



THE **LINUX** FOUNDATION  
MEMBER SUMMIT

# OpenWallet Foundation

Update and Overview



#openwallet

# Agenda



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- Welcome & Agenda — Daniela Barbosa
- Introduction to OWF — Daniel Goldscheider
- The Digital Identity Landscape — Drummond Reed
- eIDAS 2.0 & EU Digital Identity Wallet — Dan Bachenheimer
- Enterprise Perspective — Tracy Kuhrt
- Initial Building Blocks — Tracy Kuhrt
- Structure of the OWF — Scott Nicholas
- Project Life Cycle — Hart Montgomery
- How to Get Involved — Daniela Barbosa
- Q&A

# Introduction to OWF

Daniel Goldscheider



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# The digital identity landscape

Drummond Reed



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# The three eras of digital identity

## Centralized

- X.500
- SSL
- TLS
- HTTPS

## Federated

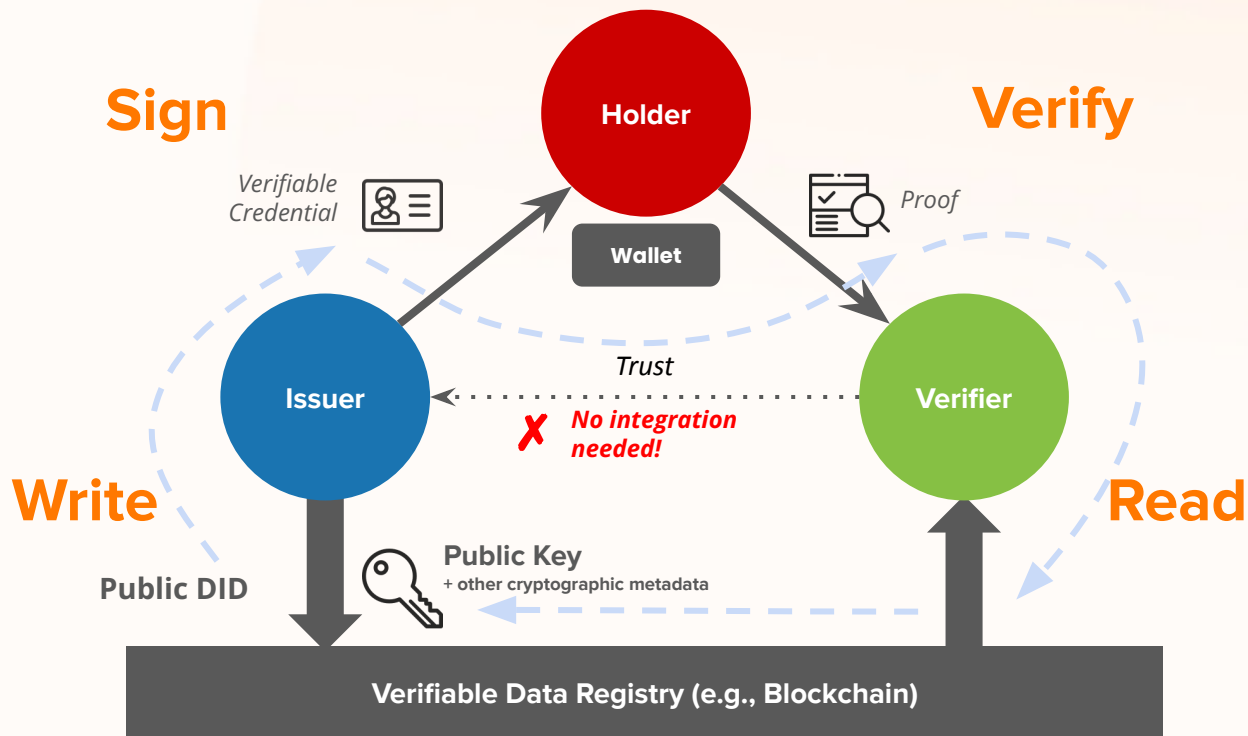
- SAML
- OpenID
- OAuth
- UMA

## Decentralized

- Decentralized Identifiers (DIDs)
- Verifiable Credentials

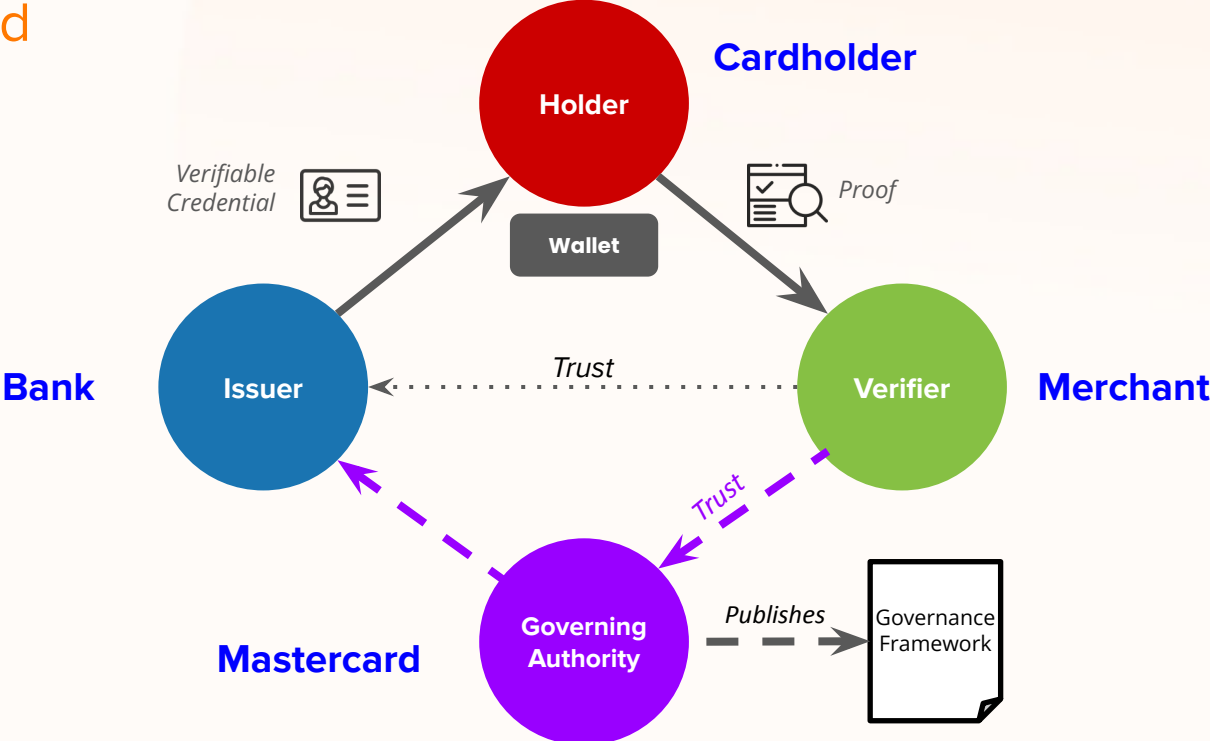


# All digital credentials are based on the “trust triangle”

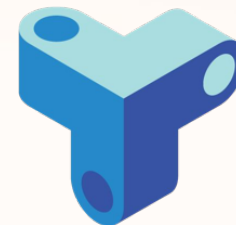
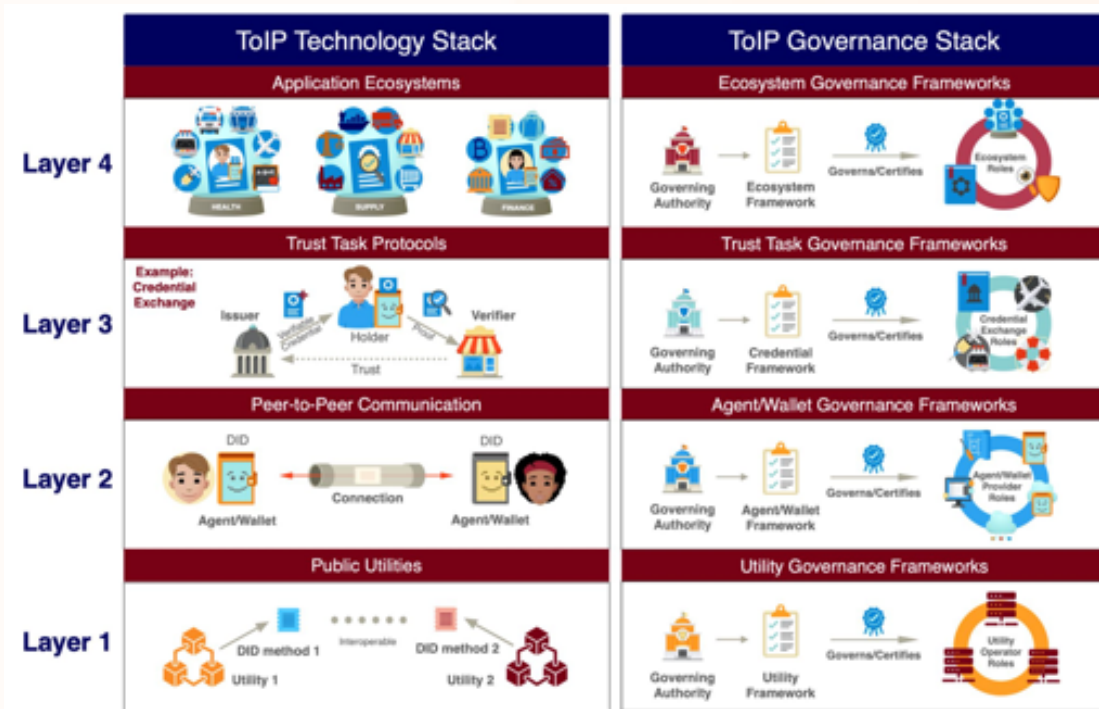


# How can digital identity wallets **scale**?

The governance trust diamond



# The Trust Over IP (ToIP) Stack



**TRUST**  
Over **IP**  
FOUNDATION





## ToIP Technology Stack

## ToIP Governance Stack

Layer 1

### Public Utilities



### Utility Governance Frameworks



Layer 2

Layer 1

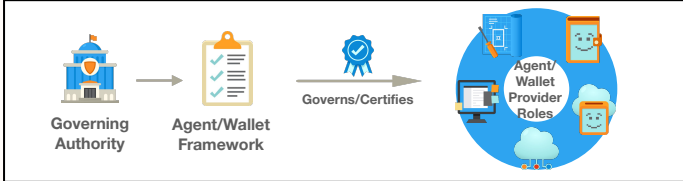
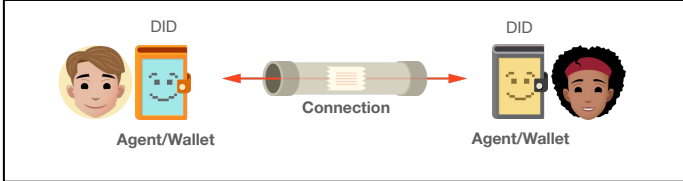
### ToIP Technology Stack

### ToIP Governance Stack



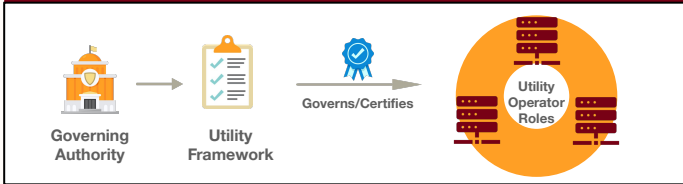
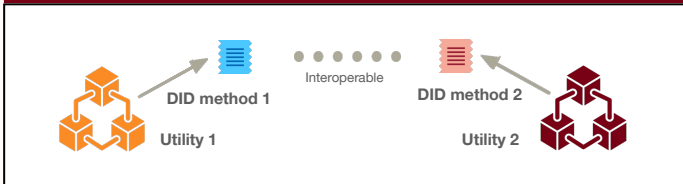
#### Peer-to-Peer Communication

#### Agent/Wallet Governance Frameworks



#### Public Utilities

#### Utility Governance Frameworks

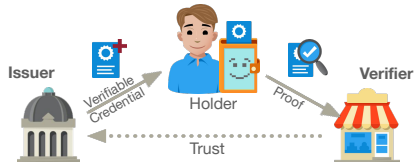


Layer 3

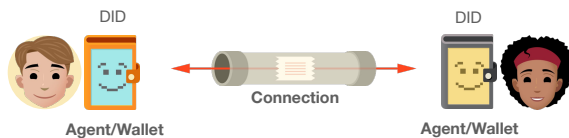
### ToIP Technology Stack

#### Trust Task Protocols

Example:  
Credential  
Exchange



#### Peer-to-Peer Communication



#### Public Utilities



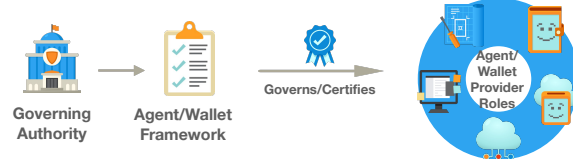
Layer 2

### ToIP Governance Stack

#### Trust Task Governance Frameworks



#### Agent/Wallet Governance Frameworks



#### Utility Governance Frameworks



Layer 1

Layer 4

### ToIP Technology Stack

#### Application Ecosystems



### ToIP Governance Stack

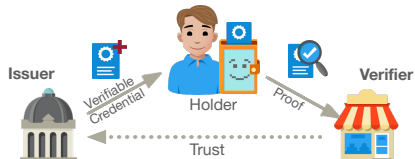
#### Ecosystem Governance Frameworks



Layer 3

#### Trust Task Protocols

Example:  
Credential  
Exchange

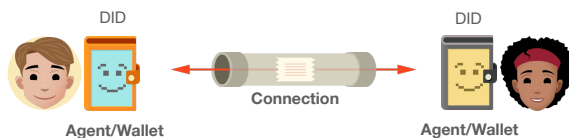


#### Trust Task Governance Frameworks

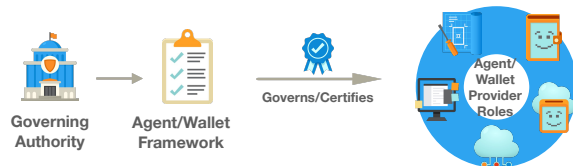


Layer 2

#### Peer-to-Peer Communication



#### Agent/Wallet Governance Frameworks



Layer 1

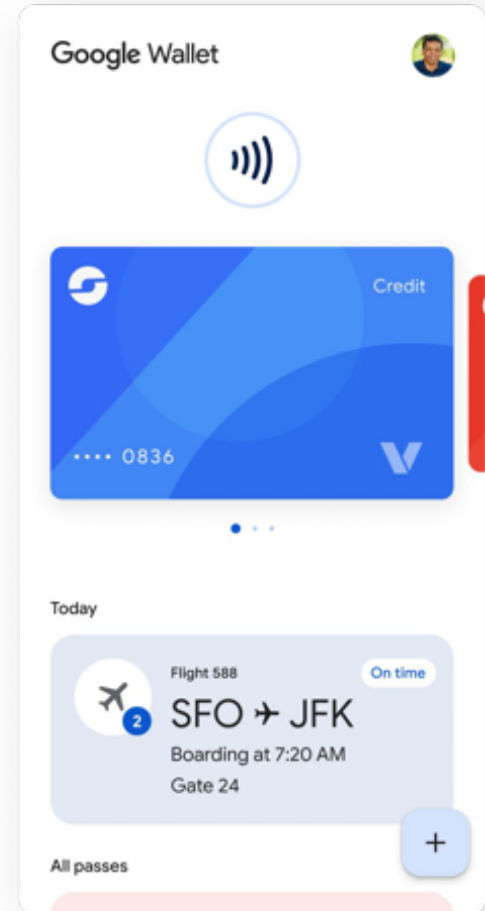
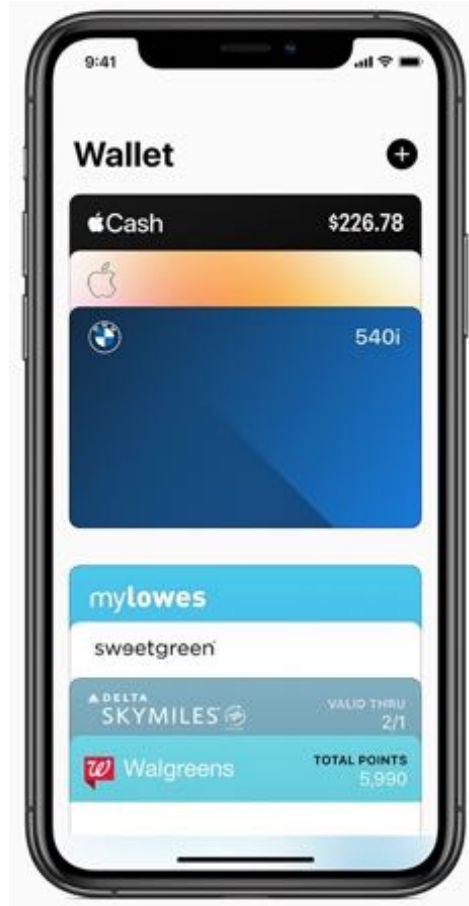
#### Public Utilities



#### Utility Governance Frameworks



Today, when  
you say  
“digital wallet”,  
everyone thinks  
of these two:



That's a problem.

At least, the EU believes it's a problem.

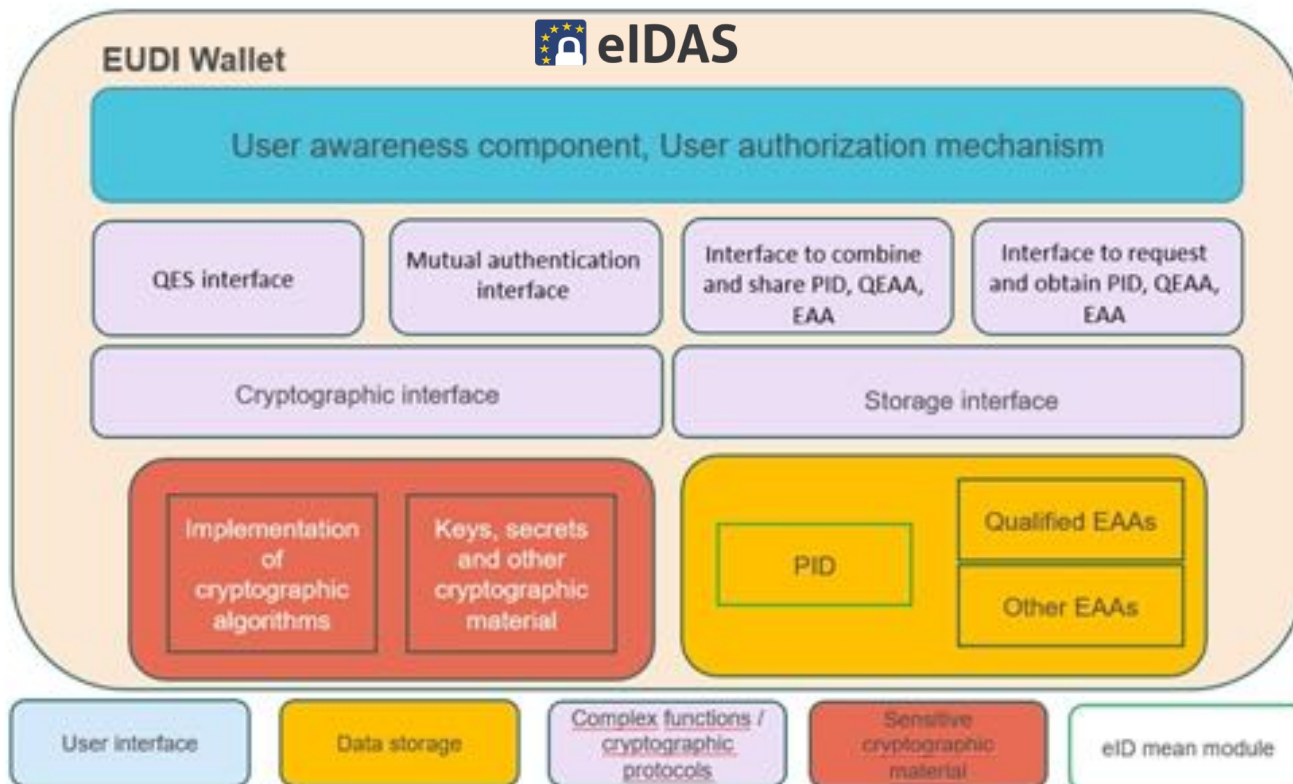
The EU wants a level playing field for digital wallets based on open standards and open source.

So they are funding the European Digital Identity Wallets initiative to the tune of over €75M.



# eIDAS 2.0 and the EU Digital Identity Wallet

Dan Bachenheimer



# Enterprise Perspective

Tracy Kuhrt



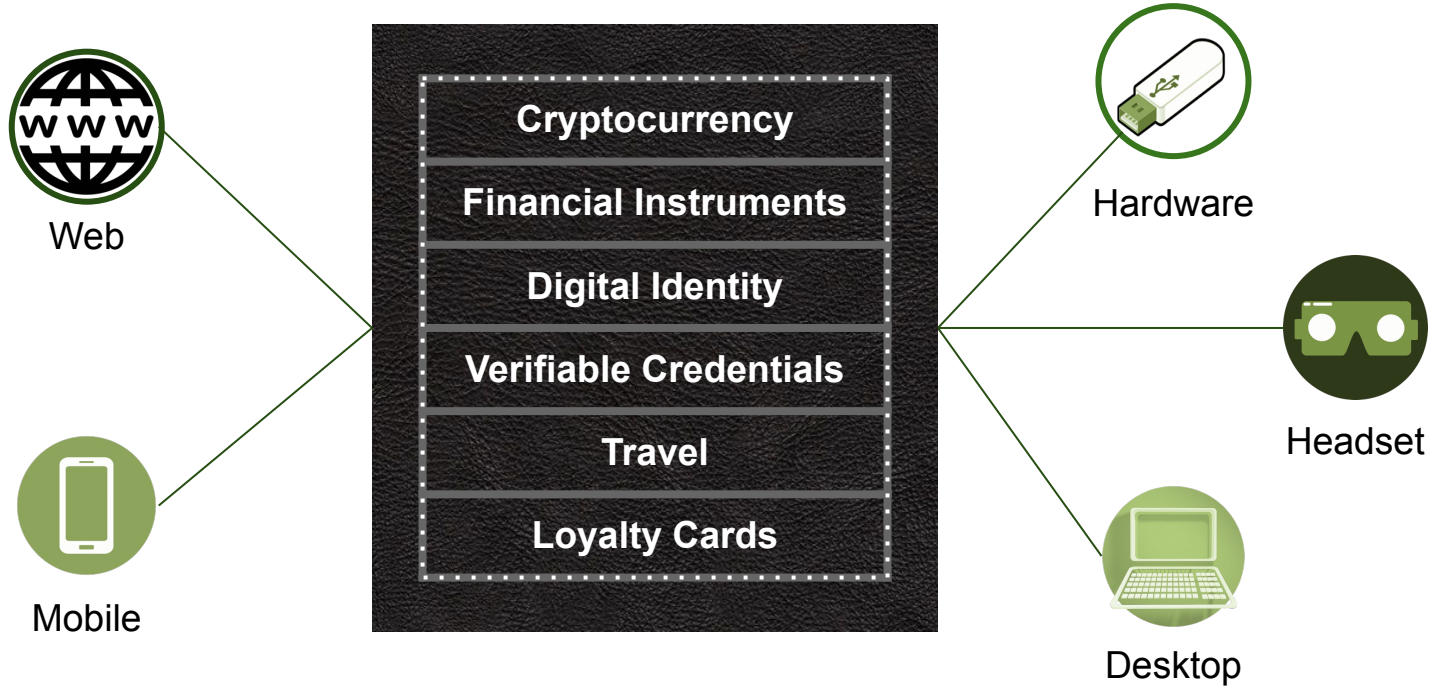
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# Multipurpose Wallets



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# Initial OWF Building Blocks

Tracy Kuhrt



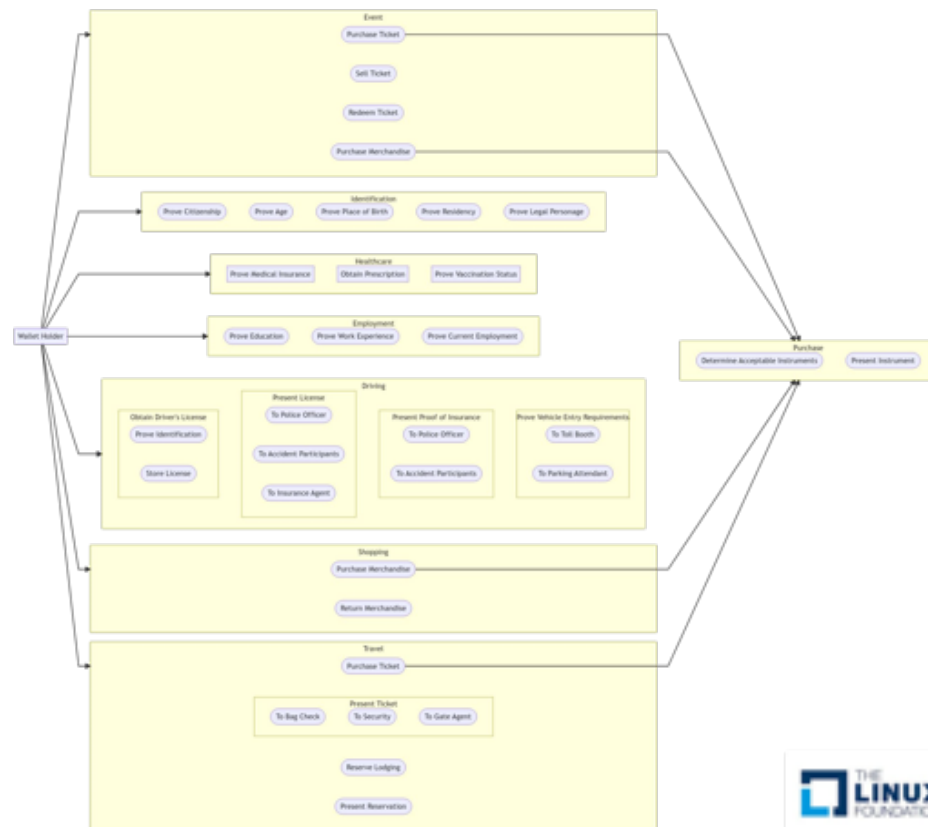
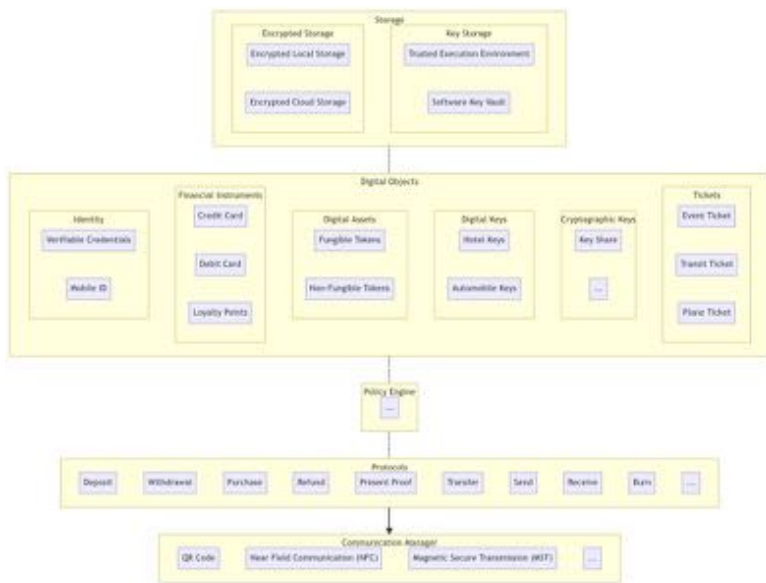
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# Where we started



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<https://github.com/openwallet-foundation/architecture-task-force>



# Proposed Initial Building Blocks



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1. Payment Tokenisation ([EMV Tokenisation Specification](#))
2. ISO mDL ([ISO/IEC 18013-X](#) - Mobile Driving License)
3. W3C Verifiable Credentials ([W3C Verifiable Credentials Data Model v1.1](#))
4. Anonymous Credentials ([AnonCreds Specification v1.0 Draft](#))
5. ICAO DTC ([Digital Travel Credentials Technical Report v1.2](#))
6. Authentication



# OWF Structure

Scott Nicholas



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# Structure of Foundation



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Linux Foundation Europe

OpenWallet Foundation

GOVERNING BOARD

GOV  
ADVISORY  
COUNCIL

TECHNICAL  
ADVISORY  
COUNCIL

OWF governance  
detailed in the  
Sponsorship  
Agreement and  
Charter

PROJECT  
ABC

PROJECT  
DEF

...PROJECT  
XYZ

Set up through  
individual technical  
charters

# Project Lifecycle

Hart Montgomery

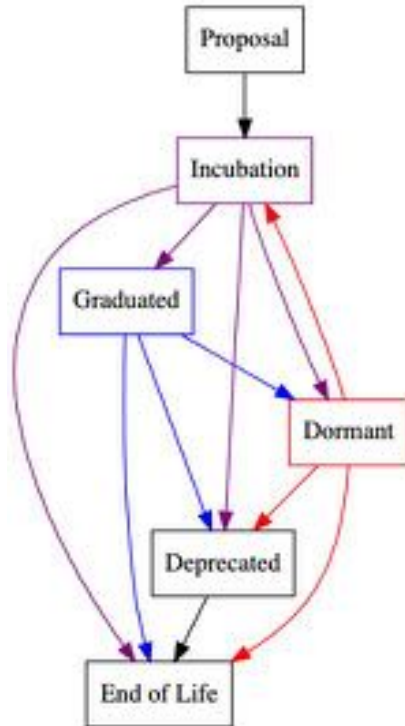


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# Umbrella Project Lifecycle



- LF umbrella projects by definition are collaborations among multiple individual projects
- To facilitate this, they develop a standard project lifecycle process.
- For example, the [Hyperledger Foundation's Project Lifecycle](#) process defines six stages in the completely lifecycle of a project as summarized in this diagram
- The OWF will define a similar process to define the maturity, interoperability, security, privacy, and other requirements a component project must meet to become part of the OpenWallet distro

# How to Get Involved

Daniela Barbosa



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# Q & A



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## ToIP Technology Stack

### Application Ecosystems



Layer 4

### Trust Task Protocols

Example:  
Credential  
Exchange



Layer 3

### Peer-to-Peer Communication



Layer 2

### Public Utilities



Layer 1

## ToIP Governance Stack

### Ecosystem Governance Frameworks



### Trust Task Governance Frameworks



### Agent/Wallet Governance Frameworks



### Utility Governance Frameworks



