG charter v1.pdf
- Every participant that has attended any meeting or contributed must validate the IPR
- Comments on any working package updates

- Presentation of the DIF IPRs
  - Share policies for copyright, source code and patents
  - Check that present participants were already DIF members and had signed the WG C&C Charter
- Update on the Working Packages:

- Data Agreement: working on Igrantio's model as a base, PRs soon to be closed. The API interface is almost accepted along
- Issuer resolution: Ubicua to start building client in JAVA
- Presentation Exchange: no updates from Gataca nor Sphereon. During IIW, no updates on WACI nor PE seem to have been presented so far.

- GATACA: Forward the DIF IPR policies and requirements to all members
  - Everybody: Read them carefully, look for possible problems. Contact outside participants if needed.
- GATACA: Look for missing participants

# Sep 30th, 2021

#### **Attendees**

- Irene Hernandez (GATACA)
- José San Juan (GATACA)
- Joris Nijman (Sphereon)
- Jan Lindquist (iGrant.io)
- Peter Langenkamp (TNO)
- Andrei Mikhin (Ubicua)
- Nikos Triantafyllou (UAegean)
- Samuel Gómez (GATACA)

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# Agenda

- Checkpoint and updates on the status of the working packages
  - Presentation Exchange:
  - Data Agreement:
  - Issuer resolution
- DIF Moving VUI's work

- Presentation Exchange
  - Sphereon is planning to resume their work in the second week of october. Some work on improving documentation
  - Gataca including the support of more cryptographic suites and bugfixing
  - Mid november endpoints and test suites should be ready
- Issuer resolution API

- Gataca is still working on implementing the API. Debating about how to resolve conflicts between 2 issuer catalogues.
- It should be ready by the end of october
- Ubicua depends on Gataca's test suite and endpoint to start interop tests.
- Data Agreement
  - Discussing the data model for a data agreement
  - Weekly joint meetings to make progress on the data agreement
  - iGrant.io will finish reviewing/reestructuring the data model and then pass on to Gataca for comments.
  - Intention is to present the final data agreement schema in next meeting
  - Jan suggests to present their work with Human Colossus
- Other
  - Deadline for final IOC2 report Jan 15 2022
- DIF
  - No objections from participants to move the work to DIF.
  - GATACA needs to provide more clarity on what will happen to IP and what are the IPR implications

 Irene to check the IPR that will protect the code after donating to DIF and on membership conditions

# Sep 16th, 2021

### **Attendees**

- Irene Hernandez (GATACA)
- Peter Langenkamp (TNO)
- Joris Nijman (Sphereon)
- Samuel Gómez Escalante (GATACA)

### Agenda

- Checkpoint and updates on the status of the working packages
  - Presentation Exchange:
  - Data Agreement:
  - Issuer resolution
- DIF Moving VUI's work

- PE Spheron
  - Delayed work on the REST API until beginning of october

- Released new version on the implementation
- IR GATACA
  - API and Data model implemented in our product suite.
  - Data Model reviewed with UBICUA and LetsTrust/Walt and approved by all parties (trying to merge DIF/EBSI/VUI data model in one)
  - Some business logic pending to be implemented and it will published in 2 weeks
- DA/Consent GATACA
  - GATACA and iGrant.io discussed over the last 2 weeks about the Data model (optional and mandatory fields). Agreement has been reached, final spec will be defined over the next 2 weeks.
- GATACA has business pressure and will not be able to work on VUI for the next 4 weeks.
- DIF -
  - All VUI members will have to decide whether/what they're willing to give away to DIF (give up on IPR?)
  - GATACA has a meeting next week with DIF, if anyone wants to join, please send email to <u>irene@gataca.io</u>

- Peter and Samuel will coordinate a meeting to provide all necessary information for TNO to integrate the GATACA wallet
- Gataca to send a formal request regarding each implementor's positioning in giving away the code/specs/IP

# Sep 2nd, 2021

#### Attendees

- Irene Hernandez (GATACA)
- Hafeez ur Rehman (Sphereon)
- Peter Langenkamp (TNO)
- Joris Nijman (Sphereon)

- Checkpoint and updates on the status of the working packages
  - Presentation Exchange:
  - O Data Agreement:
  - Issuer resolution (Updates?)

- Presentation Exchange API -
  - Specs are already available
  - Working on the REST API expected ready by the end of Sept (pending confirmation)
  - Interoperability test available
- Data Agreement no updates due to lack of participation from all implementors
- Issuer resolution -
  - Specs available
  - API implemented
  - Endpoints implemented by GATACA, will be made available this sprint
- TNO No major updates over the last 2 weeks.

Concerns arouse regarding the time left to demonstrate interoperability within the ESSIF-LAb IOC project - We need a clearer roadmap/timing/progress of the APIs. Discussion about how to provide continuity /further traction of VUI beyond IOC. Some ideas mentioned:

- Record life videos on how this interoperability works
- More graphical information may be more useful to understand what the APIs are addressing
- One single repo (more accessible than Gitlab)
- One website where these efforts are explained as an alternative
- Who do we want to convince? Wallet and Verifier developers
- It would be nice if we could integrate this initiative in DIF.
- One pager explaining VUI

### Agreements / Tasks

 To reach out to DIF and explore possibilities to include VUI as a workstream.

### August 19th, 2021

### Attendees

- José San Juan (GATACA)
- Jan Lindquist (iGrant.io)
- David Chadwick (CCP)
- Hafeez ur Rehman (Sphereon)
- Peter Langenkamp (TNO)
- Andrei Mkhin (Ubicua)
- Vladimir Perez (Ubicua)

• Lal Chandran (iGrant.io)

### Agenda

- Checkpoint and updates on the status of the working packages
  - Presentation Exchange:
    - PE Lib and service ready for deploy.
    - Preparing testing
  - Data Agreement:
    - API on review
  - Issuer resolution (Updates?)
- TNO Platform simple API questions
- Updates on next meeting/logistics

- Issuer resolution:
  - No updates on Gataca side
  - Will begin building the service with the approved to offer it soon
  - Ubicua ready to test the service when ready
- David: Relation with the train API?
  - Possible conversation on how to cover all functionalities
  - Both projects trusting the EBSI Issuer registries
  - Relation with the schemas validation: same approach defined by EBSI. The TAOR assigns the schema allowed, the credentials issued must match the schema.
- Presentation Exchange:
  - Sphereon:
    - PE-JS Library with validation of submissions and definitions is ready.
    - API will begin to be built soon for the interop test suite.
    - Simple structures and examples to use if for examples
  - Gataca:
    - Library and API built. Basic testing successfully passed.
    - Service ready for deploy, will be deployed soon and notified for integrators to use after tests are passing.
- TNO Simple API:
  - Presentation of the API: https://ssi-lab.nl/
  - Idea simplified: Wrap all providers under a common API
  - Compatible with irma, indy, jolocom...
  - Doesn't have a formal standard yet
  - No testing framework for update of connectors manual verification
  - If wanting to create a connector no specific process defined
  - David: Alternatives? how to wrap with OIDC?
- Logistics:

- Gataca dev team on vacation next weeks
- Meeting will be held as always

- Modify Data-Agreement PR: fix code structure+ provide model of Data-Agreement for discussion
  - Json schema + example (commented?)
- Notify on updates/readiness of service if we deploy any service for integrators/other implementors

### August 5th, 2021

#### Attendees

- José San Juan (GATACA)
- Hafeez ur Rehman (Sphereon)
- Irene Hernandez (GATACA)
- Peter Langenkamp (TNO)
- Andrei Mikhin (Ubicua)
- Vladimir Perez (Ubicua)
- Michael Kubach (Fraunhofer)

### Agenda

- Checkpoint and updates on the status of the working packages
  - Presentation Exchange
  - Data Agreement
  - Issuer resolution

#### Minutes

#### Presentation Exchange

#### Data Agreement

- GATACA reviewed the proposed spec to send Data Agreement messages using DIDComm. Since GATACA is not implementing DIDComm, conversations between iGRANT.io and GATACA are ongoing to define the exchange protocol. No timing defined yet for the definition and implementation of the tests. Aiming to have tests defined for next follow up meeting (or the following one), depending on vacation periods and availability.

#### Issuer resolution

 <u>Issuer resolution API</u> agreed. Next step is to define integration tests between UBICUA and GATACA. GATACA will develop a service against which the APIs can be tested, including a wrapper to integrate with EBSI. GATACA will get in touch with LetsTrust that had signed as implementor, but has not provided feedback on the API yet.

#### Presentation Exchange

- There are 3 libraries being developed by Spehereon
  - PE-Models (Published)
  - PE-JS (To be published in a couple of weeks, depends on PE-Models)
  - REST-API (To be published, depends on PE-JS)
- GATACA has already built PE-Models in Golang

### Agreements / Tasks

• GATACA to get in touch with LetsTrust (Dominik Beron)

# July 22th, 2021

#### **Attendees**

- José San Juan (GATACA)
- Peter Langenkamp (TNO)
- Michael Kubach (Fraunhofer IAO)
- Irene Hernandez (GATACA)
- Andrei Mikhin (Ubicua)
- Vladimir Perez (Ubicua)
- Hafeez ur Rehman (Sphereon)
- Samuel Gómez (GATACA)
- Jan Lindquist (iGrant.io)
- Joris Nljman (Sphereon)

- Status on the PE WP
  - Status of implementation
  - Status of integration testing
- <u>Data Agreement Specification</u> updates
- Issuer resolution status
  - API Definition and next steps

- Technical problems were faced during the last meeting, as a GATACA team member needs to be present to accept incoming attendees if they have not previously accepted the meeting invite. GATACA will make all possible efforts to avoid this problem in the future.
- Issuer Resolution WP
  - There is a Merge Request on Gitlab presenting the draft proposal for the Issuer resolution API.
     <a href="https://gitlab.grnet.gr/essif-lab/interoperability/WP-VUI-IssuerResoluti">https://gitlab.grnet.gr/essif-lab/interoperability/WP-VUI-IssuerResoluti</a>
  - Any interesting party (integrators and implementers) may provide comments before Monday July 26th.

on/-/blob/RC 0.0.1/VUI-IssuerResolution-openapi.yaml

 UBICUA presents some suggestions on taxonomy based on their work and how to merge their efforts in the proposed API

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#### PE WP

- GATACA is current building a library in Golang to implement DIF's PE specs (to complement Sphereon's Javascript library)
- Sphereon presents their interop <u>testing suite</u>.
- Next steps for Sphereon will be to implement the API in their product offering
- Data Agreement Specification WP
  - Data model has been already put in common among implementers, there are still a few open issues
  - Protocol has been just published, needs to be commented by the rest of implementers.

### Agreements / Tasks

• A separate meeting will be held to discuss this topic among the Issuer Resolution WP members (GATACA and UBICUA). Should anyone else want to participate, please reach out to jose@gataca.io

# June 24th, 2021

### **Attendees**

- José San Juan (GATACA)
- Hafeez-ur-Rehman(Sphereon)
- Jan Lindquist (iGrant.io)
- Samuel Gomez (Gataca)

- Irene Hernandez (Gataca)
- Joris Nijman (Sphereon)
- Andrei Mikhin (Ubicua)
- Vladimir Perez (Ubicua)
- Massimo Romano (Associazione Blockchain Italia VUI Integrator)

### Agenda

- Status on the PE WP
  - o <u>Test definition</u>
  - o API Definition
  - o Task division and next steps
- <u>Data Agreement Specification</u> proposed by iGrant.io
  - Intro and quick review
- Issuer resolution status
  - API Definition WIP (to be shared shortly with all WP participants)

- PE WP
  - Testing Phase 1:
    - Data model DIF PE
    - Envelop/ communication protocol: HTTP REST API API v1
  - Presentation of the proposed APIv1
  - Presentation of the defined tests
    - Credential schemas on the tests to use are being defined. Will be proposed by Sphereon
    - Presentation definitions and the related constraints depend on those.
  - Overview of next tasks
- Data Agreement WP
  - Objective is to reach an agreement on the specification by next meeting (July 8th). Any party is able to provide comments as Issues on the Github repository
  - Provide a listing of the tests to be executed for interoperability
  - Andrei raises the opportunity to coordinate their efforts to achieve a common semantic (ontology), to implement a common description language
- Issuer resolution status
  - Still work in progress, first version will be ready early next week and notified to the WP team members for comments
  - Efforts are coordinated with LetsTrust (now Wald), as they will be implementors of this API

- Although it is able to retrieve information from EBSI's TIR (trusted Issuer Registry), it shall be able to retrieve information from other Issuer registries as well.
- Andrei proposes to use merkle trees or any kind of hierarchy to retrieve the chain of trust of a Issuer

- Gataca (and any other subgrantee) shall provide comments to the Data Agreement Spec presented by iGrant.io
  - o Goal: Agree to a final spec to start defining testing
- Ubicua will open an Issue to the Data Agreement Spec Gitlab repo to illustrate how their work on semantics could be applied
- Ubicua will present next week their final work for EssifLab IOC1

### June 10th, 2021

#### Attendees

- José San Juan (GATACA)
- Jan Lindquist (iGrant.io)
- Samuel Gómez (GATACA)
- Irene Hernandez (GATACA)
- Michael Kubach (Fraunhofer)
- Joris Nijman (Sphereon)
- Hafeez-ur-Rehman (Sphereon)
- Andrei Mikhin (Ubicua)
- Vladimir Perez (Ubicua)
- David Chadwick (CCP)

- GitLab restructuration
- Status of Consent WP
- Status of Issuer Resolution WP
  - Coordination with EBSI Tir registries
  - Coordination with TNO Credentials Catalog
  - O Ubicua SSIDDI:
- Status of PE Working Package
  - Sphereon opensource library
  - Alignment with <u>DIF WACI Efforts</u>
    - https://identity.foundation/arewewaciyet/

- Implementation/Testing roadmap:
  - API v1: DIF PE
  - API v2: DIF PE over DIDComm
  - SIOP?

- GitLab restructuration
  - All VUI-related repos have been moved to the "Interoperability" folder in Gitlab, so that it is located in a more neutral location, not inside Gataca's specific repo. VUI new repo location <a href="here">here</a>.
- Status of Consent WP:
  - Initial proposal soon
  - Gataca is analyzing Kantara Receipts
  - June 15th iGrant.io will have the data specification (including ISO schemas + Kantara + new DID method)
  - Status of Issuer Resolution WP
  - Gataca intends to have a wrapper to allow for integration with the EBSI registry (TIR).
  - The API intends for a Verifier to be able to verify that an Issuer is trusted in a specific registry (how to query any registry in a standard format)
  - Coordination with TNO Credentials Catalog.
  - <u>Ubicua SSIDDI</u>: Ubicua presented their proposal already with TNO and Gataca. The main idea is to unify efforts of different groups to create an ontology registry.
  - Jan Lindquist has shared the <u>Machine Readable Governance</u>
     Frameworks
- Status of PE Working Package
  - Sphereon has built a Typescript library for DIF's presentation exchange spec.
  - A roadmap has been defined to test interoperability. The goal of testing is to achieve alignment with WACI efforts, as they are very aligned with VUI's PE WP objectives. WACI is not finished yet, but progress is being made very fast, so a first proposal is expected to be ready very soon. <u>WACI spec</u>
    - APIv1: test PE API without DIDComm (Not presented yet). Gataca will integrate Sphereon library in Gataca's wallet and will also implement a library in Golang. Sphereon does not have a wallet, so testing will be done with scripts
    - APIv2: test PE API with DIDComm. There are still discussions at DIF whether to use DIDComm v1.0 or v2.0.

 Hafeez briefly presents the scope of the <u>Sphereon PE-JS</u> <u>opensource library</u>

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### Agreements / Tasks

- Gataca to change the content within Gataca's repo to link to the new repo in the Interoperability folder.
- Working Packages to make progress independently and follow up in 2 weeks
- Consent WP Meeting will be coordinated on June 17th between implementeors to align proposal

# May 13th, 2021

### Attendees

- José San Juan(GATACA)
- Jan Lindquist (iGrant.io)
- Andrei Mikhin (Ubicua)
- Vladimir Perez (Ubicua)
- Paul Knowles (Human Colossus Foundation)
- Irene Hernandez (GATACA)

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### Agenda

- Presentation of the Consent WP
- Discussion on interop definition deliverables in the scope of the essiflab
- Next steps on working packages

- A new Working Package (Consent) is proposed by iGrant.io and introduced.
  - Proposal of the Consent WP: https://gitlab.grnet.gr/essif-lab/infrastructure 2/igrantio/wp-data agreement
  - Ubicua attended the first meeting of Credential Catalogue (CC), which seems to be aligned with the WP Issuer resolution. However, a relationship with the Consent Management may be established. Jan will reach out to Rieks
  - WorpreSSI is added as integrator
- Roles and contributions for PE WP and Issuer Resolution WP are confirmed for represented organizations
  - WP 1 Presentation Exchange
    - GATACA (implementor)

- Sphereon (implementor) \* to be confirmed
- iGrant.io (implementor)
- Letstrust (potential integrator) \* to be confirmed
- WordpreSSI (integrator)
- o WP 2 Issuer resolution
  - GATACA (implementor)
  - UBICUA (implementor) \* provided we join forces with TNO Credentials Catalogue working groups which seems to be aligned.

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• The repositories will be moved to the "Interoperability" folder so that everyone can own/manage subrepositories. A subrepository will be created for each WP.

### Agreements

- Irene to look for synergies between TNO's CC group and the Issuer Resolution WP.
- Jan to schedule a meeting for the Consent WP
- Jose to create the repository structure in the Interoperability folder.

# April 29th, 2021

#### **Attendees**

- José San Juan(GATACA)
- Michael Kubach (Fraunhofer)
- Niels Klomp (Sphereon)
- Irene Hernandez (GATACA)
- Hafeez ur Rehman (Sphereon)
- Scott Malley (Sphereon)
- Jan Lindquist (iGrant.io)
- Andrei Mikhin (Ubicua)
- Vladimir Perez (Ubicua)
- Xavier Vila (Validated ID)
- David Chadwick (VCL)

- Update on the status of the opencalls
  - New Consent WP (Possible interested: IGrantio?)
  - Issuer Resolution WP (Possible interested: Ubicua?)
  - PresentionExchange WP (Possible interested: Sphereon?)
  - Technical comitee?
- Presentation of architecture proposal

- Discussion of APIs and roles
- Intro to WACI Efforts
  - Discussion about
  - https://docs.google.com/document/d/1SH4cV-XdQBr3POt5q4TKXcm LWFwAwKCylUfMFxTid80/edit#t relation to PresentionExchange WP

- Ubicua is currently evaluating how to contribute to the Issuer Resolution WP and at which point (as implementor vs integrator).
- Sphereon's project for ESSIF-Lab seems to be very aligned with the Presentation Exchange WP. Their goal is to build library for DIF's PE spec. DIF PE spec does not provide much guidance on protocols, so they're looking at Aires to complement the spec, specifically on the protocol that negotiates the exchange of VCs
- iGrant.io would like to adopt the Consent WP.
- Presentation about WACI
  - Document <u>https://docs.google.com/document/d/1SH4cV-XdQBr3POt5q4TKXcmLWFw</u>

     AwKCylUfMFxTid80/edit#
  - Presentation 
     https://docs.google.com/presentation/d/1t4o6AXclqR7SqhGCblJKVtYxh4fm

     5mGT11MBx9K95c/edit#slide=id.qd365d119ca 0 37
  - Git hub repo https://github.com/decentralized-identity/waci-presentation-exchan-
- Presentation of VUI's architecture
  - https://gitlab.grnet.gr/essif-lab/infrastructure\_2/gataca/Verifier\_Universal\_Int erface/-/blob/master/assets/VUI\_Architecture.png

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### Agreements

- Igrantio to propose working package on consent
  - Gataca interested. Offline communication
- Remember interest on participating

# April 15th, 2021

#### **Attendees**

José San Juan (GATACA) David Chadwick (VCL) Lal Chandran (iGrant.io, ADA Project) Michael Kubach (Fraunhofer) Jan Lindquist (iGrant.io) Vladimir Perez (UBICUA) Andrei Mikhin (UBICUA)

### Agenda

- The documentation on the VUI Working Group and the Working Packages is presented before the launch of the open calls.
  - https://gitlab.grnet.gr/essif-lab/infrastructure\_2/gataca/Verifier\_Univer\_sal\_Interface/-/tree/master/WP1-PresentationExchange

#### Minutes

- David asks whether the API should be defined for the Verifier or the Wallet?
   Jose and Lal agree that both sides may be needed depending on the use case.
- It lacks of a testing framework
  - Common Test Suite defined along with the specification/testing/features/usecases
  - Implementors will probably also be integrators of their own implementation
  - Approach: API Integration testing automatized based on Javascript (any integration testing framework could work). Only sufficient for APIs, TBD for other processes

### Agreement

Add an architecture to the Readme.md, including the ESSIF-Lab framework

### March 25th, 2021

#### Attendees

José San Juan (GATACA)
Michael Kubach (Fraunhofer)
David Chadwick (VCL)
Alen Horvat (AceBlock)
Gaelle LE GARS (on behalf of Rob Van Kranenburg)
Andrei Mikhin (Ubicua)

Vladimir Perez (Ubicua)

### Agenda

- Presentation on new dynamics for the WG for the rest of the year
  - Organization
  - Roadmap
  - Goals
- New coordination tools

#### **Minutes**

- Results of the Survey
- Goals and milestones of the group for the rest of 2021
- Presentation of Working packages
- Discussion about goals and approaches for the group:
  - Focus on Wallets. Are we trying to build a universal wallet?
    - In some interfaces, maybe
    - Can the wallet be left outside of scope? It could in different working packages, but it's a goal of this WG to try to stablish common points
  - Coordination with simple universal verifier?
  - Verifying but without the presentation exchange. Think how to coordinate that
  - Non-technical consequences over one or the other approach
  - Interop between wallets supporting ARIES:
    - Demo: <a href="https://youtu.be/cWPiJrVKj-U">https://youtu.be/cWPiJrVKj-U</a>
- Presentation of working packages processes
  - Flow of action
  - How the Process can/might be adapted to different standarization frameworks (oriented to W3C, but ToIP? DIF?)
  - Roadmap of the WPackages pushed by GATACA: Presentation Exchange and Issuer Registry
- Xavier Vila:
  - Reuse and imitate the SVIP Plug-Fest Work. Great results, a lot of work.
     Can be very useful to know how to define and perform interop testing
  - https://docs.google.com/presentation/d/1MeeP7vDXb9CpSBfjTybYbo8qJfrr brXCSJa0DklNe2k/edit#slide=id.gc71a396831 10 8
  - Regarding working groups, there was an INATBA Roundtable presenting a framework for interoperability testing, pushed by Sphereon. We should check if we can collaborate, get a broader audience or adapt processes to get results
- TRAIN coordination discussion left for the specific working package.

### Agreements and next steps

- Open call for the 2 working packages
- Redirection of the group coordination to groups.io. All members in distribution list will be included
- Open call for technical committee members

### March 11th, 2021

#### **Attendees**

José San Juan (GATACA) Irene Hernández (GATACA) Andrei Mikhin (Ubicua) Vladimir Perez (Ubicua) Xavier Vila (Validated ID) Issac Henderson (Fraunhofer) David Chadwick (VCL)

### Agenda

- Presentation on TRAIN
- Discussion about compatibility and efforts with the VUI.
- Review past discussions for updates on Verifier Universal Interface Analysis
- Agreements on how to continue

### Minutes

#### Presentation on TRAIN

- Train is not focused/specific for SSI. It is focused on the external verification of trust
- Train uses DNS to verify the chain of trust and to locate the Trust List
- Trust Policy that defines the list of trusted authorities by the Verifier
- TPA (Trust Publication Authority) Defines the trust schemes and trust lists in a specific domain
- Project with SICPA
  - Trying to integrate TRAIN in an SSI ecosystem
  - Using the host name as a claim
  - Building an API to receive the DID and DNS Hostname from a verifier and to return verification results to the verifier
  - DNS Hostname is the issuer of the Trust list
  - SIOP for the presentation exchange
- Discussion about URI field in the post API should be more standard compliant to enable interoperability with URN, URLs and even DIDs.
- Each Verifier has their own ATVs
- Trust Policy own language (open source) TPL file > parsing would be needed to read these trust policies

How to leverage TRAIN in VUI? There is no strong overlap, but there are a few options to connect both initiatives

- The level of trust

- The verifier can integrate directly with an ATV or the different issuer registries could be integrated with an ATV

Could we connect both worlds: The traditional lists of trusted issuers and SSI registries?

### Agreements and next steps

 GATACA - To prepare a couple of diagrams to lead the discussion on how to connect

# February 25th, 2021

#### **Attendees**

Irene Hernández (Gataca)

José San Juan (GATACA)

Jan Lindquist (iGrant.io)

Andrei Mikhin (Ubicua) Vladimir Perez (Ubicua)

David Chadwick (Verifiable Credentials)

Xavier Vila (Validated ID)

Victor Martinez (SICPA)

### Agenda

- Review updates on the Delta with Aries APIs (<u>Analysis report reference</u>)
- Discuss Interoperability Report Contents for EssifLab <u>Verifier Universal</u> <u>Interface Analysis</u>
- Present the OpenAPIs as base for future testing platform

- We need to prioritize which interfaces we start working on. In order to do that, Gataca will prepare a questionnaire and send it to the group. After initial responses and comments to the survey have been received, the questionnaire will be further shared with other SSI communities.
- Trusted Issuer registries vs Issuer registries. SICPA's approach:
  - Trusted schemes and then a trusted list of issuers for this trusted scheme is created

- One host name = one trusted list (e.g. a bank consortium)
- Authority Trust Scheme Verifier (ATV) you can deploy locally or as a service. You can define verification policies. As a verifier you can provide the host name. Problem -> the host name has to be embedded as part of the credential (in the body)
- There is an interop WG (eIDAS Generic Use Case) > meetings on Mondays.
- Try to get Michael present TRAIN in next VUI meeting
- TRAIN Trusted Issuer Registry might overlap the Issuer Registry or might not overlap it -and be compatible.
- Issuer Registry provides more information than the TRAIN Trusted Issuer, not only the trust, but also the trust
- Interoperabilty Report: Summary of all efforts taken into this group and future effort.
- Presentation of the OpenApis Sandbox by GATACA
  - Useful sandbox for testing and playing with the Connect APIs
  - Could serve as an example: having a Sandbox with the VUI APIs for participants to integrate or test
  - The Sandbox should be built together by different teams like ToIP.

### Agreements and next steps

- Have a conversation with Fraunhofer about TRAIN to understand overlaps and compatibilities of the TRAIN component. Request them to present on this group.
- Form to request interest on APIs for participants to focus effort on most attractive APIs.

# February 11th, 2021

#### **Attendees**

David Chadwick (VCL) José San Juan (GATACA)

Jan Lindquist (TDA-iGrant.io/unikk.me)

Irene Hernandez (GATACA)

Caspar Roelofs (Off Blocks / Sphereon / Gimly)

Andrei Mikhin (Ubicua)

Vladimir Perez (Ubicua)

### Agenda

• Review state on the Delta with Aries APIs (Analysis report reference)

- Discussion on where to move the group after extinction of the EssifLab
- Refocus on interoperability testing:
  - Avoid difficult to agree points (Presentation Exchange)
  - Try to start on easy APIs (Issuer Registry?)

#### Delta Review by iGrant.io

- VUI and DIF PE are much more aligned than any of the two with Aries. For this
  reason the Delta was performed here with respect to DIF PE that is more complete
  and complex than VUI
- DC DIF PE may seem to mix different layers in the same document. Is it the right reference?
- JL We can provide some simplification for easier development
- CR Sphereon working on achieving interoperability between Aries and DIF PE.
- SJP There may be some Indy specs/efforts that align with W3C DID resolution follow up offline with Markus Sabadello to get his input on this
- DC There is already an existing API (TRAIN API) for Trusted Issuer Registry, we can leverage some of the work done here as comparison source
- JSP There is a proposal on Verifiable Consents in VUI v1.0, amended on the Delta Analysis
- Verifier Credential refers to the issuance API

#### Moving forward

- Gataca has been selected for the eSSIF LAB IOC grant to give continuity to VUI
  over the next 9 months. Currently discussing the best approach to include a broad
  community, including hosting VUI in the W3C or DIF.
- Currently talking with a few organizations that want to co-lead VUI. Interested please reach out to <a href="mailto:jose@gataca.io">jose@gataca.io</a>

#### Interop tests

- Starting with easier interfaces like Schema registry
- JL By the end of next week to organize a meeting with ToIP and all participants to gather interest on building a new interop group?

### Agreements and next steps

Next meeting on Feb 25th.

# January 21st, 2021

#### Attendees

Samuel Gómez (GATACA)
Irene Hernández (GATACA)
Lal Chandran (iGrant.io)
Michael Kubach (Fraunhofer)
Victor Martinez (SICPA)
David Chadwick
Vladimir

### Agenda

Review interoperability use cases and find matches

#### **Minutes**

The objective of today was to find matches between different companies willing to work together to build an interop test.

SICPA and Fraunhofer (who are working together) declare that they are observers, as they don't have the need to implement a test in the short term, but rather interested in the definition of standard APIs in the long term. The two are already working on defining APIs that should be ready in 1-3 weeks. Gataca asks them to unite definition efforts and try to converge into one single API.

Gataca and iGrant.io are already working on integrating Gataca's verifier with iGrant.io wallet. iGrant.io also committed to make a delta analysis of Aries with VUI. Progress will be shown in next interop meeting.

PolicyMan is interested in building interop test C out of the ones suggested by Jose (Gataca) in ISSUE 3. Gataca offers to provide our Wallet for this interop test, although it does not need it within the timeline of Essif-Lab. To be discussed offline.

### Agreements and next steps

- Fraunhofer to present a delta/comparison analysis between their current efforts and VUI so as to find a common ground and converge initiatives
- Policyman and Gataca to discuss offline how to build the interop test C
- iGrant.io and Gataca to make progress on their interop test and iGrant.io to prepare the delta analysis between Aries and VUI

# January 14th, 2021

### **Attendees**

José (GATACA)

Irene Hernández (GATACA)

David Chadwick (VCL)

Xavier Vila (Validated ID)

Jan Lindquist (iGrant.io)

Lal Chandran (iGrant.io)

Hidde-Jan Jongsma (TNO)

Michael Kubach (Fraunhofer)

Victor Martinez (SICPA)

### Agenda

- Discussion about change of scope on the group
  - Reviewing <u>the issue</u> with the <u>alternative architecture</u>
- <u>iGrant.io</u>: Discuss universal verifier interface with Aries
- Review meeting frequency
- Authentication needs on DIDs as a requirement

### **Minutes**

- Review past context and present the two alternative architectures
  - Need for a clear roadmap on the original scope
  - Need for incremental progress
  - o Try to avoid deviation from the ultimate goal to show short term results
- iGrant.io:
  - They will provide an analysis of VUI with their implementation with 2 objectives:
    - Identify the Delta what specifications could be contributed back to Aries
    - o Interoperability see how to match Aries with the VUI

### Agreements and next steps

- Proposal on Roadmap on <u>ISSUE#3</u> for testing following the group original approach
- Centralize on the ISSUE#3 all the discussion about testing
- Participants shall enroll and comment on the Issue about their intentions to participate and suggestions for testing
- Collaboration between Gataca and iGrant.io to define the gap with the Aries implementation

# January 7th, 2021

#### Attendees

Jose San Juan (Gataca) Hidde-Jan Jongsma (TNO) Michael Kubach (Fraunhofer) Andrei Mikhin (Ubicua) Vladimir Perez (Ubicua) David Chadwick (VCL)

# Agenda

- Review Scope of David's proposal
  - o Creation of an Issue for discussion on the Simpler Approach
- Review needs on Authentication

#### **Minutes**

- Presenting the alternative approach
  - Presentation from TNO policies
  - Discussion about propagation of the Verifiable presentation (as a blob)
- Authentication needs on DIDs as a requirement
- Presentation of a possible roadmap for testing on the simple architecture

### Agreements and next steps

- Postpone discussion about authentication needs on DIDs as a requirement for next meeting
- Discuss Testing Roadmap on Issue: https://gitlab.grnet.gr/essif-lab/interoperability/verifierapis/-/issues/3

# December 29th, 2020

#### **Attendees**

Jose San Juan (Gataca)

David Chadwick (VCL) Andrei Mikhin (Ubcua) Vladimir Perez (Ubicua)

### Agenda

- Overall architecture review
- Usage of semantic technologies
- Comments/Discussion on Proposals: Exchange protocol at application layer or between Wallet and verifier?

#### Minutes

- Review the Simple Architecture Review uploaded by David:
  - Different approach to interop and interfaces definition
  - o Similar to the Universal resolver
  - o Multiple driver approach
  - o Easier less complex approach (more feasible) compared to the other
  - Drawbacks: no interoperability between providers just resolution and internal logic - but same wallet to verifier strict relationship
- Separation of stages:
  - o DID Authentication vs Verification of presentations and credentials
  - DID Authentication (as authentication of the DID owner and source wallet) should also be part of the verifiers
  - o Divide scenarios and use cases first authentication, then verification

### Agreements and next steps

- Creation of an Issue for discussion on the Simpler Approach
- Ubicua: Bring some backup document to explain their views on authentication vs verification
- David (VCL) Propose the first draft roadmap of achievements for testing the SUV
- Jose: Review on exchanges at application layer vs. ssi layer

# December 17th, 2020

#### **Attendees**

José San Juan (Gataca) David Chadwick (VCL) Andrei Mikhin (Ubicua)
Matteo Marangoni (SICPA)
Hidde-Jan Jongsma (TNO)
Michael Kubach (Fraunhofer)
Sven Wagner (University of Stuttgart)
Jan Lindquist (Unikk)
Ahmad Samer Wazan(Zayed University)

### Agenda

- Explanation of interoperability tests proposed
  - MatchMaking
- Overall architecture review
- Usage of semantic technologies
- Comments/Discussion on Proposals
- Logistics/Next steps discussion for Christmas time

#### Minutes

- Start by checking current proposals on interoperability testing:
  - José Proposal: Stating interest on specific tests -part of the specification:
    - 1. Define which parts of the draft are affected by the test
    - 2. Work on adjusting those parts: modifying, suppressing unnecessary and including missing parts.
    - 3. Design tests to specific process
    - 4. Implement differences
    - 5. Test (subset of processes)
  - Andriy proposed a 3-steps process:
    - 1. State the specifications/definitions of the meta-data on which the testing is based i.e. schemas, @contexts, data values, issuer keys etc.
    - 2. Configuration stage. The issuer, holder and verifier configure their systems with the meta-data specified in step 1.
    - 3. Operational stage. The interoperating tests are performed.
- Terminology review: Usage of prover vs. Verifier to be included and specified on the draft.

### Agreements and next steps

- Meeting frequency on Christmas time. One meeting before January the 7th.
- Explanation for the tests: Duplicate all cases to be able to interop only on one direction.
- Matchmaking:
  - Include missing tests
  - Tests are TBD. i.e: specific schemas, contexts and goals for each test, as well as interfaces, will be stated later by the participants.
- Review and provide contributions (i.e.: Modifications, removals, updates) on the current draft

Include missing points on this agenda for next one

### December 10th, 2020

#### **Attendees**

José San Juan (Gataca)
Ahmad Samer Wazan (Zayed University)
Jan Lindquist (unikk.me)
David Chadwick (VCL)
Victor Martinez Jurado (SICPA)
Michael Kubach (Fraunhofer)
Hidde-Jan Jongsma (TNO)
Andrei Mikhin (Ubicua)

### Agenda

- Architecture review <u>Draft for debate</u>
  - David's proposal presentation
- Interoperability test discussion

- Review comments by David Chadwick Policy APIs
  - Policy Servers should be used for integration
  - o Policies should be written in natural language
  - Proprietary implementations should provide a policy-translator to their own model
  - Policies should be made public to comply with GDPR
- Discussion on the "presentation-exchange" or consent apis
- The other APIs may be considered useful
- Discussion of governance
  - o Trust roots and dynamic management
  - o Importance of trust lists
  - o Trust lists defined at configuration but might be retrieved dynamically
  - o Admission policies and revocation
- Testing
  - Explanation and mapping of some of the proposed tests

- Relevance of sharing proprietary schemas if wished for requesting and understanding: Common interface to include new ones instead of developing adhoc integrations or import tools
- Relevance of sharing proprietary trusted lists if wished. Same reasons
- o Every one should state what interoperability tests he is willing to achieve

### Agreements and next steps

- Be able to record meetings for people not attending
- Give write access to the GitLab for everyone to contribute allow them to post diagrams and new documents
- Discuss thoughts on David's proposal on the GitLab PR.
- Include your interests on interoperability testing on the spreadsheet
  - Do not worry about mapping them to previously existing cases
  - Just state what you wish to achieve
  - Mapping will be done on future meetings

### December 4th, 2020

#### **Attendees**

José San Juan (Gataca)

Irene Hernández (Gataca)

Peter Langenkamp (TNO)

Scott Malley (Off-Blocks)

Caspar Roelofs (Off-Blocks)

Sebastjan Pirih (Netis)

Michael Kubach (Fraunhofer)

Klemen Zajc (Netis)

Ahmad Samer Wazan(Zayed University)

Andrei Mikhin (Ubicua)

Xavier Vila (Validated ID)

Victor Martinez Jurado (SICPA)

Matteo Marangoni (SICPA)

Hidde-Jan Jongsma (TNO)

Rieks Joosten (TNO)

David Chadwick (Verifiable Credentials Ltd)

Oskar van Deventer (TNO)

Petros Kavassalis (University of the Aegean)

Gaelle Le Gars (NGI FORWARD WP4) on behalf of ROB VAN KRANENBURG

### Agenda

- Introductions & Reintroductions (10')
- Architecture review (20')
  - Draft for debate
- Interoperability test discussion (25')
- Logistics (5')
  - o Instant Communication Slack
  - Email (essif-lab distribution group?)
  - o Issues (On Gitlab by default. On Github for external organizations)

### Minutes

#### Peter Langenkamp (TNO)

Focus on interoperability, they are working on making SSI components easy to implement

#### Hidde-Jan Jongsma (TNO)

- TNO is coordinating the ESSIF-Lab project, he is focused on interoperability and standardization.

#### Rieks Joosten (TNO)

- Joining as an observer.

#### Oskar van Deventer (TNO)

- Joining as an observer mostly.

### Scott Malley (Off-Blocks) & Caspar Roelofs (Off-Blocks)

 Tech and project leaders at Off Blocks, interested in learning about the group and hopefully participate

#### Sebastjan Pirih (Netis)

 Essif-Lab Business call. Project SSi-as-a-service. I'm a project lead, participating for the first time in this group, would like to explore ways to execute interoperability testing

#### Michael Kubach (Fraunhofer)

- Essif-Lab infrastructure, also first time. External verification service (TRAIN project) Klemen Zajc (Netis)
  - Technical side of the team.

#### Ahmad Samer Wazan(Zayed University)

- Before Zayed, working at the Uni of Toulouse. Their objective is to provide a cross border verifier.

#### Andrei Mikhin (Ubicua

- Online passwordless authentication solution. Interested in a general verification framework. Strong authentication

#### Xavier Vila (Validated ID)

- ESSIF-IAb infrastructure group. They have a verifier, so interested in what is being defined in this group.

#### Victor Martinez Jurado (SICPA)

- ESSIF-IAb infrastructure group.. Focused on issuance and verification of VCs, focused on interoperability. Interested in following, more in an end to end use case David Chadwick (Verifiable Credentials Ltd)

- ESSIF-Lan 1st business call. Building a user friendly policy management interface for verifiers. Interested at the policy level.

#### Petros Kavassalis (Zila)

- Representing the Silk project linking different education verifiable Credentials Gaelle LeGars
  - Joining as an observer on behalf of Rob van Kranenburg (NGI FORWARD WP4).
     Making a bridge between ESSIF-Lab and NGI

#### REVISION of the architecture:

- Presentation of the goals
  - Allow interoperability without having to implement ad-hoc integrations
  - o Separate roles for governance
- Quick overview of every of the APIs
  - Presentation of which parts are affected by the API
  - Presentation of the expected input and output of every API
  - Comments and opinions by David Chadwick regarding the opportunity of the APIs
  - o To review: Adaptability to vc-http-apis

#### Brief presentation of the spreadsheet

#### Logistics:

- Discussion over slack/email/PRs
- Not everyone being able to accept the slack channel
  - Possibility of having an own slack server?
  - o Possibility of email communication?
- Try to speed things up by working asynchronously

### Agreements and next steps

- Communication via email of the minutes and next steps for next meeting
- Need for definition of the interoperability cases
- Include questions for agenda of next meeting on the spreadsheet
- Should meetings be recorded?

### November 26th, 2020

#### **Attendees**

José San Juan (Gataca) Irene Hernández (Gataca) Andrei Mikhin (Ubicua) David Chadwick (Verifiable Credentials) Oskar van Deventer (TNO) Vladimir Perez Gonzalez (Ubicua)

# Agenda

- Introductions
- Context and objective of VOP
  - Achieve interoperability between two or more providers
  - Release a draft protocol that includes as many perspectives as possible to lay foundations of standard/interoperability protocol
- Overview of draft
  - Considerations/Scope
- Use case definition: Interoperability test
- Logistics

#### **Minutes**

#### **Short introductions**

Andrei & Vladimir (Ubicua) - Their company is part of EssifLab Infrastructure Open Call. Ubicua offers passwordless authentication solutions.

- Andrei suggests to explore two levels of integration:
  - Intra layer interoperability between protocols
  - Inter layer interop for the end consumer

#### David (CEO of Verifier Credentials Limited)

- There are lots of different wallets and different credential types. The Verifier needs to deal with the complexity of this fragmentation
- He suggests that the Wallet should talk to a Universal Resolver (not referring to the Universal DID Resolver, but a Verifier resolver) and the Universal Resolver to the Verifier component
- Impressed with a provider in Singapore? They, however, implemented a different API per wallet, this internalizing the complexity of developing a different driver per wallet
- Also interested in including policies to the spec to avoid abuse by the Verifier

#### Oskar (TNO)

- He really likes the policy concept. He would add electronic signatures to the policy, so that they could be proven in a court
- He joins as an observer in this group. Interested in testing interoperability.
- We should not presume a monoculture, there will be multiple wallets, issuer and verifier components, we need to encourage interoperability
- The tricky part will be to find a balance for a minimum set of common APIs, since many verifier components support rich (and different) functionalities
- At TNO they also developed a multi-wallet solution
- Presents the similarities of what we could aim to achieve with the implementation of different payment systems in a website: as a user you can select paypal or

credit card. It is up to the web provider to offer all of them or only a subset, but this selection is simple to implement.

Irene presents the background of this group and the objectives:

- Objectives
  - Test interoperability between two or more providers
  - Release a draft protocol that includes as many perspectives as possible to lay foundations of standard/interoperability protocol
- We should be pragmatic and aim to test interoperability above building a standard, but the objective of this group is also to provide continuity to these efforts and find an appropriate home for this spec that can provide continuity beyond Essif-lab

#### Jose

- Two potential solutions:
  - Make a wrapper for each solution
  - Standardize the APIs

Oskar - he suggests to include an architecture picture. Andrei - he suggests to define first an interoperability profile.

Use case definition: Interoperability test

### Agreements and next steps

- Weekly meetings until those are no longer necessary
- Irene to double check with DIF how we can initiate a working group without incurring in membership costs

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#### Before next meeting:

- Define the solution architecture
- Define interoperability profiles
  - Which APIs are interesting
  - What operations I want to perform
- Propose use cases definition for the interoperability tests based on each interested/vision