Linux Foundation Public Health (LFPH)

Linux Foundation Member Summit 2021

www.lfph.io

LF PUBLIC HEALTH

LFPH Vision and Mission

Vision

LFPH is the premier home for the development of open source software and digital services that serves the world's public health needs. To protect lives during this and future pandemics, promote health, and address other population health challenges requires more secure, more privacy-respecting, more standards-based and more collaboratively developed software and digital services.

Mission

We work with public health authorities, healthcare organizations, technology vendors, academia, industry associations, and the public to ensure their investments into tech meet common needs and have maximum impact, leading to a sustainable and broad commercial ecosystem around shared software and digital services.

LF PUBLIC HEALTH

About Linux Foundation Public Health (LFPH)

› Founded in summer of 2020, the initial focus of LFPH has been helping PHAs deploy an app implementing the Google Apple Exposure Notification (GAEN) system.

› In December 2020, LFPH adopted the Covid Credentials Initiative to take lead on creating interoperable standards for digital identity in a healthcare context, such as sharing COVID19 test results and vaccination status.

› As the organization grows we will explore other areas of public health that would benefit from open source software, open specifications, or open data services.

Membership

Premier Members

General Members

Associate Members

Building relationships with public health authorities

1,027
Members in our community

slack

21
US States and Territories

25+
Countries from around the world

Projects used in production (so far)

COVID Shield
2 countries

COVID GREEN
**4** US States **6** countries

HERALD
1 country

LF PUBLIC HEALTH

LFPH's first projects are exposure notification apps

› COVID Shield was developed by a top engineering and design team at Shopify as a volunteer effort to combat COVID-19.
› Canada has deployed nationwide with implementation by the Canadian Digital Service and over 5,000,000 downloads already.

› COVID Green was developed by NearForm as part of Ireland's response to the pandemic.
› Since its launch by Ireland's Health Services Executive in July, it has achieved over 30% adoption.
› The app has also been deployed in NY, NJ, PA, and DE with more on the way.

› Herald was developed by VMWare as part of the UK's response to the pandemic.
› The protocol is not build off the Google-Apple Exposure Notification APIs.
› Australia has deployed the protocol in their app and other governments are seriously exploring it.

COVID Shield

COVID GREEN

HERALD

LF PUBLIC HEALTH

Events Set Us Apart
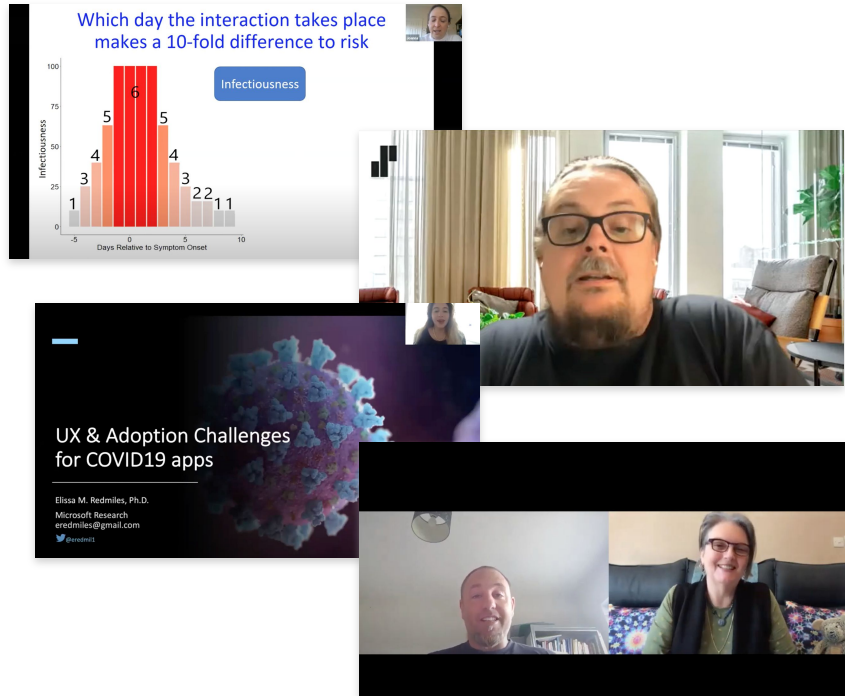
- › GAEN symposium last July attracted 150+ participants and jump-started our community

- › Monthly webinars with very high-quality attendance and good discussion, has boosted our credibility in the space rapidly

- › Risk scoring working group in partnership with Apple, Google, and the CDC to develop guidelines

LF PUBLIC HEALTH

About the COVID-19 Credentials Initiative (CCI)

› CCI is an open global community of over 400+ participants looking to deploy and help deploy privacy-preserving Verifiable Credential projects in order to mitigate the spread of COVID-19 and safely reopen

› CCI community builds on Verifiable Credentials because it is an open standard defined by W3C for broad use cases and it can provide a similar experience to paper credentials while offering additional benefits.

› CCI joined LFPH in December 2020 to work together on advancing 1) the use of Verifiable Credentials, and 2) data and technical interoperability of Verifiable Credentials in the public health realm, starting with vaccination records for COVID-19.

LFPH/CCI Goals and Activities

Use Case Implementation Workstream	**Rules & Governance Workstream**	**Vaccine Credentials Focus Group**
This workstream identifies verifiable credentials (VCs) that are most useful to the COVID-19 response and provides a forum and platform for those who are implementing COVID-19 VCs to present their projects/solutions and get community input.	This workstream defines rules and guidelines for general or particular COVID-19 verifiable credential use cases and develops MVP governance frameworks to enable solutions to be deployed at speed.	The goal is to form geography-focused subgroups under this group to bring together key stakeholders, especially public health authorities, to identify trusted and scalable ways of rolling out vaccine credentials.
28 presentations done so far	2 versions of governance framework published (V2)	The first subgroup formed is for US.

LF PUBLIC HEALTH
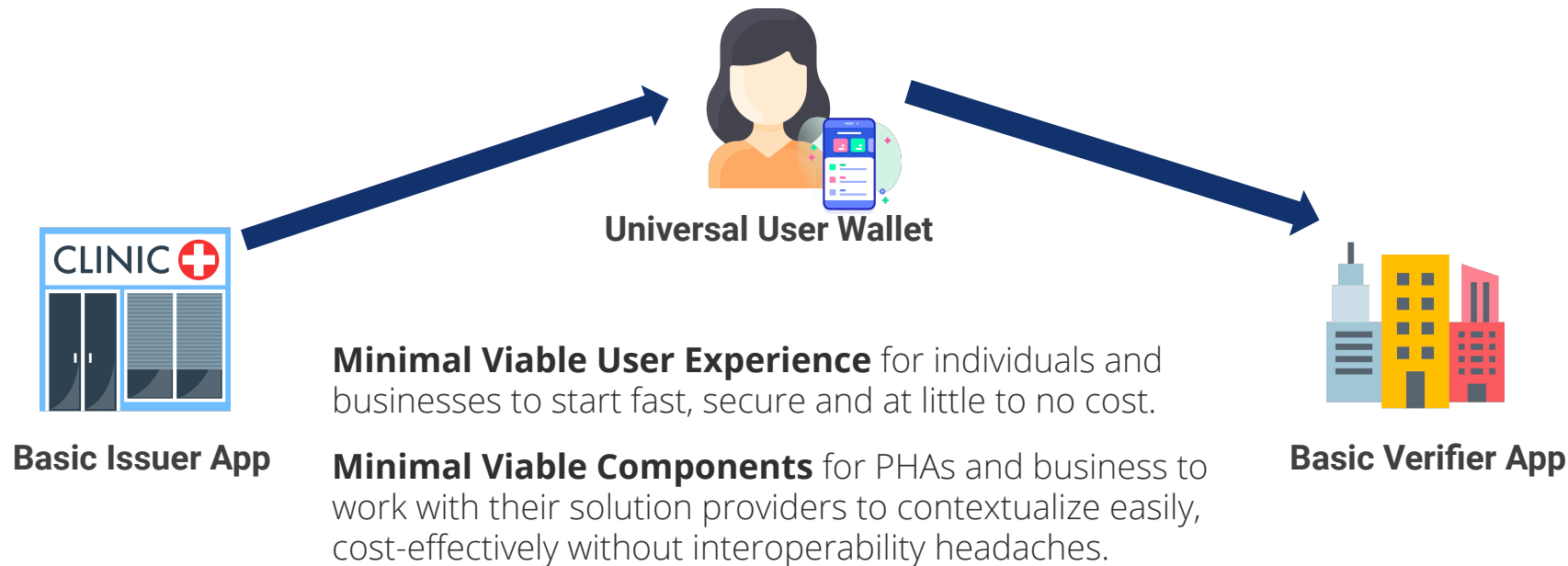
Open Specifications

Digital Credentials

- Schemas (community-led): CCI Use Case Implementation Workstream - Schema Task Force (Creating a repository for schema specifications)
- Credential Format and Signing Protocols (staff-led): [Verifiable Credentials Flavors Explained White Paper](#)
- Credential Exchanges (staff-led): Verifiable Credentials Exchange Protocols Explained White Paper (WIP)

Paper Credentials

- Conversion between Verifiable Credentials and paper credentials (staff-led): [Paper Credential Summit](#)
- QR Code Representation (forming collaboration)

Three Key Software Pieces to Verifiable Credentials

Universal User Wallet

Basic Issuer App

Minimal Viable User Experience for individuals and businesses to start fast, secure and at little to no cost.

Minimal Viable Components for PHAs and business to work with their solution providers to contextualize easily, cost-effectively without interoperability headaches.

Basic Verifier App

CLINIC

LF PUBLIC HEALTH

Cross-Initiative Collaborations

In Conversations

Vaccination Credentials Initiative (MITRE, Mayo Clinic, Lumetic, Microsoft, etc.)

AOKPass

Pathcheck Foundation

Resolve to Save Lives

Digital Infrastructure for Verifiable Open Credentialing

Active Participation

WHO Smart Vaccination Certificate (Kaliya Young)

Good Health Pass Collaborative

W3C Credentials Community Group

Active Community Participants

Evernym - Partnered with IATA to develop its Travel Pass

ProofMarket - CEO leads Product Strategy at PathCheck Foundation

Other Engaged Linux Foundation Projects: Trust over IP Foundation, Hyperledger, and Decentralized Identity Foundation.

Public health authorities and LFPH

› Public Health Authorities (PHAs) are facing their gravest crisis in a century.

› One of the roles of LFPH is to serve as a forum for collaboration between PHAs, developers, technology companies, and academics to ensure the implementation and dissemination of best practices, including privacy and security.

› LF Public Health is a nonprofit that works with PHAs *and/or* their preferred IT vendor with no charge to the PHAs.

  › Like other Linux Foundation initiatives, LFPH is a membership organization that receives funding from technology and consulting companies that want to collaborate on open source development.

  › We request PHAs to become no-fee affiliate members. This helps us prove our value to the community and get support from paying members.

Supporting Public Health Authorities

My choices before LFPH were McKinsey or vendor pitches. LFPH has provided something without financial skin in the game that I can use as a Public Health Authority.

– Mike Flowers, NJ Office of Innovation

Membership has brought with it a number of benefits. The breath, depth and inter-disciplinary nature of this community is impressive. I think the engagement so far has opened people's eyes across government to the benefits of open source in particular for situations where public trust and confidence is paramount.

– Gar Mac Críosta, Health Service Executive Ireland

Membership Benefits Summary

	Associate	General	Premier
Governing Board Seat		1 representative for every 10 members	✔
TAC Seat			✔
Outreach Committee		✔	✔
PH Advisory Council	✔ Public Health organizations only		
Press Release	Quarterly group announcement	Quarterly group announcement	Individual press release
Write Blog Posts	✔	✔	✔
Host Webinars		✔	✔
Vouchers for LF Training Courses		10	10

LF PUBLIC HEALTH

LFPH Annual Dues (for current LF members)

Premier Member*	**200+ employees: $150,000** **<200 employees: $75,000**
General Member	**5,000+ employees: $30,000** **3,000 - 4,999: $30,000** **1,000 - 2,999: $20,000** **500 - 999: $10,000** **100 - 499: $5,000** **50 – 99: $5,000** **Less than 50 employees: $2,000**
Public Health Authority Associate Member	**$0**
Academic or Nonprofit Associate Member	**$0**

Two year minimum commitment

Contact us

Brian Behlendorf, Executive Director
bbehlendorf@linuxfoundation.org
To book a Zoom call: calendly.com/bbehlendorf

Jenny Wanger, Director of Programs
jwanger@linuxfoundation.org
To book a Zoom call: calendly.com/jennywanger

Or join slack.lfph.io and send us a message

Join LFPH

LF PUBLIC HEALTH