

DignifID™ Trust Assurance Framework V1

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This is a Controlled Document of the DignifID Governance Framework V1 approved by the DignifID Board of Directors. If you have comments or suggestions, we invite you to contribute them to the [living community version of this document](#)—access is open to anyone. If you are interested in joining the DignifID Governance Framework Working Group, please visit our [Meeting Page](#).

NOTE: *This document is based on the Sovrin Trust Assurance Framework document.*

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1 Introduction

The DignifID Animals Foundation (*DignifID*) is tasked with administering the governing the DignifID Digital Identity System (*DDIS*) on behalf of all DignifID Identity Owners, DignifID Credential Issuers, and the entire DignifID Community.

The Purpose, Vision and Mission statements of DignifID are:

Purpose: We believe animals should have legitimate identity that acknowledges and promotes their value and social status as perceived by their guardians and societies.

Vision: We envision a world where every animal has access to a digital identity that values their lives and social status, while enriching their well-being.

Mission: We provide animal guardians (humans or organizations) with a trusted, secure and universally available digital identity system for their animals, while promoting their well-being through a vibrant global community.

The DDIS operates primarily on the Sovrin Network, as related to Identity communications. For the Sovrin Network itself to be trusted as a global public utility, the public must be able to assess the degree to which the providers of Sovrin Infrastructure, including the Sovrin Foundation, Stewards, Agencies, and Developers, comply with the policies specified in the Sovrin Governance Framework. Similarly, the public must be able to assess the degree to which the DDIS complies with the policies specified by the Sovrin and DignifID Governance Frameworks. This is the purpose of the DignifID Trust Assurance Framework (DTAF) and the Sovrin Trust Assurance Framework.

The DignifID Animals Foundation adopts, in total, the Sovrin Trust Assurance Framework for the DignifID Digital Identity Service. The DignifID Trust Assurance Framework has components that are additional to the scope of the Sovrin Trust Assurance Framework, particularly as related to Credentials.

2 Versioning

Each version of this document is tied to the DignifID Governance Framework at a specific point of time. See the revision dates of this document and of the referenced documents in the DignifID Governance Framework to clarify the current state.

3 Terminology

All terms in First Letter Capitals that are not defined in this document (as called out in a specific section) are defined in the DignifID [Glossary or the Sovrin Glossary](#).

For the purposes of the DTAF, a Trust Assertion is a statement of fact or belief (the Statement) made by an Entity. This Statement can be issued publicly, or privately to one or more Entities. It is a Trust Assertion if the issuing Entity provides said Statement with the expectation that

those receiving it will rely on information in the Statement as being true and accurate within the contextual bounds of the Statement. For DignifID Identity Data, a Trust Assertion is a set of Claims within a Credential, made by a Credential Issuer about the Subject of the Credential. The Credential Holder (which may or may not be the Subject), receives the Credential (which is comprised of said Claims) from the Credential Issuer. As such, these Claims are Trust Assertions. A Credential Holder could then use such a Credential to demonstrate, or Prove, these Claims to a third party, which is called a Verifier. A Verifier would be able to receive a cryptographic Proof to confirm the Issuer did Issue said Claims to the Holder, and that such Claims are valid. (Reference Appendix G: Credential Exchange Layer Roles, in the Sovrin Glossary V2).

4 Purpose

The purpose of the DignifID Trust Assurance Framework is to establish expectations within the DignifID Community for Credentials issued by DignifID Credential Issuers, and identify:

1. The Trust Elements (defined in Section 6) that Trust Actors (defined in Section 10) assert in the Sovrin Network and for the DDIS.
2. The DignifID Roles (Section 7) that assert and rely upon trust.
3. Generally-Accepted, DignifID-Specific Trust Criteria used in the evaluation of trust in the DDIS (defined in Section 8).
4. The Trust Assertions that DignifID Credential Issuers make against Trust Criteria (defined in Section 8).
5. The Trust Evidence that Trust Actors produce to create assurance regarding their trust assertions (defined in Section 9).
6. The Trust Mechanisms in place to assert and evaluate trust (defined in Section 11).
7. The process of Trust Governance whereby trust assertions are evaluated and deemed trustworthy, so they can be relied upon by Relying Parties (defined in Section 12).

5 Levels of Assurance

The levels of assurance a Relying Party can derive from Claims in a DignifID Credential are outlined below. The following Assurance Level (“AL”) tiers are supported for DignifID Credentials, as incremental levels of assurance within the DDIS:

(NOTE: assurance level criteria specified below are summarized in Table 1)

- AL0: Issuer: not accredited by DignifID
Credential: Claims are not reasonably auditable, but they are cryptographically verifiable as being issued by the Issuer
Result: no assurance that Claims are accurate and valid
Example: a self-attested Credential issued by an Individual or Organization that has no history of verifiable credential issuance, such as an Individual who is a new, first-time Animal Guardian
- AL1: Issuer: not accredited by DignifID
Credential: Claims are reasonably auditable, the Issuer openly accepts and/or publishes audits from credible 3rd party Organizations, and Claims are cryptographically verifiable as being issued by the Issuer
Result: limited assurance that Claims are accurate and valid
Example: a vaccination Credential issued by a veterinarian which is not accredited as a DignifID Credential Issuer
- AL2: Issuer: accredited by DignifID
Credential: Claims are reasonably auditable, the Issuer openly accepts and/or publishes audits from credible 3rd party Organizations, and Claims are cryptographically verifiable as being issued by the Issuer
Result: reasonable assurance that Claims are accurate and valid
Example: a vaccination Credential issued by a veterinarian accredited as a DignifID Credential Issuer
- AL3: Issuer: a national government department, or second tier government (i.e. state or province) department, of a WTO country
Credential: Claims are reasonably auditable, the Issuer openly accepts and/or publishes audits from credible 3rd party Organizations, and Claims are cryptographically verifiable as being issued by an approved government body Issuer
Result: high assurance that Claims are accurate and valid
Example: national ID Credential issued to an Animal Guardian or a DignifID Animal

DignifID Assurance Level	Cryptographically Verifiable Claims	Auditable Claims	3 rd Party Audit Opportunity	Issuer is DignifID Accredited	Issuer is a Trusted Government Organization
AL0	x				
AL1	x	x	x		
AL2	x	x	x	x	
AL3	x	x	x		x

Table 1: This is a summary of Trust Criteria required to achieve certain DignifID Assurance Levels. An “x” indicates that a certain Trust Criterion is required for a particular DignifID Assurance Level.

Detailed specifications for Assurance Levels are provided in the DignifID Control Document, *DignifID Assurance Levels Specifications*.

6 Trust Elements

The following Trust Elements guide the development of specific Trust Criteria asserted by Trust Actors in the DignifID Governance Framework. Being aligned with the Sovrin Trust Assurance Framework, these are based on [AICPA Trust Services Criteria](#), which are based on [COSO Internal Control - Integrated Framework](#), for use in attestation or consulting engagements to evaluate and report on controls over information and systems (a) across an entire entity; (b) at a subsidiary, division, or operating unit level; (c) within a function relevant to the entity's operational, reporting, or compliance objectives; or (d) for a particular type of information used by the entity.

- **Security.** Information and systems are protected against unauthorized access, unauthorized disclosure of information, and damage to systems that could compromise the availability, integrity, confidentiality, and privacy of information or systems and affect the entity's ability to meet its objectives.
- **Availability.** Information and systems are available for operation and used to meet the entity's objectives.
- **Processing integrity.** System processing is complete, valid, accurate, timely, and authorized to meet the entity's objectives.
- **Confidentiality.** Information designated as confidential is protected to meet the entity's objectives.
- **Privacy.** Personal information is collected, used, retained, disclosed, and disposed to meet the entity's objectives.

7 DignifID Roles in Making Trust Assertions

- 7.1 DignifID, by utilizing the Sovrin Ledger, cooperates with and monitors the Sovrin Foundation and its Stewards to continuously confirm that their performance meets SGF requirements, and expectations of the DignifID Community.
- 7.2 DignifID may make Trust Assertions for certain Credential Issuers, such as approving an organization to be a DignifID Trust Anchor.
- 7.3 DignifID may Issue Credentials which Holders and Verifiers may accept as Trust Assertions.

8 Trust Criteria

DignifID relies on Credential Assurance Level definitions (AL0 – AL3) as key Trust Criteria for the DignifID Trust Assurance Framework. Furthermore, DignifID relies on the Sovrin Governance Framework V2, for Trust Criteria related to Identity communications on the Sovrin Network. These Trust Criteria are the foundation of Trust Assertions.

9 Trust Evidence

Trust assertions are empty without evidence to support them. The following are examples of Trust Evidence that are used to support Trust Assertions for the DignifID and Sovrin Governance Frameworks.

1. Signed Contracts
2. Signed Agreements
3. Configurations
4. Signed Approvals
5. Policies
6. Procedures
7. Logs
 - a. Security
 - b. Application
 - c. System
 - d. Database
8. Incident Records
9. Audit reports from credible audit Organizations

10 Trust Actors

The following is the set of Entities who play a role in the DignifID Governance Framework V1 by assessing and opining on Trust Assertions.

1. **DignifID Board of Directors.** Issues the Policies within the DignifID Governance Framework. It has the right to perform Self-Certification to evoke assurance from Relying Parties,
2. **Auditors.** Organizations that audit and report on Trust Actors in the DignifID Governance Framework.
3. **Government Authorities:** National, provincial or local government bodies.
4. **DignifID Credential Issuers.** Individuals or Organizations that are certified as Trust Anchors by the DignifID Animals Foundation, and thereby granted authority to issue DignifID Credentials during the time period of certification term.
5. **Legal Authorities.** Enforce laws in the Jurisdictions of the DignifID Animals Foundation and Stewards and may mediate the DignifID Steward Agreement if challenged.

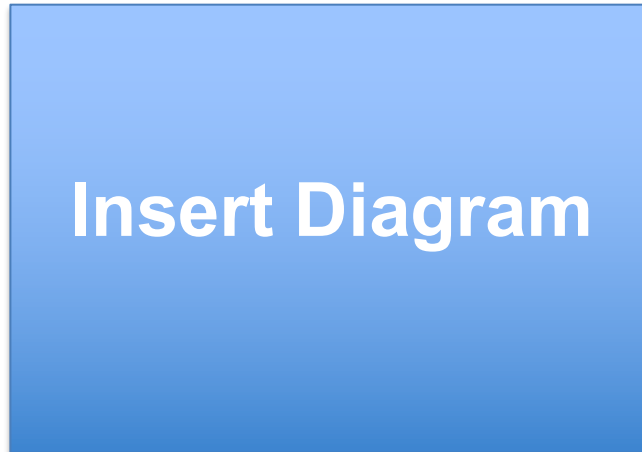
11 Trust Mechanisms

The following are actions that the DignifID Animals Foundation takes to assert and assure trust:

1. Assessment, and formal approval process, for any Trust Anchor which is recorded in formal written documents.
2. Contracts and Agreements.
3. Self-Assertion.
 - a. DignifID Trust Criteria Compliance.
 - b. Legal Compliance.

12 Trust Governance

The following is a graphical and procedural diagram of how DignifID works with a Trust Anchor, and how such Trust Anchor then acts to issue Credentials that are certified DignifID Credentials.



For the DignifID Governance Framework V1:

1. The DignifID Board of Directors has established the DignifID [Governance Framework](#) and this DignifID Trust Assurance Framework. It has created its own Policies and those it requires of DignifID Trust Anchors in their role as DignifID Credential Issuers.
2. The DignifID Board of Directors requires DignifID Credential Issuers to sign the DignifID Trust Anchor Agreement and maintain compliance with DGF policies.

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