Overview of

The First Person Project

Privacy-preserving proof of personhood based on personal trust relationships, not biometrics

Drummond Reed & FPP Contributors
CAWG Bi-weekly Meeting
2025-05-19

The origin of the First Person Project was solving proof of personhood *without* using a global biometric database.

In other words, without using one of these.

Vitalik Buterin described the alternative in his 6500 word essay “What do I think about biometric proof of personhood?”

https://vitalik.eth.limo/general/2023/07/24/biometric.html

Vitalek's problem areas

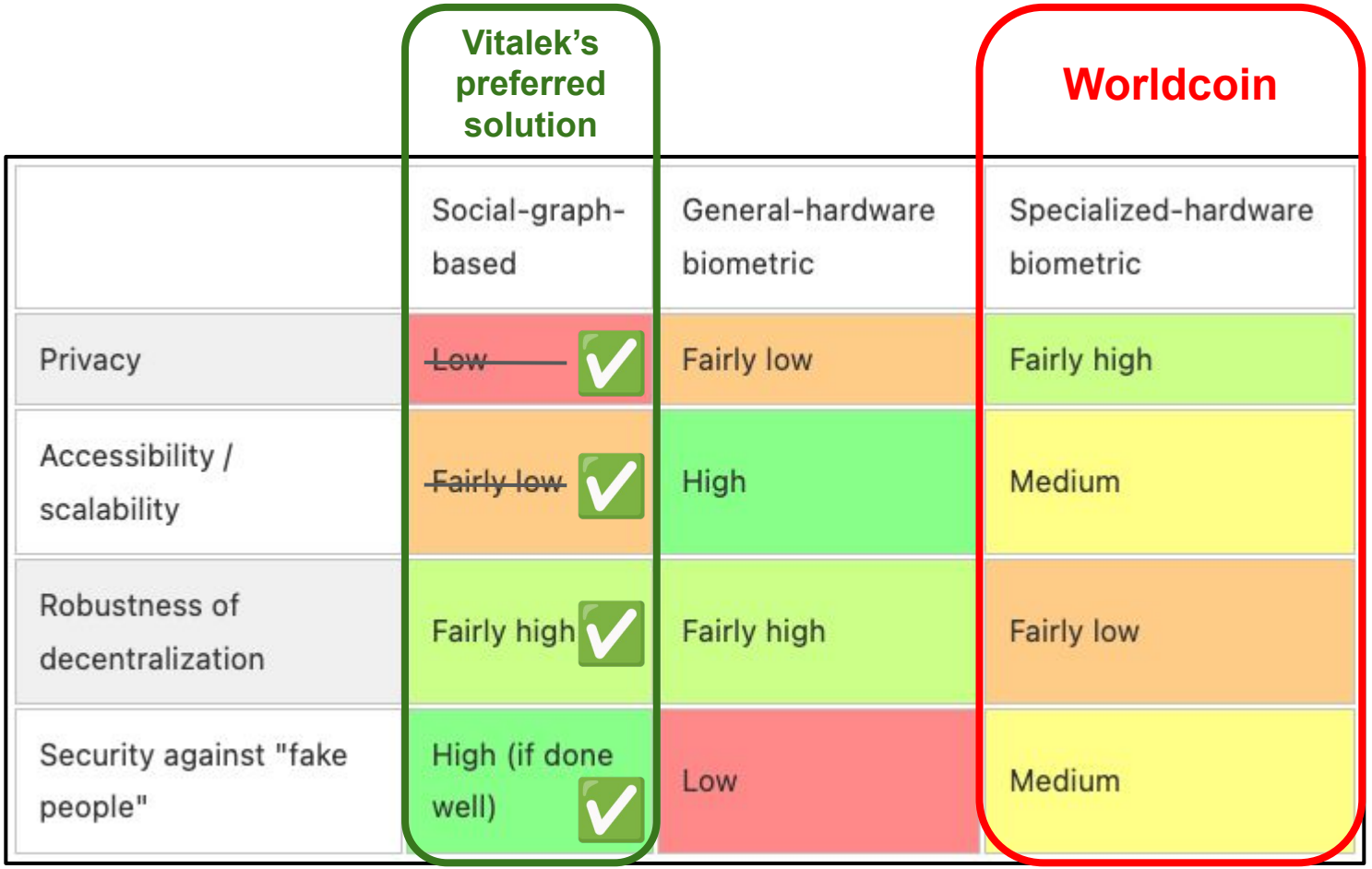
	Social-graph-based	General-hardware biometric	Specialized-hardware biometric
Privacy	Low	Fairly low	Fairly high
Accessibility / scalability	Fairly low	High	Medium
Robustness of decentralization	Fairly high	Fairly high	Fairly low
Security against "fake people"	High (if done well)	Low	Medium

Vitalek's preferred solution

Worldcoin

But Vitalek was looking at the proof of personhood problem through a blockchain lens.

If you look at the problem through a decentralized identity lens—using DIDs and VCs—we can solve it beautifully.


Vitalek's preferred solution
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Security against "fake people"
High (if done well) ✅
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To build this solution requires two specific types of VCs:

1. Personhood Credentials (PHCs)
2. Verifiable Relationship Credentials (VRCs)

Personhood Credentials (PHCs)

The term “personhood credential” was introduced in seminal proof of personhood paper published in August 2024.

Personhood credentials: Artificial intelligence and the value of privacy-preserving tools to distinguish who is real online

Steven Adler,[*†1] Zoë Hitzig,[*†1,2] Shrey Jain,[*†3] Catherine Brewer,[*4] Wayne Chang,[*5] Renée DiResta,[*25] Eddy Lazzarin,[*6] Sean McGregor,[*7] Wendy Seltzer,[*8] Divya Siddarth,[*9] Nouran Soliman,[*10] Tobin South,[*10] Connor Spelliscy,[*11] Manu Sporny,[*12] Varya Srivastava,[*4] John Bailey,[13] Brian Christian,[4] Andrew Critch,[14] Ronnie Falcon,[15] Heather Flanagan,[25] Kim Hamilton Duffy,[16] Eric Ho,[17] Claire R. Leibowicz,[18] Srikanth Nadhamuni,[19] Alan Z. Rozenshtein,[20] David Schnurr,[1] Evan Shapiro,[21] Lacey Strahm,[15] Andrew Trask,[4,15] Zoe Weinberg,[22] Cedric Whitney,[23] Tom Zick[24]

[1]OpenAI, [2]Harvard Society of Fellows, [3]Microsoft, [4]University of Oxford, [5]SpruceID, [6]a16z crypto, [7]UL Research Institutes, [8]Tucows, [9]Collective Intelligence Project, [10]Massachusetts Institute of Technology, [11]Decentralization Research Center, [12]Digital Bazaar, [13]American Enterprise Institute, [14]Center for Human-Compatible AI, University of California, Berkeley, [15]OpenMined, [16]Decentralized Identity Foundation, [17]Goodfire, [18]Partnership on AI, [19]eGovernments Foundation, [20]University of Minnesota Law School, [21]Mina Foundation, [22]ex/ante, [23]School of Information, University of California, Berkeley, [24]Berkman Klein Center for Internet & Society, Harvard University, [25]Independent Researcher

August 2024

https://arxiv.org/pdf/2408.07892

DARPA PERSONhood Workshop Attendee

The paper boils personhood credentials (PHCs) down to two strict requirements:

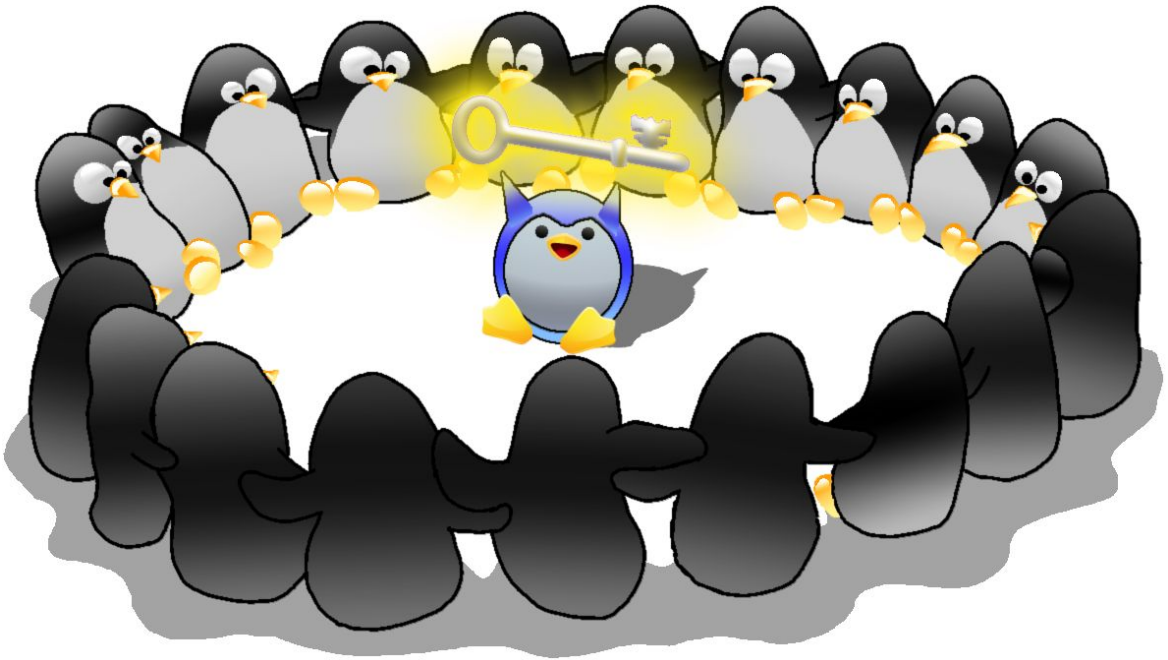
1. Credential limits: PHC issuers must only issue one per person.
2. Unlinkable pseudonymity: PHC verifiers must accept zero-knowledge proofs (ZKP).

But personhood credentials by themselves do not build a decentralized social graph—they only create one kind of relationship within that graph.

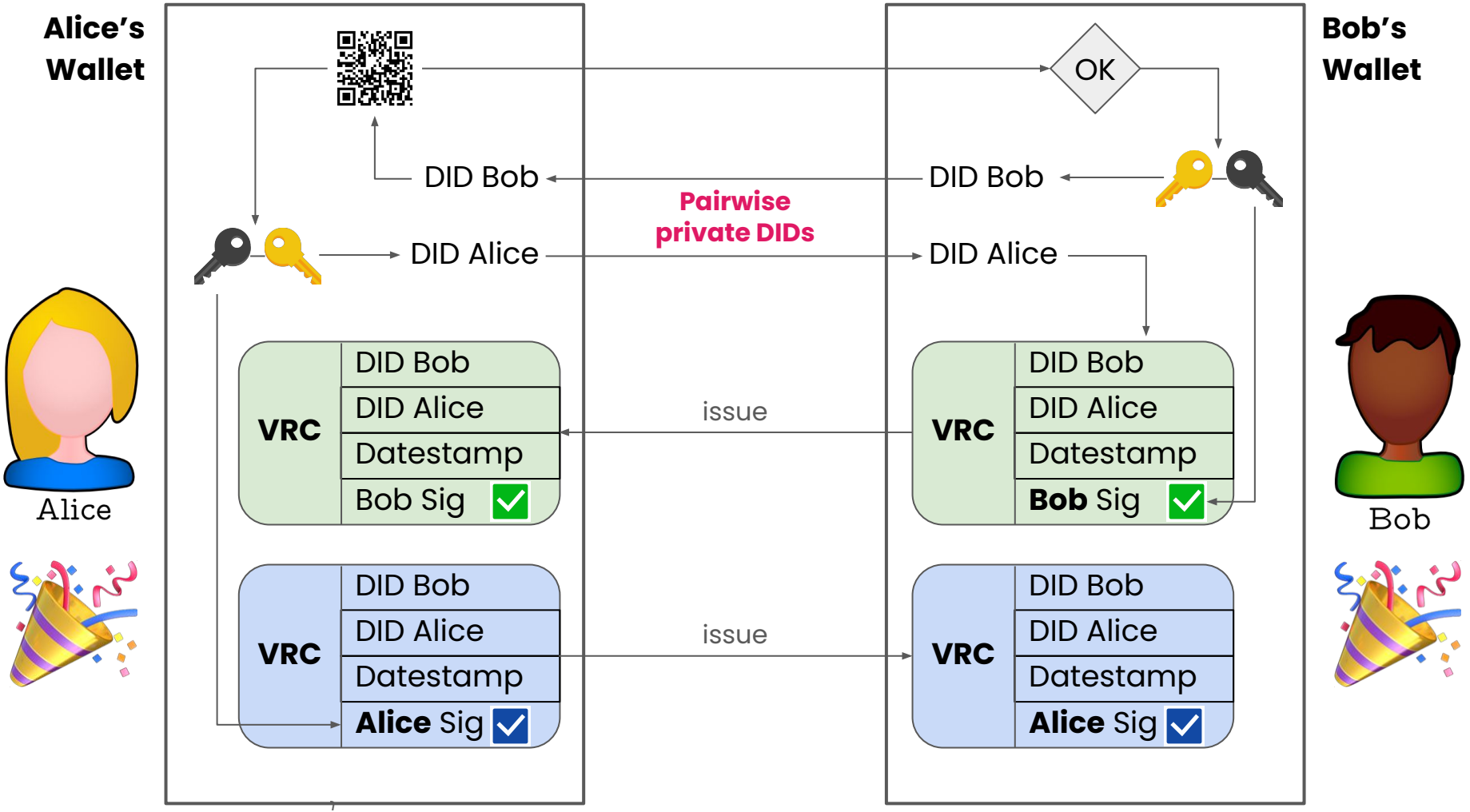
Verifiable Relationship Credentials (VRCs)

The best explanation of VRCs came from the First Person Project Workshop led by Linux Foundation ED Jim Zemlin and his staff at the LF Member Summit in March.

Verifiable relationship credentials are Phil Zimmermann's dream.



They are the ultimate instant key signing party.


Alice's Wallet
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VRCs are not limited to just verifiable proof of a relationship. They can also be the basis for decentralized reputation.

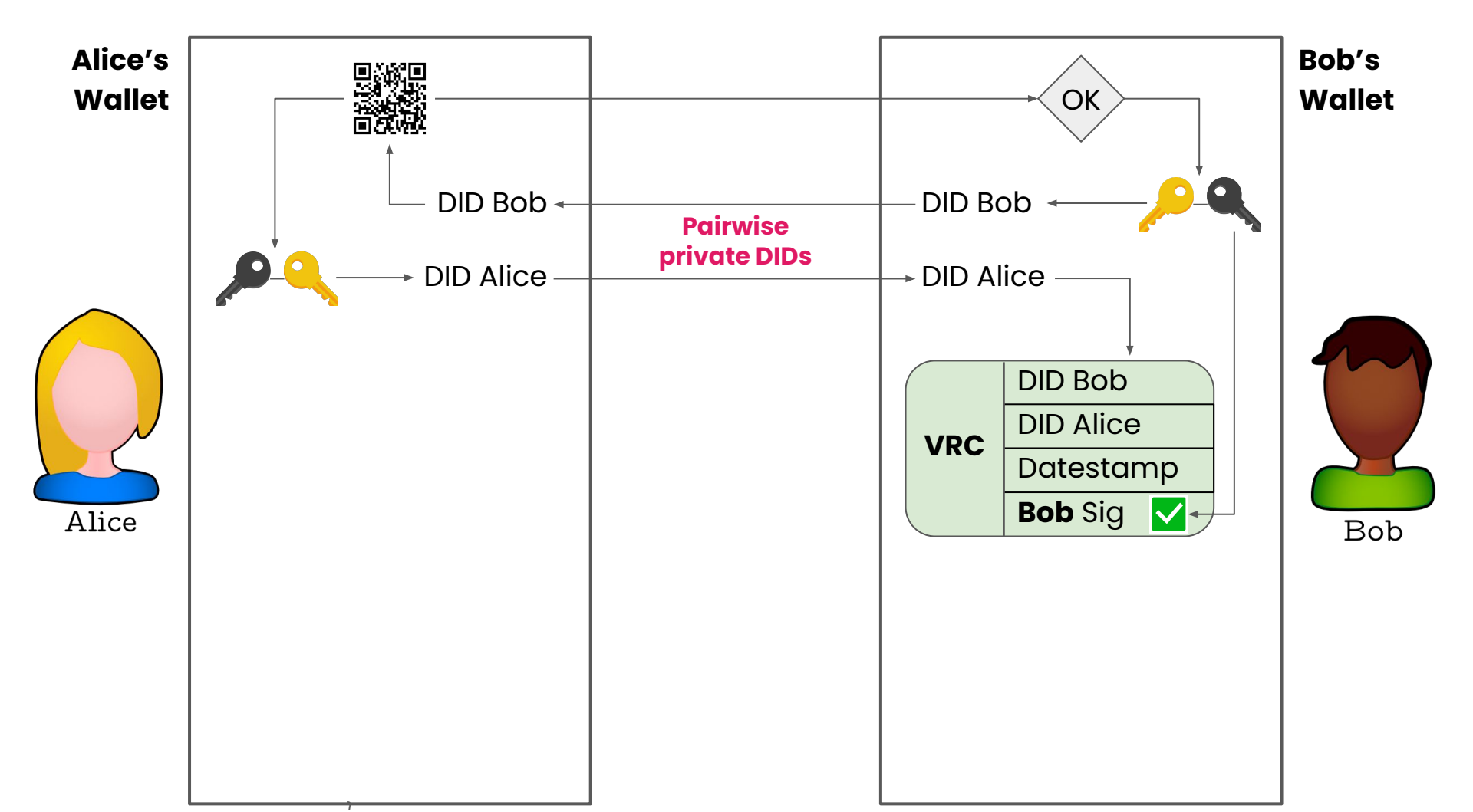
Internet Identity Workshop co-founder Phil Windley described this in depth in his blog post about VRCs:

Establishing First Person Digital Trust

Phil Windley // Thu Apr 10 11:48:00 2025 // DIDCOMM FIRST+PERSON IDENTITY PGP VERIFIABLE+CREDENTIALS

https://windley.com/archives/2025/04/establishing_first_person_digital_trust.shtml

Here is an illustration of how Bob can vouch for Alice by adding tags to his VRC.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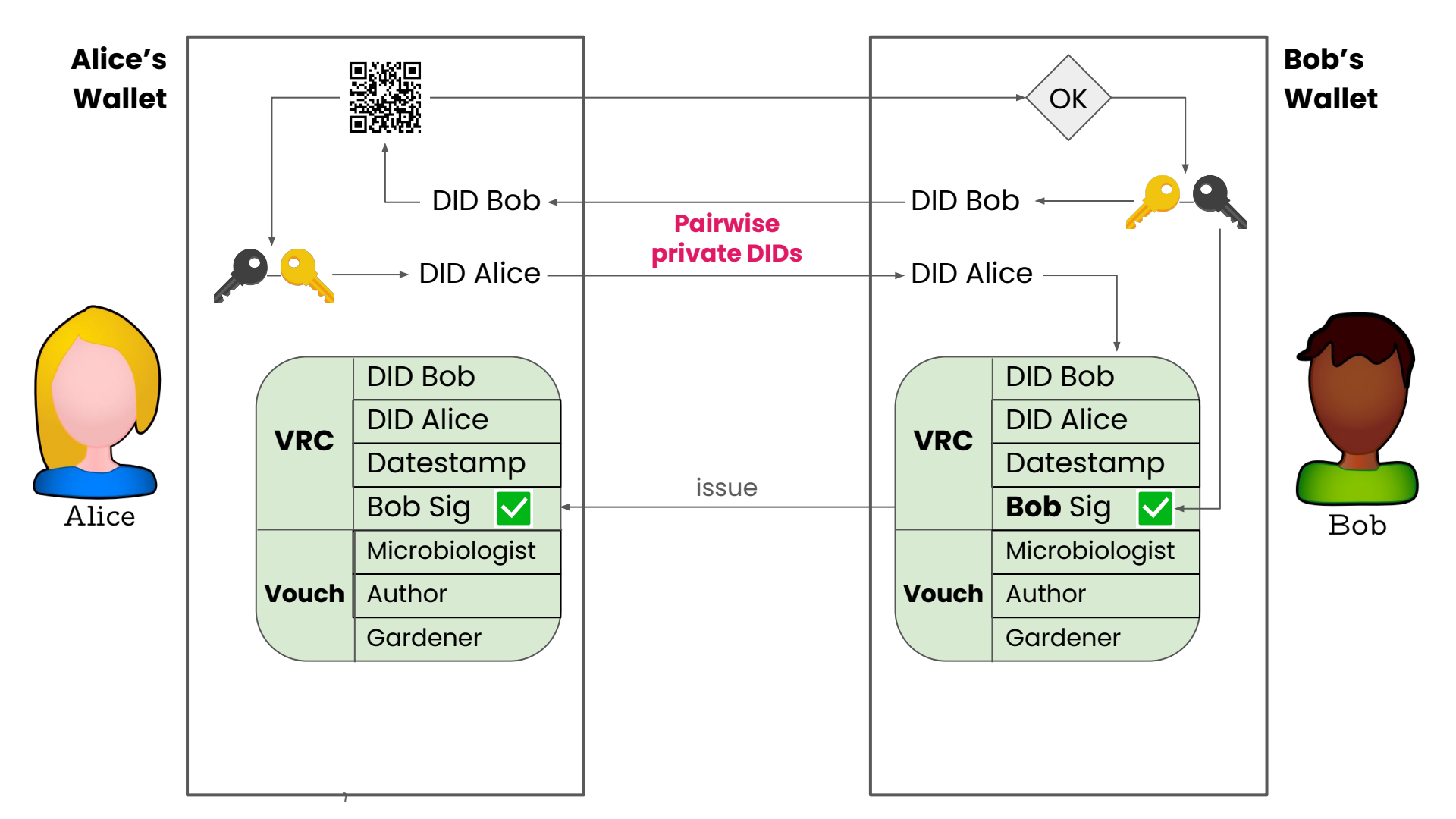
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Bob Sig
Vouch
Microbiologist
Author
Gardener
issue
VRC
DID Bob
DID Alice
Datestamp
Bob Sig
Vouch
Microbiologist
Author
Gardener
Alice
Bob

Phil’s blog post summarized it this way:

Summary

Key signing parties attempted to establish decentralized trust but they ultimately failed due to poor usability, lack of incentives, and shallow trust models. Verifiable Relationship Credentials (VRCs) provide a modern, peer-to-peer approach that enables actionable, contextual trust built on decentralized identifiers, and secure messaging. First-person identity emerges from direct connections that form relationships, mutual authentication, and portable, verifiable trust.

Next Steps

The First Person Project is currently a collaboration between the Ayra Association, LF Decentralized Trust, Trust Over IP (ToIP), and the Decentralized Identity Foundation.

Work has started on setting up a new nonprofit organization.

We anticipate the first major announcement of the First Person Project will be at the Global Digital Collaboration event.

Save the date

for the launch of the

Global Digital Collaboration

to foster wallets, credentials and trusted infrastructure
for the benefit of all humans

July 1-2, 2025

CICG Geneva, Switzerland

Hosted by the Swiss Confederation

A great deal of planning will happen over the next 6 weeks leading up to the GDC.

If you would like to be involved, we invite you to join the First Person Project mailing list.

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first-person-project@groups.io

This group is for members supporting formation of the First Person Project as a social utility for personal trust relationships. See the description of First Person Credentials in the Ayra Association white paper: https://ayra.forum/ayra-network-effects-whitepaper/

Group Information

1 Member
Started on 8:18pm
RSS Feed

Group Email Addresses

Post: first-person-project@groups.io
Subscribe: first-person-project+subscribe@groups.io
Unsubscribe: first-person-project+unsubscribe@groups.io
Group Owner: first-person-project+owner@groups.io
Help: first-person-project+help@groups.io

Group Settings

All members can post to the group.
Posts to this group do not require approval from the moderators.
Messages are set to reply to group.
Subscriptions to this group require approval from the moderators.
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Wiki is visible to members only.
Members can edit their messages.
Members can set their subscriptions to no email.

https://groups.io/g/first-person-project

Questions?

Thank you.