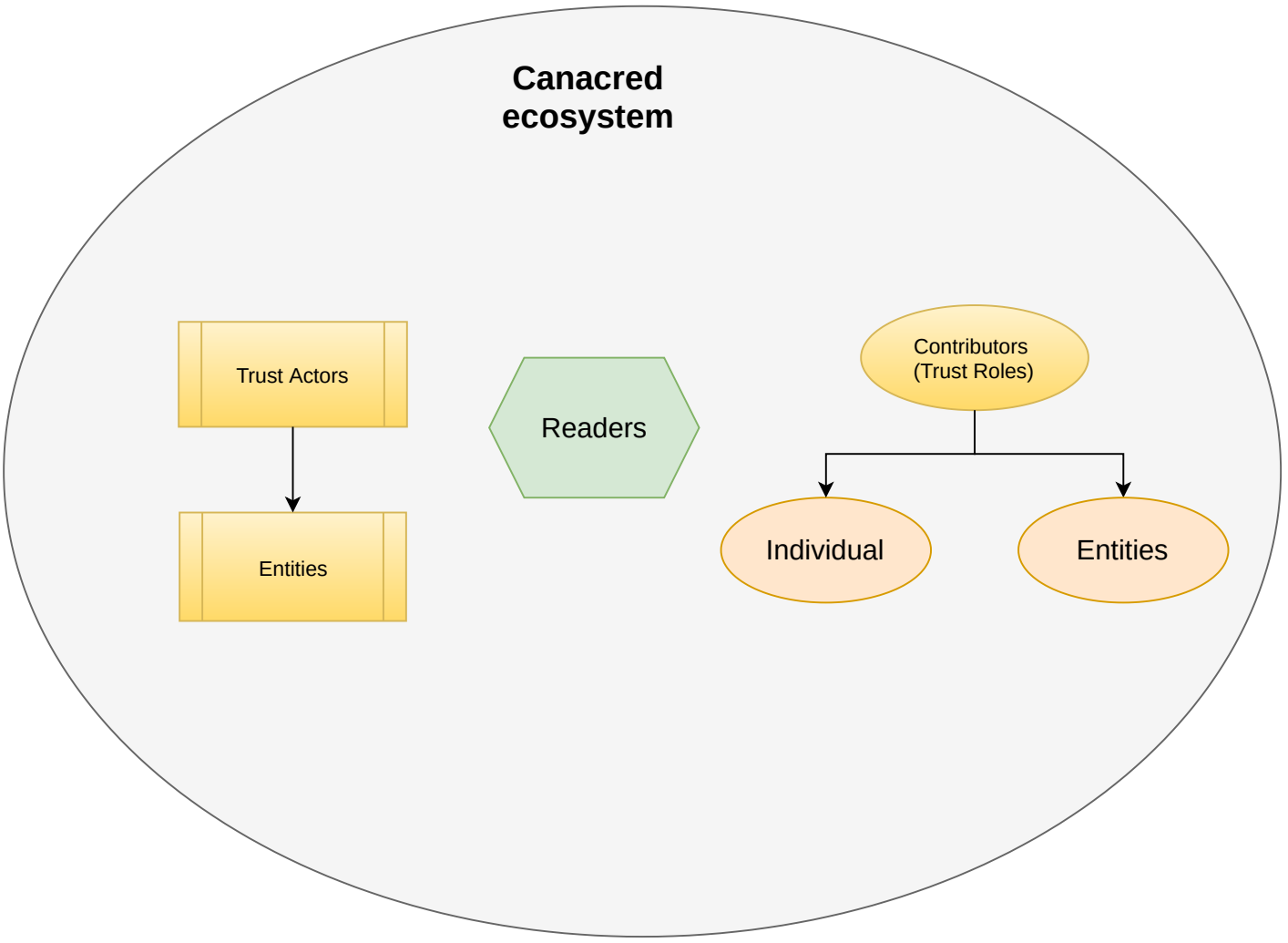


Trust Actors	Entities that create, assess, and opinion on legal, governance and business frameworks where Canacred operates: Federal, provincial governments and government entities, Stewards, Canacred Network Committee
Trust Roles	Participants making trust assertions about other participants: Stewards, Issuers, Relying parties, Authorized Developer, Authorized Administrator
Readers	Canacred Participants that have Read access to the Canadian Credential Network Utility through the use of Agents

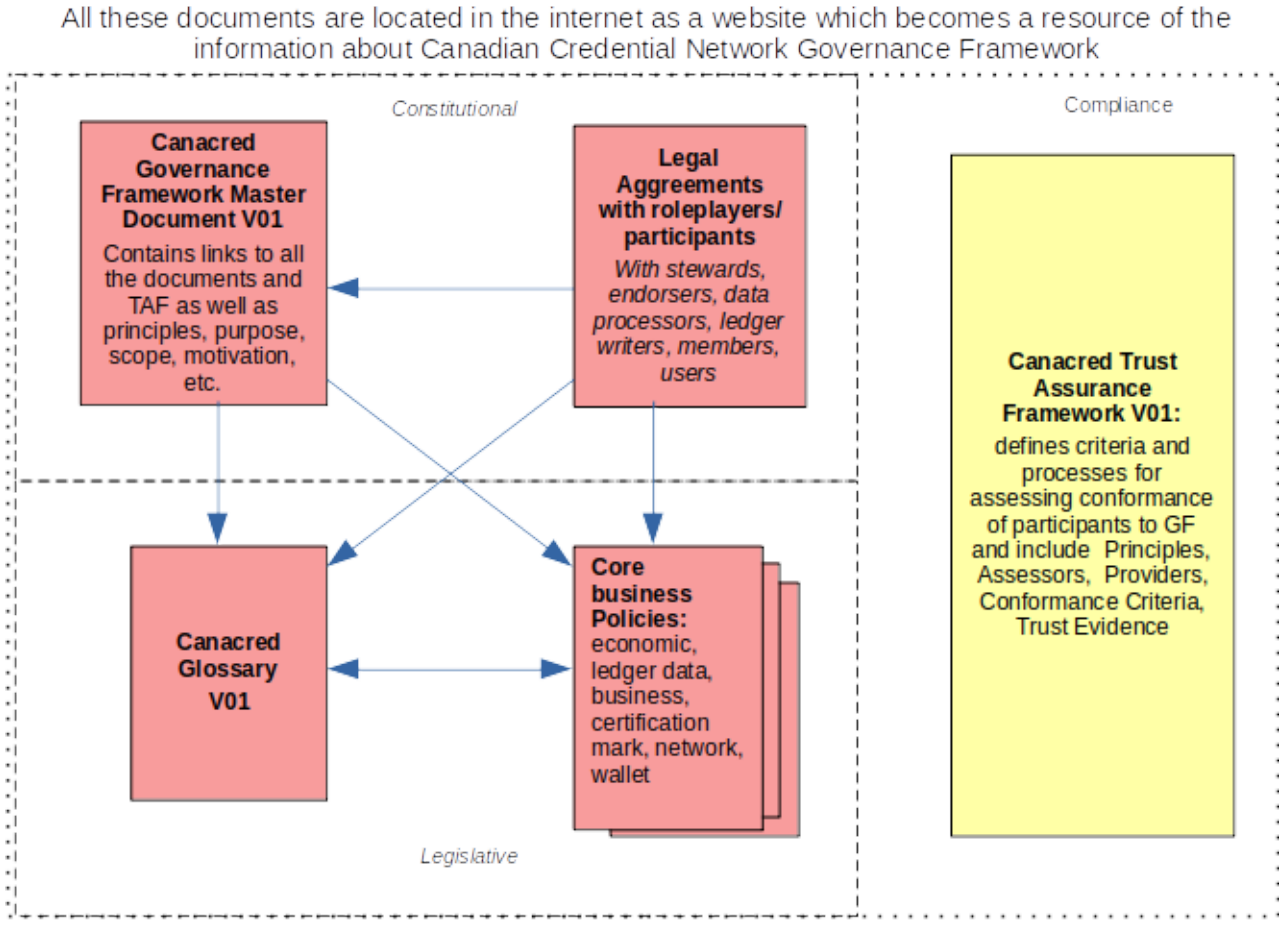
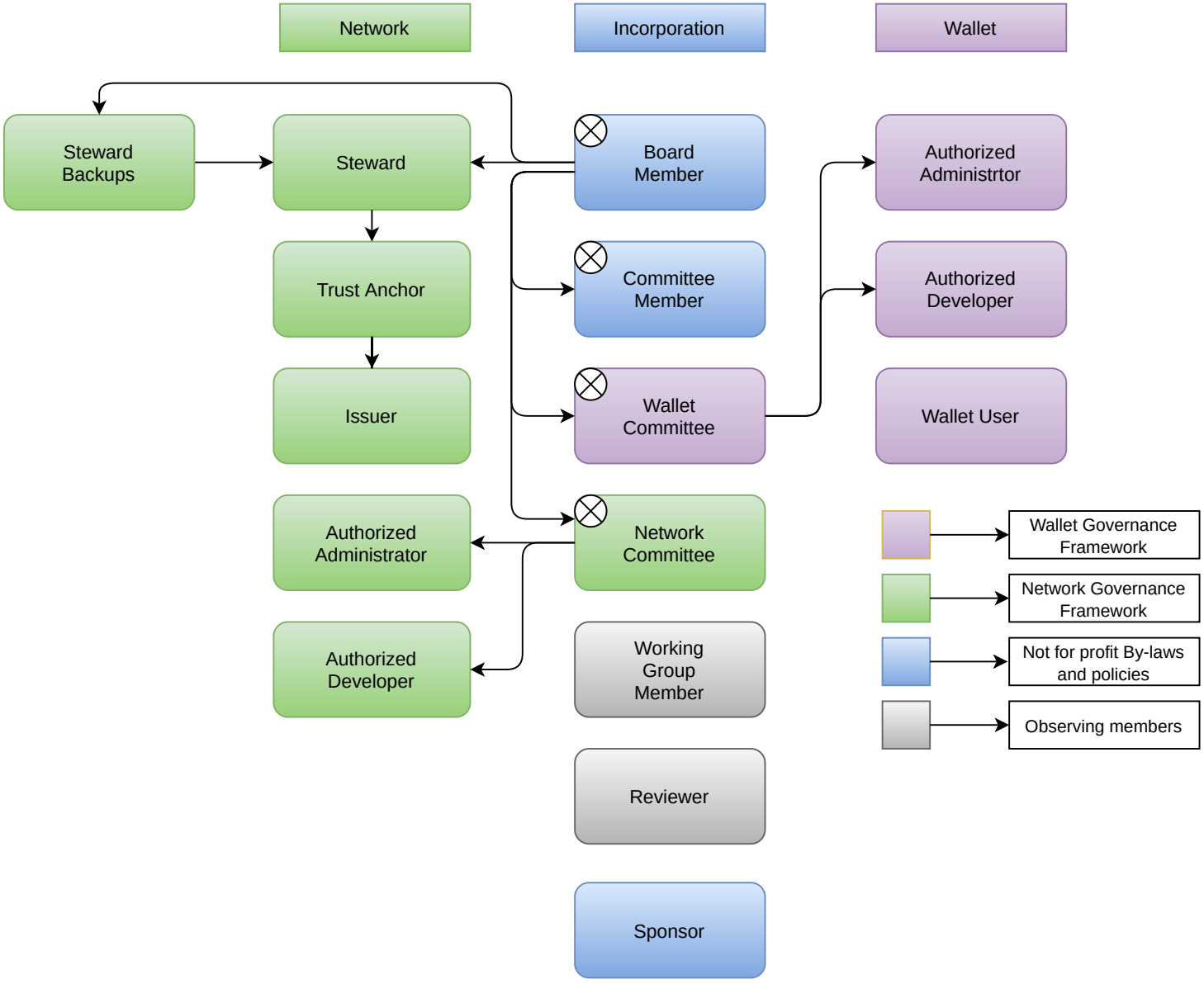
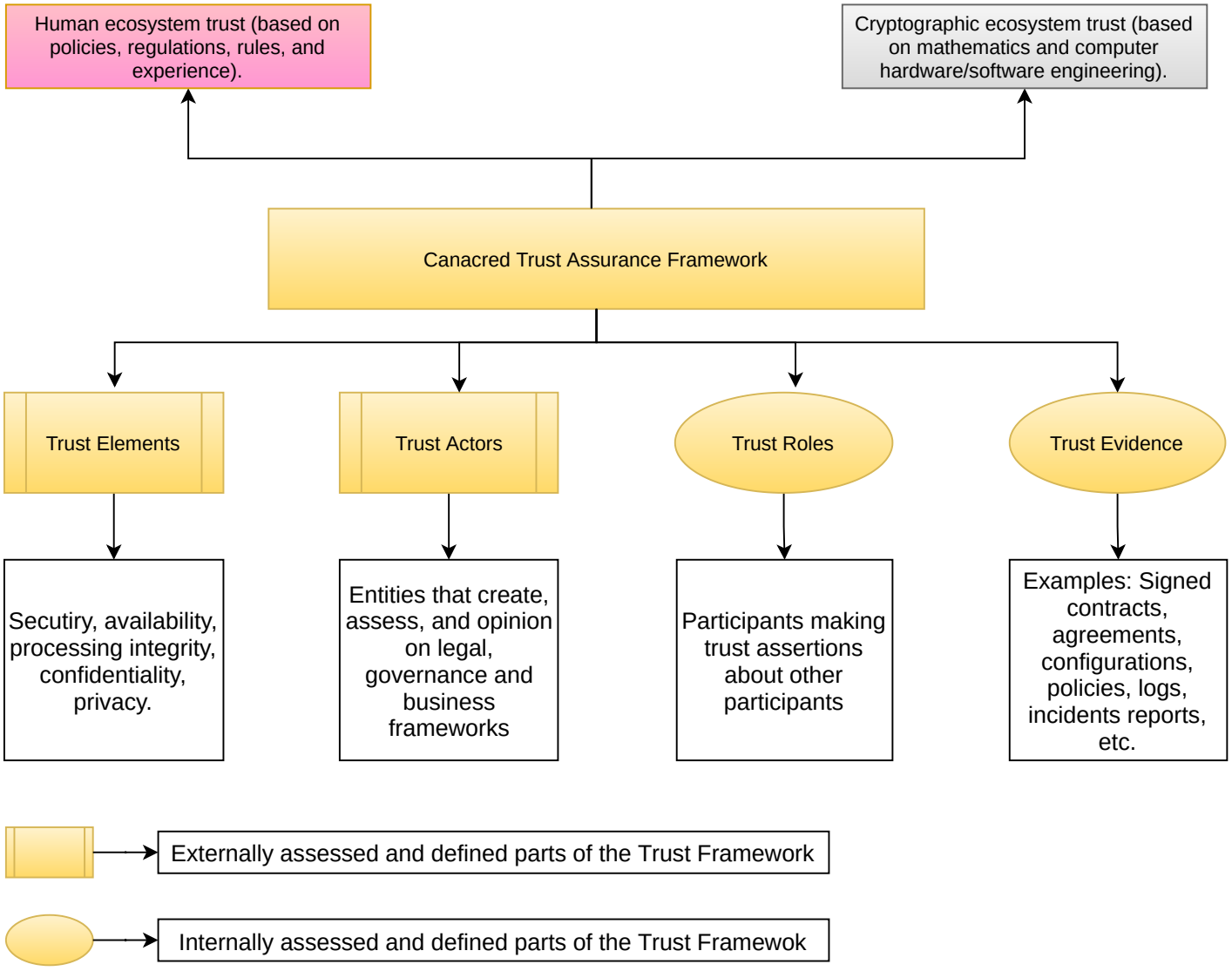
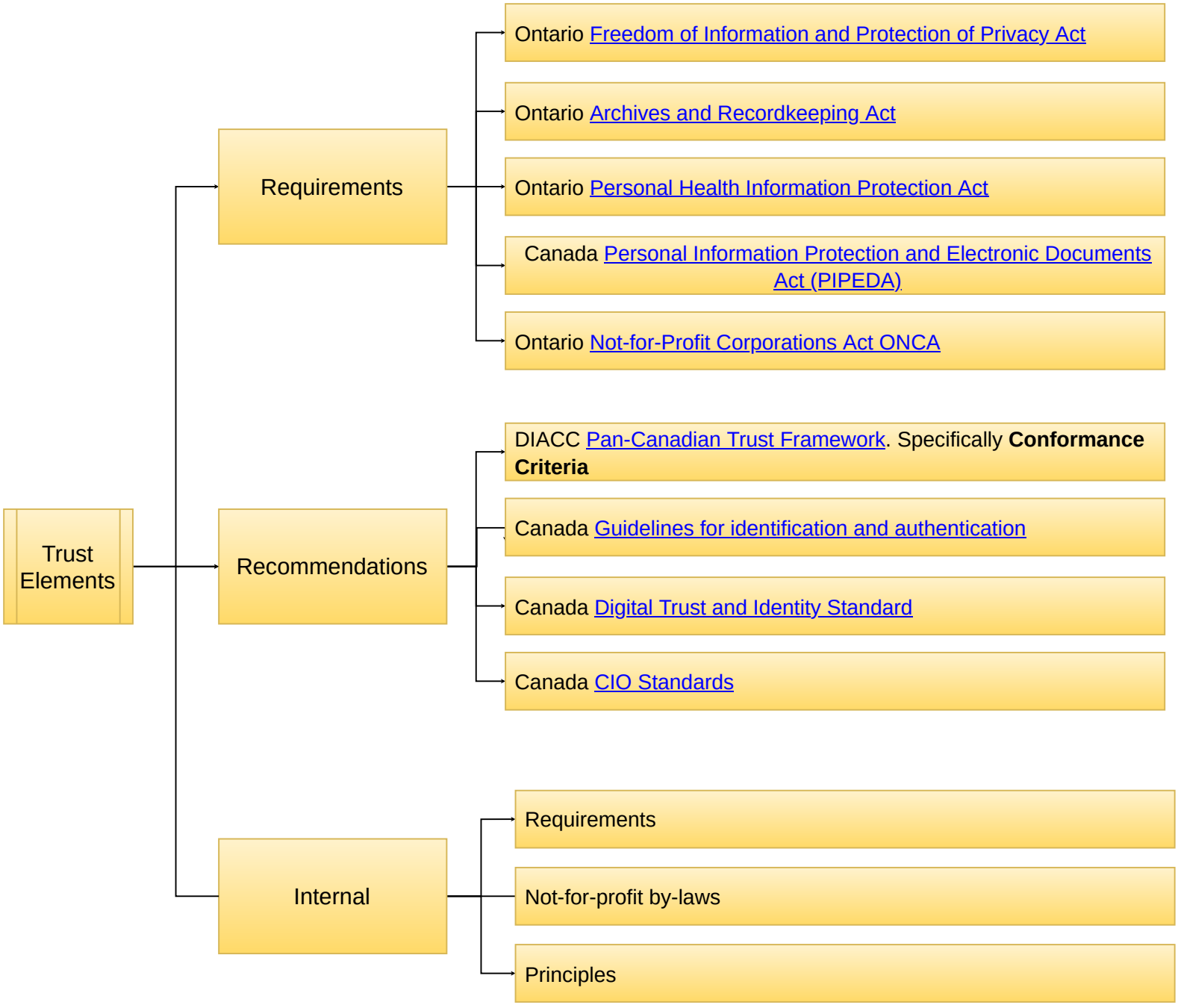


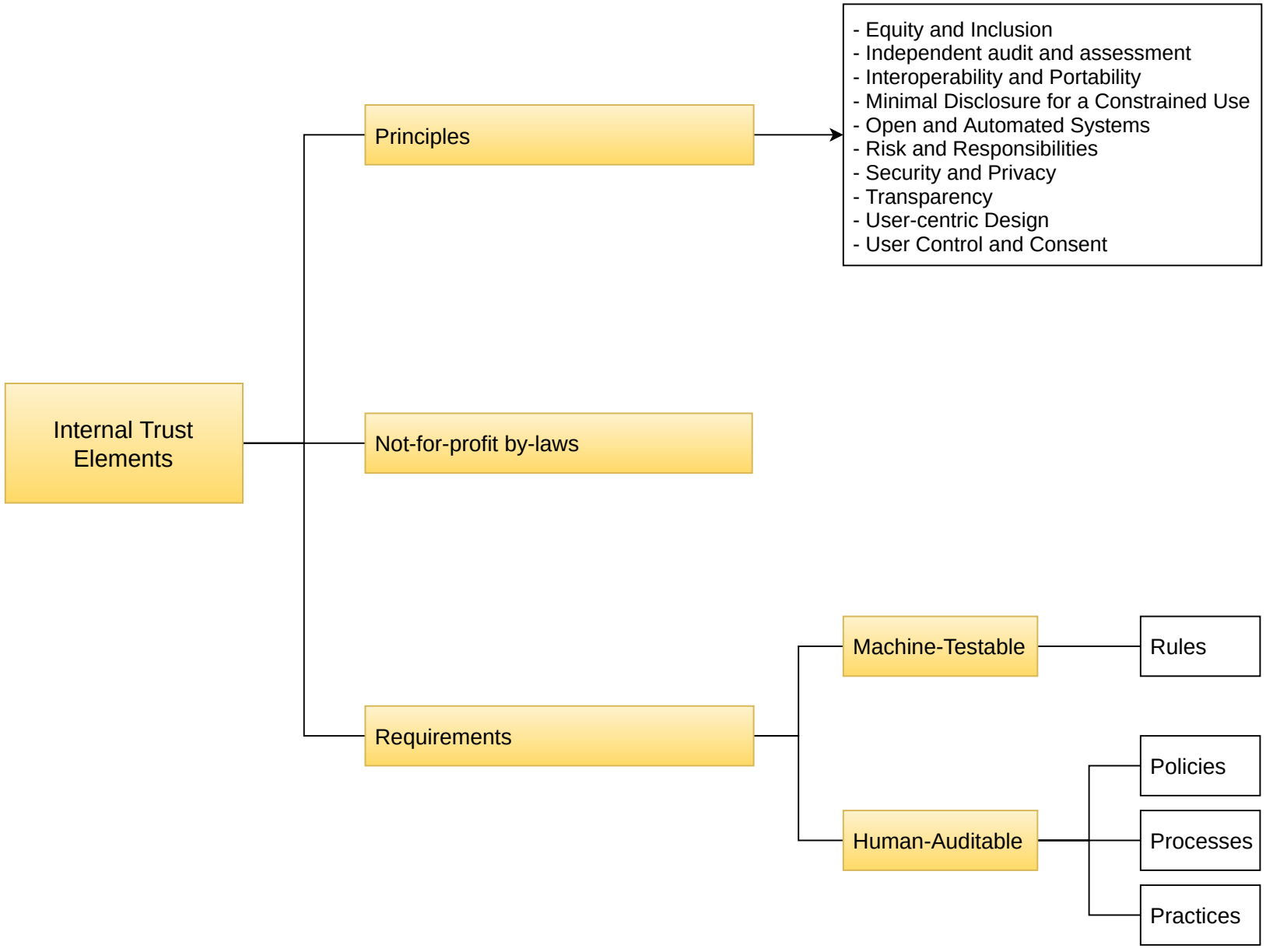
Figure 1: *Documents in the Canacred Governance Framework V1 (Rose - Normative, Yellow - Assessment)*

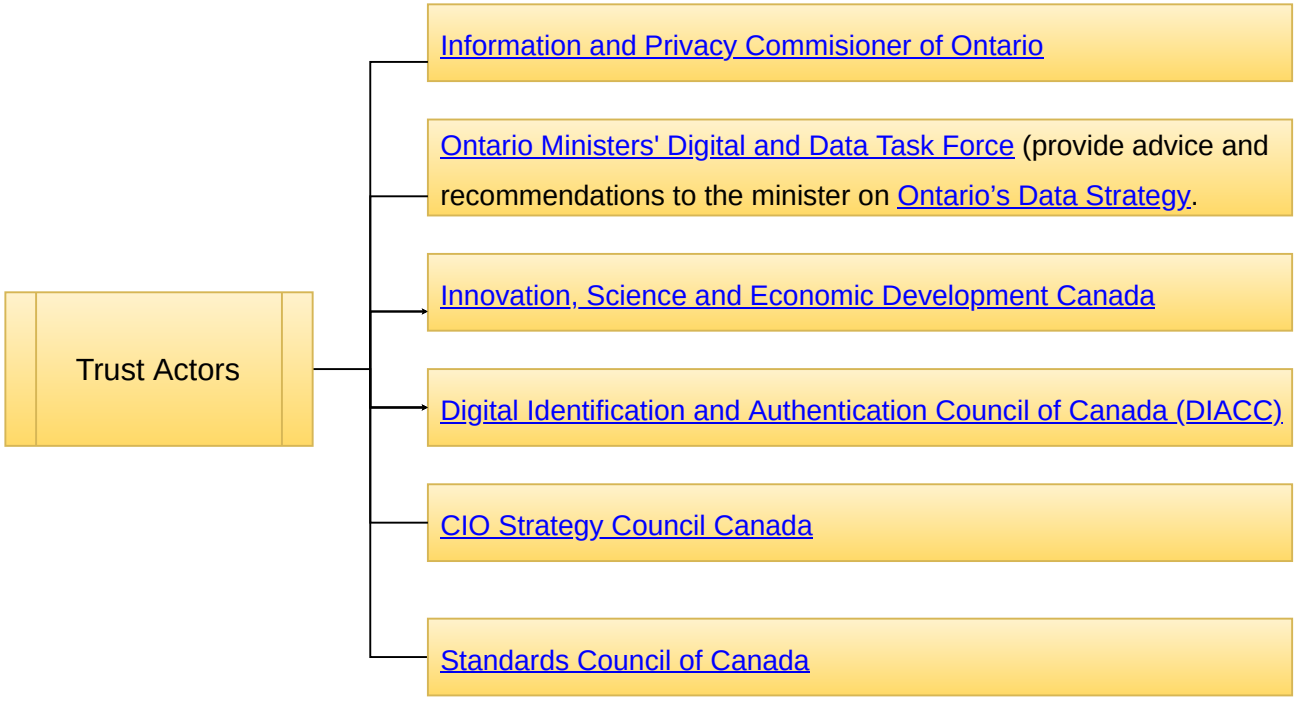
Canacred Project Governance Structure

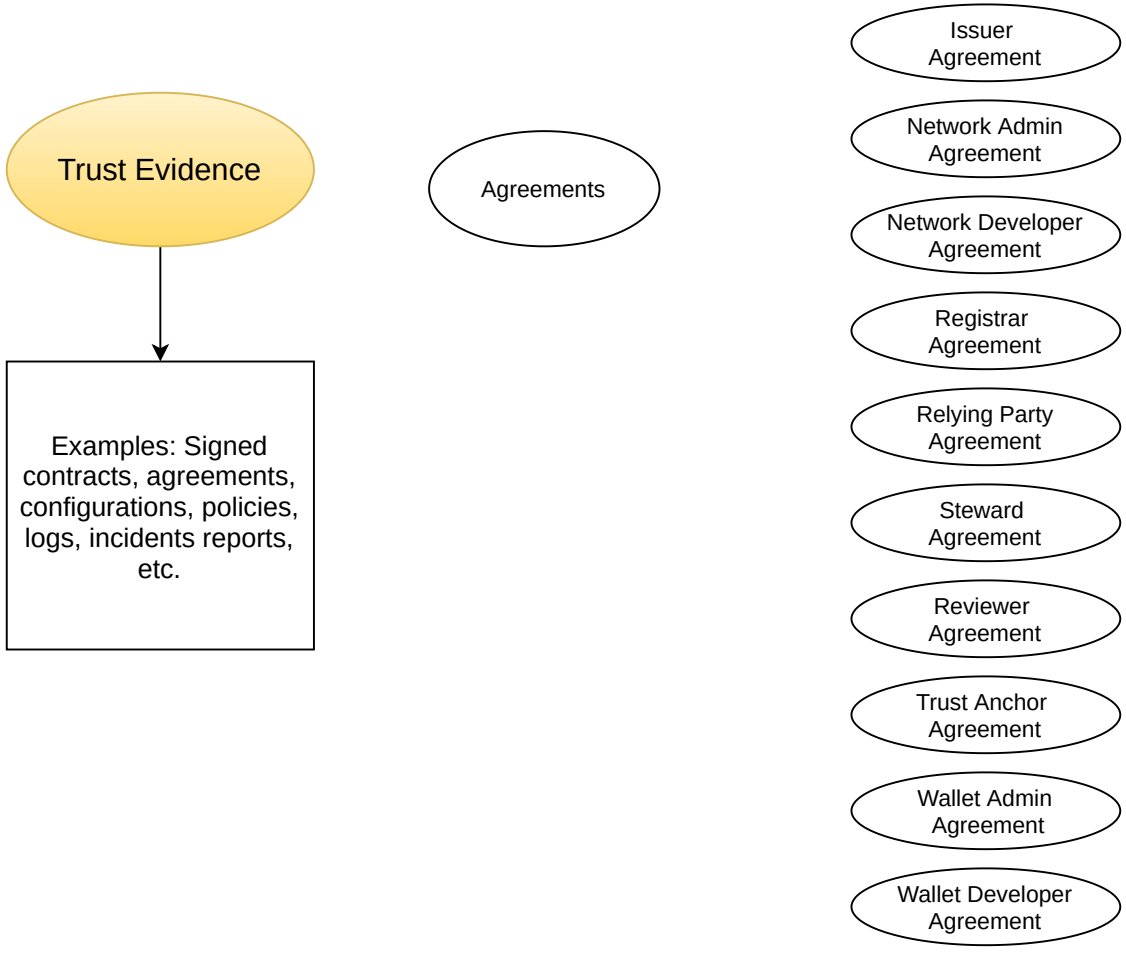



Human ecosystem trust (based on policies, regulations, rules, and experience).
Cryptographic ecosystem trust (based on mathematics and computer hardware/software engineering).
Canacred Trust Assurance Framework
Trust Elements
Trust Actors
Trust Roles
Trust Evidence
Secutiry, availability, processing integrity, confidentiality, privacy.
Entities that create, assess, and opinion on legal, governance and business frameworks
Participants making trust assertions about other participants
Examples: Signed contracts, agreements, configurations, policies, logs, incidents reports, etc.
Externally assessed and defined parts of the Trust Framework
Internally assessed and defined parts of the Trust Framewok


Trust Elements
Requirements
Ontario Freedom of Information and Protection of Privacy Act
Ontario Archives and Recordkeeping Act
Ontario Personal Health Information Protection Act
Canada Personal Information Protection and Electronic Documents Act (PIPEDA)
Ontario Not-for-Profit Corporations Act ONCA
Recommendations
DIACC Pan-Canadian Trust Framework. Specifically **Conformance Criteria**
Canada Guidelines for identification and authentication
Canada Digital Trust and Identity Standard
Canada CIO Standards
Internal
Requirements
Not-for-profit by-laws
Principles


Internal Trust Elements
Principles
- Equity and Inclusion
- Independent audit and assessment
- Interoperability and Portability
- Minimal Disclosure for a Constrained Use
- Open and Automated Systems
- Risk and Responsibilities
- Security and Privacy
- Transparency
- User-centric Design
- User Control and Consent
Not-for-profit by-laws
Requirements
Machine-Testable
Rules
Human-Auditable
Policies
Processes
Practices


Trust Actors
Information and Privacy Commisioner of Ontario
Ontario Ministers' Digital and Data Task Force (provide advice and recommendations to the minister on Ontario's Data Strategy.
Innovation, Science and Economic Development Canada
Digital Identification and Authentication Council of Canada (DIACC)
CIO Strategy Council Canada
Standards Council of Canada


Trust Evidence
Examples: Signed contracts, agreements, configurations, policies, logs, incidents reports, etc.
Agreements
Issuer Agreement
Network Admin Agreement
Network Developer Agreement
Registrar Agreement
Relying Party Agreement
Steward Agreement
Reviewer Agreement
Trust Anchor Agreement
Wallet Admin Agreement
Wallet Developer Agreement

Steward

Layer 4

Layer 3

- Credential Lifecycle Processes: enrollment, signing, issuance, renewal, expiration, archival
- Credential Verification
- Sending and Receiving Messages (Chat interface for communications for context for credential exchange)

Layer 2

Layer 1

- Run Node
- Create Trust Anchors
- Public DID management (a DID creation and modificaton, a DID Document writing to layer one)
- Schemas creation (every schema should have a DID and a DID Document)
- Credential revocation

Trust Anchor

Layer 4

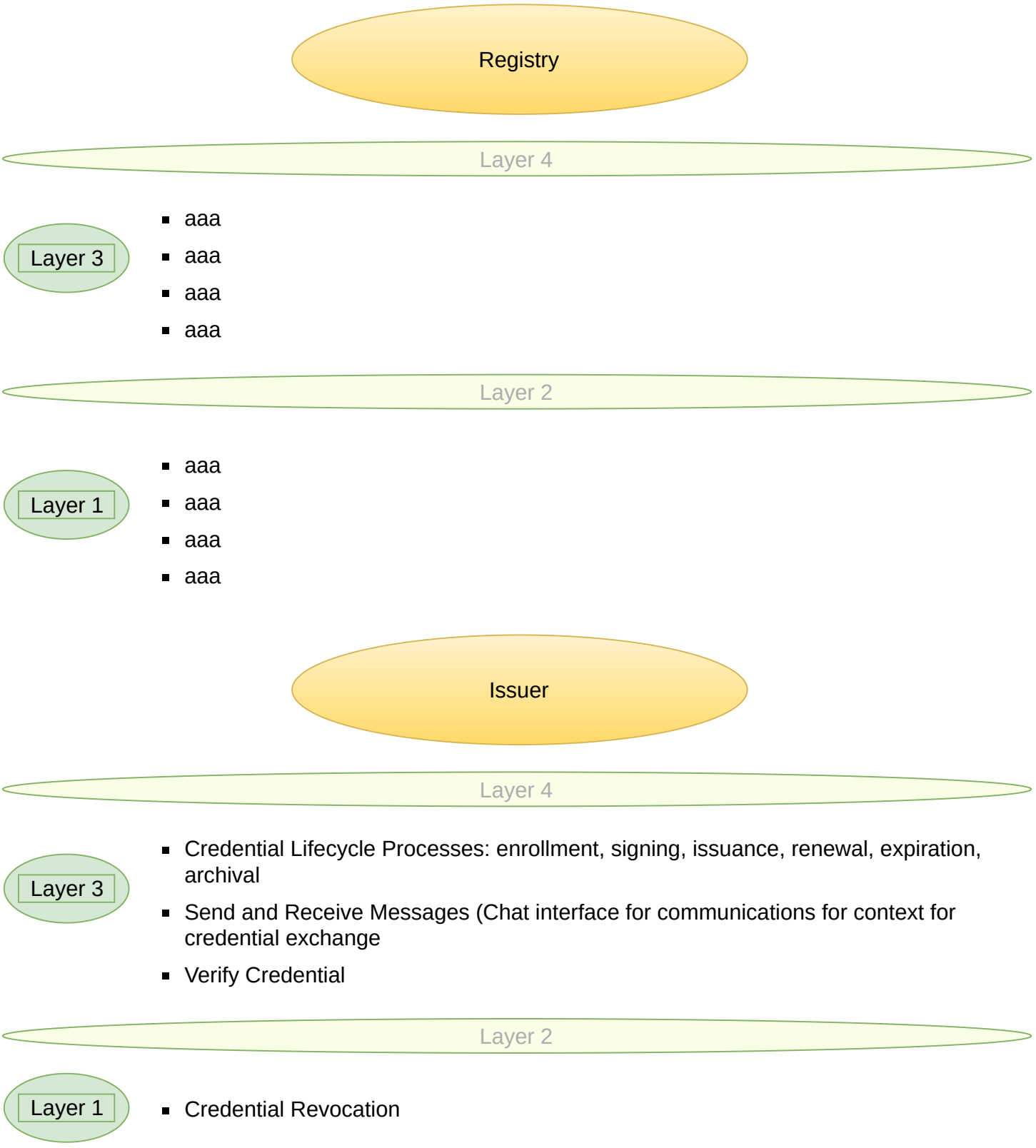
Layer 3

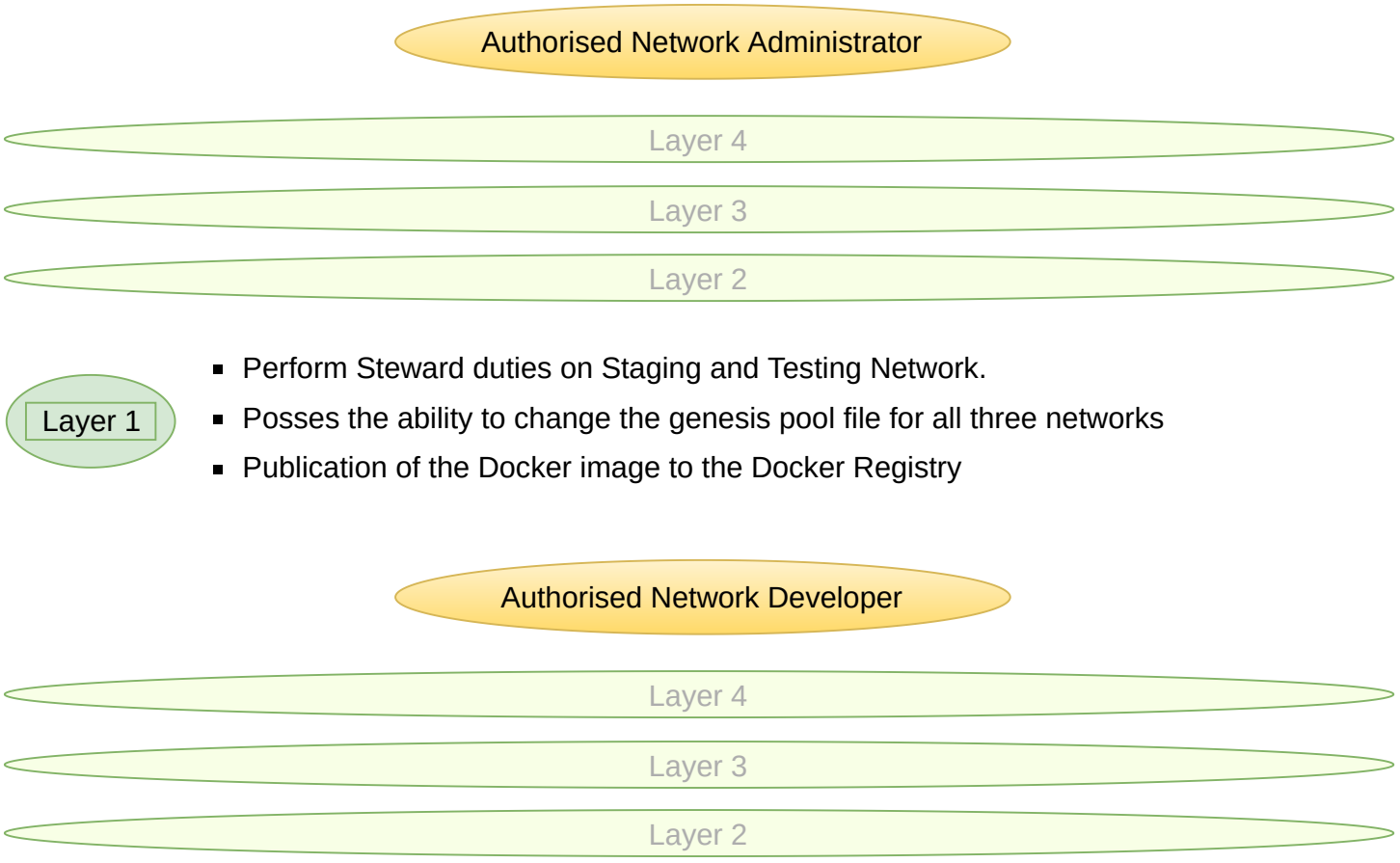
- Credential Lifecycle Processes: enrollment, signing, issuance, renewal, expiration, archival
- Credential Verification
- Sending and Receiving Messages (Chat interface for communications for context for credential exchange)

Layer 2

Layer 1

- VC publication
- Issuer Vetting Process
- Transaction Logging
- Records Archival
- Public DID management (a DID creation and modificaton, a DID Document writing to layer one)
- Schemas creation (every schema should have a DID and a DID Document)
- Credential revocation


Registry
Layer 4
Layer 3
aaa
aaa
aaa
aaa
Layer 2
Layer 1
aaa
aaa
aaa
aaa
Issuer
Layer 4
Layer 3
Credential Lifecycle Processes: enrollment, signing, issuance, renewal, expiration, archival
Send and Receive Messages (Chat interface for communications for context for credential exchange
Verify Credential
Layer 2
Layer 1
Credential Revocation


Authorised Network Administrator
Layer 4
Layer 3
Layer 2
Layer 1
Perform Steward duties on Staging and Testing Network.
Posses the ability to change the genesis pool file for all three networks
Publication of the Docker image to the Docker Registry

Authorised Network Developer
Layer 4
Layer 3
Layer 2
Layer 1
Perform Steward duties on Testing Network.
Posses the ability to change the genesis pool file for the Testing Network
Edition of the Docker image

Authorised Wallet Administrator

Layer 4

Layer 3

- Administer and maintain Wallet code available for public in Application stores and libraries (Google and Apple App Store)
- Administer and maintain GitHub repository for the Wallet codes.
- Intermediary between Canacred Wallet Committee and Auditors for Trust marks.

Layer 2

Authorised Wallet Developer

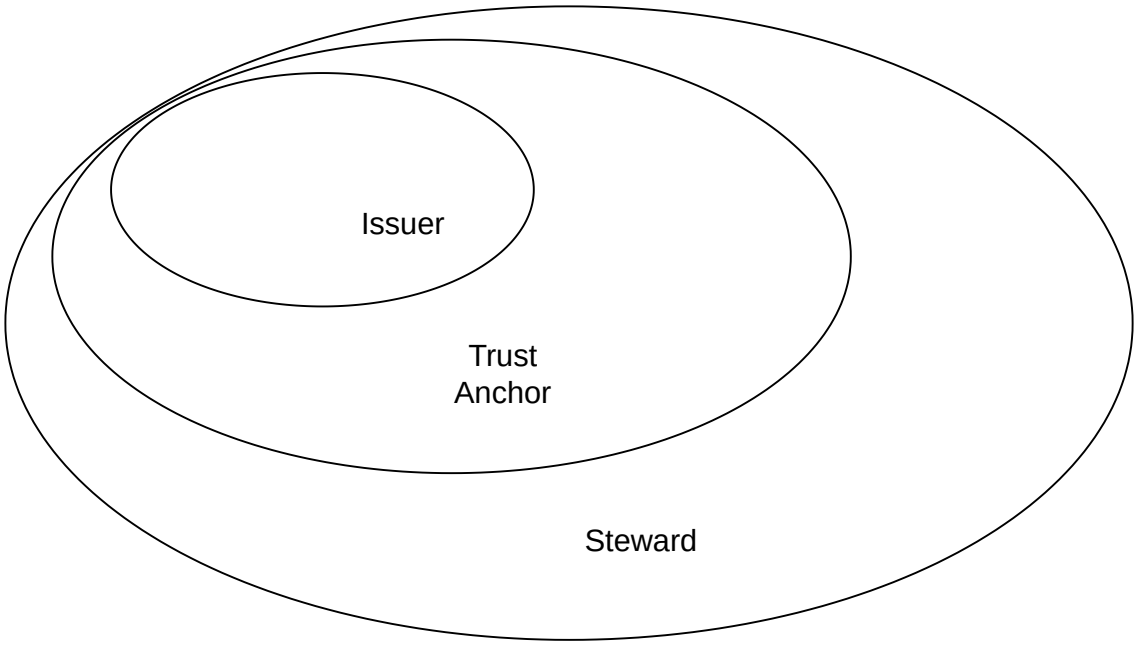
Layer 4

Layer 3

- Have writing access to the Wallet repository on GitHub
- Cooperate with Network Developer on bringing changes to the Test Network

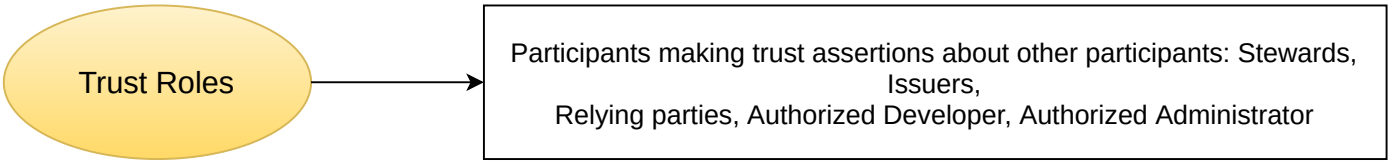
Layer 2

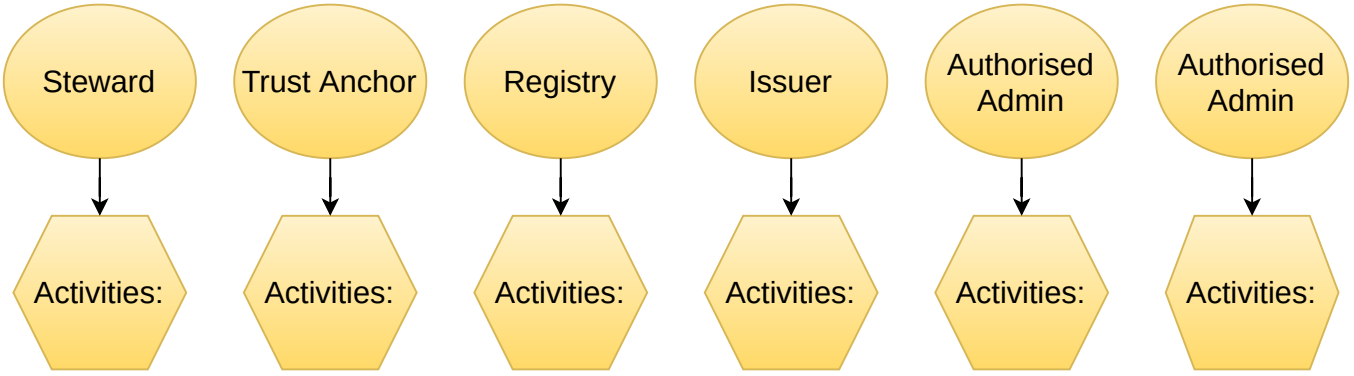
Layer 1



Verifiier:
Read public DIDs,
Schemas

Wallet holder:
Read public DIDs,
Schemas





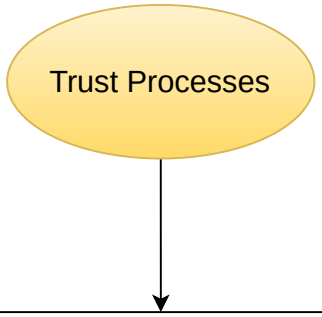
Independent to the Layer: Jurisdictional Authority, Industry Authority, Standards Authority

Utility: Utility Governance Authority, Transaction Author, Transaction Endorser, Steward,..

Wallet: Provider Governance Authority, Software Provider, Agency, Secure Data Store, Digital Guardian, Digital Delegate, Digital Dependant, Thing Controller,..

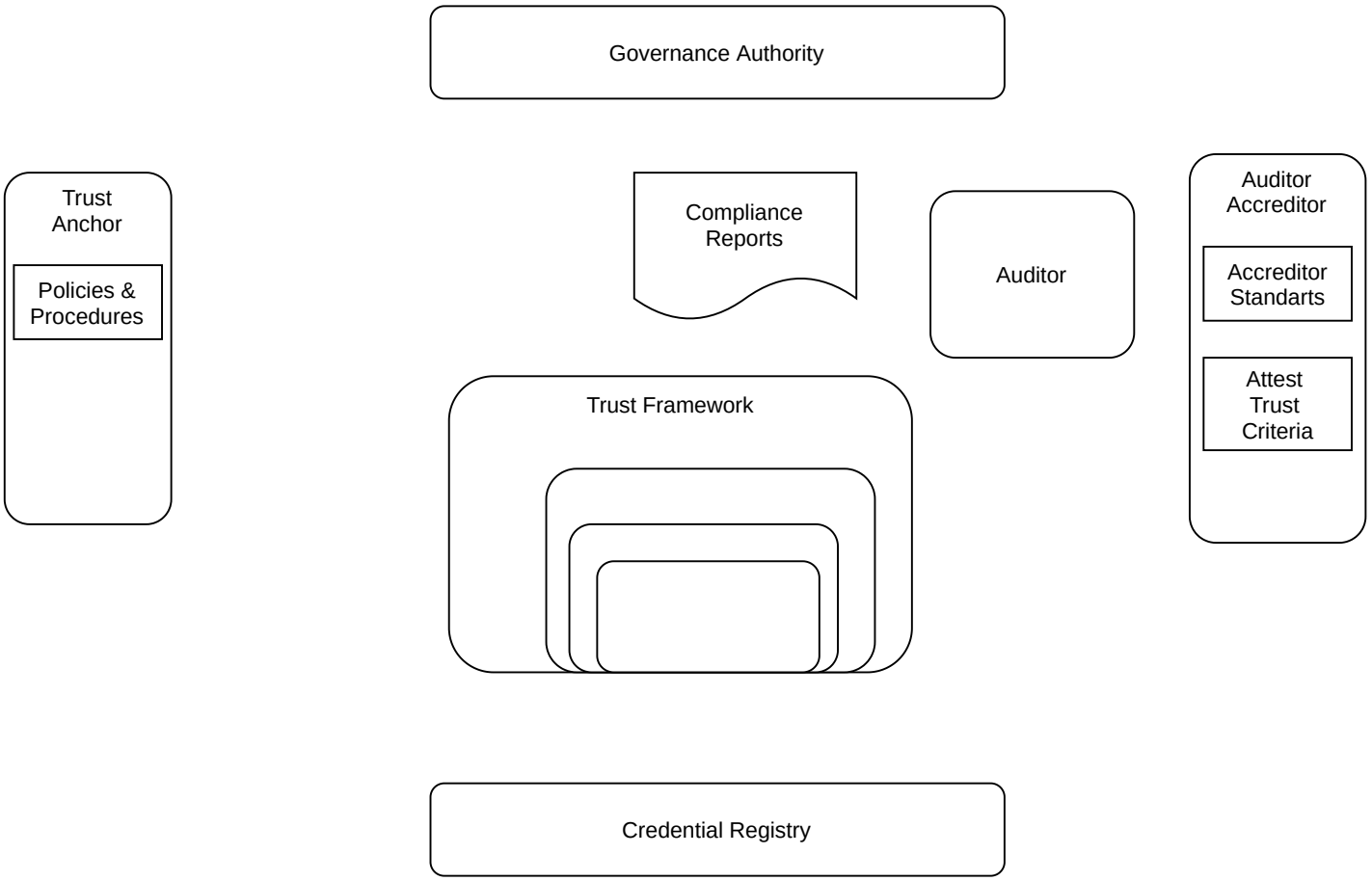
Possible roles: Transaction Author, Transaction Endorser

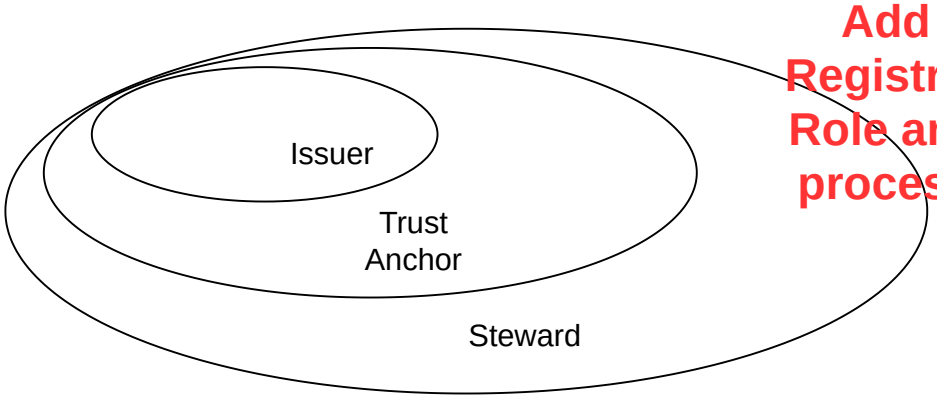
Each role has various activities in each layer. It will be good to create a diagram where roles will be separated in vertical columns where each next horizontal layer will represent a process or activity that this role executes there



Utility: Permissioned/Permissionless, Steward Configuration, Consensus Model, Data Structures, Data Security Methods, Data Privacy Methods, Transaction Initiation, Transaction Endorsement, Steward Operational Processes

Wallet: Provider Governance Authority, Software Provider, Agency,
Secure Data Store, Digital Guardian, Digital Delegate, Digital Dependant, Thing Controller,..


Governance Authority
Trust Anchor
Policies & Procedures
Compliance Reports
Auditor
Auditor Accreditor
Accreditor Standarts
Attest Trust Criteria
Trust Framework
Credential Registry



Add Registrer Role and process

Verifiier: Read public DIDs, Schemas

Wallet holder: Read public DIDs, Schemas

Established and confirmed processes and activities

Steward	Trust Anchor	Issuer	Authorised Admin	Authorised Developer
Run Node Create Trust Anchors Manage Public DID Create Schemas Create Credential Definition	Manage Public DID Create Schemas Create Credential Definition	Create Credential Definition Issue Credential		

Processes that needs to be confirmed and/or added

	Steward	Trust Anchor	Issuer	Authorised Admin	Authorised Developer
Layer 4					
Layer 3	Credential Lifecycle Processes: enrollment, signing, issuance, renewal, expiration, archival Verify Credential Send and Receive Messages (Chat	Credential Lifecycle Processes: enrollment, signing, issuance, renewal, expiration, archival Verify Credential Send and Receive Messages (Chat	Credential Lifecycle Processes: enrollment, signing, issuance, renewal, expiration, archival Send and Receive Messages (Chat interface for communications for context for credential exchange	They can put wallet code to the Google and Apple App Store (to update versions of wallet for the public) GitHub maintainers: approve pull requests and merge branches Working with Auditors for Trust marks	Able to write to GitHub branch of the wallet repository Need to work with Network Developer on bringing needed changes to the Test Network

interface for communications for context for credential exchange

interface for communications for context for credential exchange

Verify Credential

Layer 2

Layer 1

Run Node

Create Trust Anchors

Manage Public DID (create a DID and write and modify a DID Document to layer one)

Create Schemas (every schema should have a DID and a DID Document)

Credential revocation

VC publication

Issuer Vetting Process

Transaction Logging

Records Archival

Manage Public DID (create a DID and write and modify a DID Document to layer one)

Create Schemas (every schema should have a DID and a DID Document)

Credential revocation

Credential revocation

They have abilities of the Steward on Staging and Testing Network.

We will have three networks:
staging, testing, and main (production).

Can have the ability to change the genesis pool file for all three networks

Can put the Docker image to the Docker Registry

They have abilities of the Steward on Testing Network.

We will have three networks:
staging, testing, and main (production).

Can have the ability to change the genesis pool file for the Testing networks

Can change the Docker image

We may have registries of schemas that are used in various ecosystems as a standard. Standard schema should have an approval process before being implemented as a standard.

After roles are defined, these definitions will change setting in Hyperledger Indy Planum Blockchain

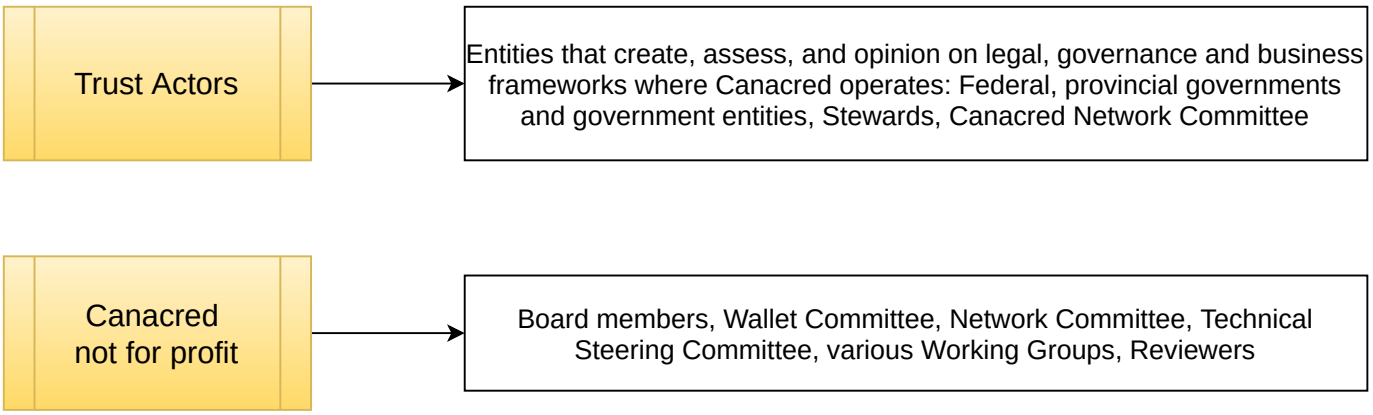
DID Whitelisting

Authorised Admin and Developers are different for Wallet and NEtwork

We will have three networks:

staging, testing, and main (production).

Remove the Layer 2 (minimize)


Trust Actors
Entities that create, assess, and opinion on legal, governance and business frameworks where Canacred operates: Federal, provincial governments and government entities, Stewards, Canacred Network Committee
Canacred not for profit
Board members, Wallet Committee, Network Committee, Technical Steering Committee, various Working Groups, Reviewers