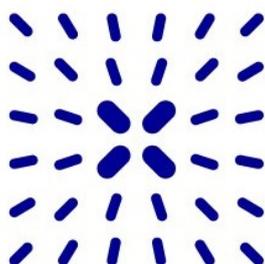


Gaia-X Glossary - local Release



Description	Gaia-X specification to build trusted decentralised digital ecosystems.
Repository	https://gitlab.com/gaia-x/glossary
Author(s)	Gaia-X European Association for Data and Cloud AISBL
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67 Identity

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68 Instantiated Virtual Resource

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69 Issuer

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74 NIST planes

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- 91.1 References
- 91.2 See Also

92 Trust Anchor

- 92.1 References
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93 Trust Indexes

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94 Trusted Data Source

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95 Usage Control

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96 Usage Policy

- 96.1 References
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97 Verifiable Credential Wallet

- 97.1 References
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98 Verifiable Credential

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99 Verifiable Presentation

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100 Verifier

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101 Virtual Resource

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- 101.2 See Also

III Acronyms

102 Acronyms

I. About

1 Gaia-X Glossary

This is the glossary for Gaia-X references. The terms derive mainly from Gaia-X deliverables and documents. Where relevant, also terms from external sources are reported.

2 Editorial Information

2.1 Publisher

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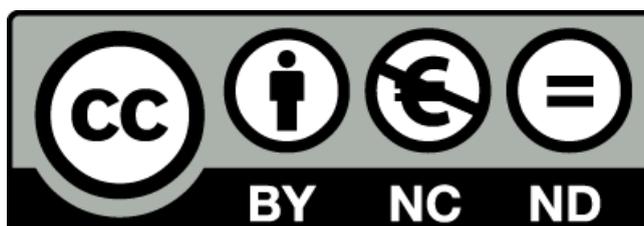
2.4 Other format

For convenience a PDF version of this document is generated [here](#).

2.5 Copyright notice

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II. Glossary

3 Access Control

Access control restricts access to resources.

3.1 References

Data Exchange Document [23.11](#) - 2.6

4 Accreditation

Accreditation is the third-party attestation related to a conformity assessment body, conveying formal demonstration of its competence, impartiality and consistent operation in performing specific conformity assessment activities.

4.1 References

ISO/IEC 17000:2020

4.2 See Also

- [Attestation](#)
- [conformity assessment body](#)

5 Application portability

Application Portability refers to the porting of customer or third party executable code from one cloud service to another, public or private.

5.1 References

- [Gaia-X Policy Rules Conformity Document 23.10](#) - 11.5
- [ISO/IEC 19941:2017](#) - 5.2.3

6 Attestation

Issue of a statement, based on a decision, that fulfilment of specified requirements has been demonstrated.

Note 1 to entry: The resulting statement, referred to in this document as a “statement of conformity”, is intended to convey the assurance that the specified requirements have been fulfilled. Such an assurance does not, of itself, provide contractual or other legal guarantees.

Note 2 to entry: First-party attestation and third-party attestation are distinguished by the terms declaration, certification and accreditation, but there is no corresponding term applicable to second-party attestation.

6.1 References

ISO/IEC 17000:2020

7 Catalogue

A catalogue provides mechanisms to publish Data Product Descriptions (metadata) and support search or query of the descriptions. A catalogue may be realized as a centralized or decentralized service, but the capability can also be realized as a distributed functionality.

7.1 References

Gaia-X Architecture Document 24.04 - 7.5

8 Certification

Certification is the third-party attestation related to an object of conformity assessment, with the exception of accreditation.

8.1 References

ISO/IEC 17000:2020

8.2 See Also

- Attestation
- Conformity Assessment
- Accreditation

9 Claim

A claim is a statement about a subject. A subject is a thing about which claims can be made. Claims are expressed using subject-property-value relationships.

9.1 References

W3C, Verifiable Credentials Data Model v2.0

10 Conformity Assessment Body (CAB)

Conformity Assessment Body (CAB) performs Conformity Assessment services. Conformity with label criteria can be declared by self-assessment (declaration) or supported by external Conformity Assessment Bodies (CAB). The Gaia-X Association reserves its right to choose its own CABs for its three basic labels.

10.1 References

- [ISO/IEC 17000:2020](#)
- [Gaia-X Policy Rules Conformity Document - 3.2.4](#)

11 Conformity Assessment

Conformity Assessment is a demonstration that specified requirements (need or expectation that is stated) are fulfilled.

11.1 References

ISO/IEC 17000:2020

11.2 See Also

Conformity Assessment Body

12 Consumer Policy

Consumer Policy describes a consumer's restriction of a requested Resource.

12.1 Reference

Gaia-X Architecture Document 24.04 - 4.2.2

12.2 See Also

- [Consumer](#)
- [Resource](#)
- [Policy](#)

13 Consumer

Consumer is a participant who searches service offerings and consumes service instances in the Gaia-X Ecosystem to enable digital offerings for end users.

13.1 References

Gaia-X Architecture Document 24.04 - 3.2.2.3

13.2 See Also

- [Participant](#)
- [Service Offerings](#)
- [Service Instances](#)
- [Gaia-X Ecosystem](#)
- [End-Users](#)
- [Policy](#)
- [Consumer Policy](#)

14 Credential Event Service (CES)

CES is a common publication/subscription service that allows the Gaia-X catalogues of the GXDCH to be notified about new, updated, and revoked credentials.

14.1 References

Gaia-X Architecture Document 24.04 - 6.4

14.2 See Also

- [Gaia-X Catalogues](#)
- [GXDC](#)

15 Credential

A set of one or more claims made by the same entity.

15.1 References

[W3C, Verifiable Credentials Data Model v2.0](#)

15.2 See Also

- Claim
- entity

16 Customer Data

In the context of the definition of Gaia-X Policy Rules and Labelling Criteria for Cloud Services, the term is used for all customer provided or generated data, both personal and non-personal data, as processed by a Provider.

16.1 References

Gaia-X Policy Compliance Document 24.11 - 4

17 Data Catalogue

A Data Catalogue presents a set of available data and data products that can be queried.

17.1 References

Data Exchange Document 23.10 - 2.2

17.2 See Also

- [Data](#)
- [Data Products](#)

18 Data Consumer

A participant that receives data in the form of a data product. The data is used for query, analysis, reporting or any other data processing.

18.1 References

- Data Exchange Document 23.10 - 2.2
- Gaia-X Architecture Document 24.04 4.5.1

18.2 See Also

Data Product

19 Data Contract

See [Data Product Usage Contract](#).

20 Data Exchange Services

A set of services that provides features enabling a Data Exchange, such as and not limited to: policy negotiation for access control and usage control, exchange traceability, service protocol negotiation, data access, data tiering, access enforcement, usage enforcement.

20.1 References

- [Data Exchange Document 23.10 - 2.2](#)
- [Gaia-X Architecture Document 24.04 7.5](#)

21 Data License

Each [data](#) product description contains a Data License defining the usage policies for all [data](#) in the [data](#) product.

21.1 References

Gaia-X Architecture Document 24.04 - 4.5.1

21.2 See Also

- [Data Product Description](#)
- [Data Product](#)

22 Data Portability

This refers to the porting of data (structured or unstructured) from one cloud service to another, public or private.

22.1 References

Gaia-X Policy Rules Conformity Document 23.10 11.5

22.2 See Also

Data

23 Data Producer

A natural or legal participant who furnishes data to a data product provider.

23.1 References

- Data Exchange Document 23.10 - 2.2
- Gaia-X Architecture Document 24.04 4.5.1

23.2 See Also

- Participant
- Data Product Provider

24 Data Product Description

Data Products are described by a Data Product Description, which must be a valid Gaia-X Credential.

24.1 References

Gaia-X Architecture Document 24.04 - 4.5.1

24.2 See Also

Data Product

25 Data Product

Data are furnished by Data Producers to Data Providers who compose them into a Data Product to be used by Data Consumers. A Data Product is described by a Data Product Description, which must be a valid Gaia-X Credential and is stored in a (searchable) Federated Data Catalogue.

25.1 References

Gaia-X Architecture Document 25.XX - ongoing version - 4.5.1

25.2 See Also

- [Data Producer](#)
- [Data Provider](#)
- [Data Product Description](#)

26 Data Provider

Data are furnished by Data Producers (who are either data owners or data controllers in the GDPR sense, or data holders in the Data Act sense) to Data Providers who compose these data into a Data Product to be used by Data Consumers.

26.1 References

Gaia-X Architecture Document 24.04 - 4.5.1

26.2 See Also

- [Data Producer](#)
- [Data Consumers](#)

27 Data Rights Holder

A natural or legal participant (not necessarily a Gaia-X participant) who own usage rights for some data. It can be a data subject as per GDPR for personal data or a primary owner of non-personal data (i.e. not liable to GDPR).

27.1 References

Data Exchange Document 25.XX - in progress

28 Data Space

Interoperable framework, based on common governance principles, standards, practices and enabling services, that enables trusted data transactions between participants.

28.1 References

DSSC Glossary, update October 2024

29 Data Transaction

Result of an agreement between a data provider and a data user with the purpose of exchanging, accessing and using data, in return for monetary or non-monetary compensation.

Note 1 to entry: “Data exchange“ and “data access“ terms are used in order to describe different mechanisms, like actual transfer of data or situations where data does not move but where access is provided to different stakeholders.

Note 2 to entry: Data transactions do not necessarily imply a commercial relationship.

Note 3 to entry: Each data transaction is unique and must be treated independently of other data transactions.

29.1 References

CEN/WS TDT Part 1

29.2 See Also

Data Provider

30 Data Usage Agreement (DUA)

The Data Usage Agreement is signed by the data rights holder and by the data consumer and gives to the Data Consumer the legal authorization to use the data in accordance with the constraints specified by the Data Rights Holder and to the Data Rights Holder the assurance that the Data Consumer commits to respect these constraints.

30.1 References

Gaia-X Architecture Document 25.XX - ongoing version - 4.5.1

30.2 See Also

- [Data Rights Holder](#)
- [Data Consumer](#)

31 Data

Data means any digital representation of acts, facts or information and any compilation of such acts, facts or information.

31.1 References

- [Data Exchange Document 23.10 - 2.2](#)
- [Gaia-X Architecture Document 24.04 - 4.5.1](#)

32 Declaration

First-party attestation.

32.1 References

ISO/IEC 17000:2020

32.2 See Also

Attestation

33 DSBA (Data Spaces Business Alliance)

The Data Spaces Business Alliance (DSBA) accelerates business transformation in the data economy. It's the first initiative of its kind, uniting industry players to realize a data-driven future in which organizations and individuals can unlock the full value of their data.

The Data Spaces Business Alliance are [Gaia-X European Association for Data and Cloud AISBL](#), the [Big Data Value Association \(BDVA\)](#), [FIWARE Foundation](#), and the [International Data Spaces Association \(IDSA\)](#).

33.1 References

<https://data-spaces-business-alliance.eu/>

34 Enabling services

Enabling Services facilitate the operation of ecosystems. There are multiple technologies, products and implementations of each of the enabling services available.

34.1 References

Gaia-X Architecture Document 24.04- 7

34.2 See Also

Ecosystems

35 Entity

Entity is an item relevant for the purpose of operation of a domain that has recognizably distinct existence.

Note 1 to entry: An entity can have a physical or a logical embodiment.

35.1 References

ISO/IEC 24760-1:2019

36 Evidence

Evidence can be included by an [issuer](#) to provide the [verifier](#) with additional supporting information in a [verifiable credential](#). This could be used by the [verifier](#) to establish the confidence with which it relies on the claims in the [verifiable credential](#).

It is expected that the credentials issued by the notaries contain the evidence of the validation [process](#).

36.1 References

- [W3C, Verifiable Credentials Data Model v2.0](#)
- [Gaia-X Architecture Document 24.04- 4.6.1.1](#)

36.2 See Also

- [Issuer](#)
- [verifier](#)
- [verifiable credential](#)
- [Notaries](#)

37 Example Standard

Example standards shall provide for possibilities how criteria may be implemented. Implementation as provided by such standards is not mandatory, and it is required to comply with any such standards. Gaia-X will provide additional notes, if significant differences are identified. Example Standards shall especially help in evaluating conformity with Gaia-X, as Example Standards can be considered “implementation guidance”.

37.1 References

Gaia-X Compliance Document 24.11 - 3.2.5

38 Federated Catalogues

The goal of the Federated Catalogue is to: - enable Consumers to find best-matching offerings and to monitor them for relevant changes in the offerings. - enable Producers to promote their offerings while keeping full control of the level of visibility and privacy of their offerings. - enable Service Composition by including and publishing Service Descriptions, conformant to the Gaia-X Schema, that contain structured service attributes required to compose services. - avoid a gravity effect with a lock-out and lock-in effect around a handful of catalogue instances.

38.1 References

Gaia-X Architecture Document 24.04- 7.3

38.2 See Also

Offerings

39 Federation Services

Federation Services are enabling services operated under the specific rule of ecosystem governance.

39.1 References

Gaia-X Architecture Document 24.04- 7

39.2 See Also

Enabling services

40 Gaia-X Architecture Document

The Gaia-X Architecture Documentm also known as Architecture Document is a Gaia-X deliverable that explains the core elements that compose the Gaia-X Trust Framework and defines how they relate to each other at the functional level in the Gaia-X model.

40.1 References

Gaia-X Architecture Document 24.04 - 2

40.2 See Also

Gaia-X deliverable

41 Gaia-X Compliance Service

The service takes as input the Verifiable Presentations provided by the participants, checks them against the [SHACL](#) Shapes available in the Gaia-X Registry and performs other consistency checks based on the Gaia-X Policy Rules. The service returns a Verifiable Credential, the “Gaia-X Compliance Credential” with a Gaia-X signature, as a proof that the input provided has passed all the verifications.

41.1 References

Gaia-X Architecture Document 24.04- 6.2

41.2 See Also

- [Verifiable Presentation](#)
- [Verifiable Credential](#)

42 Gaia-X Credential

A Gaia-X [credential](#) is a verifiable [credential \(VC\)](#) using the Gaia-X Ontology which is available via the Gaia-X Registry. A [holder](#) can put several Gaia-X credentials together to build a verifiable presentation.

42.1 References

Gaia-X Architecture Document 24.04 - 5.1.1.2.2

42.2 See Also

- [Verifiable Credential \(VC\)](#)
- [Gaia-X Ontology](#)
- [Gaia-X Registry](#)
- [holder](#)
- [Verifiable Presentation \(VP\)](#)

43 Gaia-X Data & Services Business Committee (DSBC)

The Data & Services Business Committee (DSBC) collects, shares, and aligns needs and achievements between national Hubs, Ecosystems, Gaia-X Lighthouses & projects, and Service Providers to support the creation of Data Spaces and accelerate Gaia-X market adoption.

43.1 References

[Gaia-X website](#)

44 Gaia-X Data Exchange Document

The Gaia-X Data Exchange document, also known as the Data Exchange Services specifications is a Gaia-X deliverable that provides specifications for Data Exchange Services, including high level architecture and key requirements for data value, trust and compliance.

44.1 References

- [Gaia-X Framework](#)
- [Gaia-X Data Exchange Document](#)

44.2 See Also

- [Gaia-X deliverable](#)
- [Data Exchange Services](#)

45 Gaia-X Deliverables

[Gaia-X delivers](#): - [Specifications](#) - [Code](#) - [Labels](#)

45.1 References

[Gaia-X website](#)

46 Gaia-X Ecosystem

The Gaia-X Ecosystem is the virtual set of participants and Service Offerings following the Gaia-X Compliance requirements.

46.1 References

Gaia-X Compliance Document 24.11

46.2 See Also

Participants

47 Gaia-X Framework

The Gaia-X Framework provides an overall view of the Gaia-X Association pillars and deliverables, highlighting the elements that are mandatory to be Gaia-X Compliant and Gaia-X Technical Compatible.

47.1 References

[Gaia-X Framework](#)

47.2 See Also

[Deliverables](#)

48 Gaia-X Hub

Gaia-X Hubs bundle user interests across Europe to facilitate the creation of European Data Spaces. They gather use cases, requirements, and standards, to support the Gaia-X Association in setting up and establishing a sovereign data-infrastructure via a common Gaia-X architecture as well as policy rules, standards and Federated Services. Gaia-X Hubs are the central contact points for interested parties in each country, and grassroots supporters of the Gaia-X project.

48.1 References

[Gaia-X website](#)

49 Gaia-X Identity, Credential and Access Management (ICAM) Document

The Gaia-X Identity, Credential and Access Management (ICAM) document, also known as ICAM specifications is a Gaia-X deliverable aimed at describing the components for “Authorization & Authentication” which shall deliver core functionalities for authorization, access management and authentication as well as services around it to Gaia-X participants with the purpose to join the trustful environment of the ecosystem.

49.1 References

- [Gaia-X Framework](#)
- [Gaia-X Identity, Credentials and Access Management Document](#)

49.2 See Also

- [Gaia-X deliverable](#)
- [Participants](#)
- [Ecosystem](#)

50 Gaia-X Label

A Gaia-X Label is a machine readable, structured and signed document issued by the accredited Gaia-X Compliance services in case of a valid verification and validation of the criteria for a specific assessment scheme.

50.1 References

Gaia-X Compliance Document 24.11- 8

51 Gaia-X Lighthouse projects

Projects aiming to create a data exchange platform built on transparency, trust, and openness. They target multiple industries and are the front-runners implementing the Gaia-X Framework.

51.1 References

[Gaia-X website](#)

52 Gaia-X Member

A Gaia-X member is a member of the international non-profit organization, Gaia-X.

52.1 References

[Gaia-X website](#)

52.2 See Also

[Gaia-X](#)

53 Gaia-X Notary - LRN (Legal Registration Number)

It is one of the mandatory software components that are being operated only by the Gaia-X Digital Clearing House (GXDCH). The Gaia-X Notary-LRN: - Takes as input a LegalRegistrationNumber VC from the user; - Verifies that the VC contains at least one identification number as requested by the Gaia-X rules, and checks that the number is valid; - Returns a Gaia-X VC with the proof that the number has been verified.

53.1 References

Gaia-X Architecture Document 24.04- 6.3

53.2 See Also

Gaia-X Digital Clearing Houses

54 Gaia-X Ontology

An ontology is a formal, explicit specification of a shared conceptualisation (Gruber,1993).

In Gaia-X case, it means to create models that are understandable by an algorithm so one can automate rules with a computer. The models are developed by Gaia-X members under the Technical Committee.

54.1 References

- [Gaia-X Compliance Document 24.06- 4.2](#)
- [Gaia-X Ontology: https://docs.gaia-x.eu/ontology/development/](https://docs.gaia-x.eu/ontology/development/)

55 Gaia-X Open Source Software Community

The Gaia-X Open-Source Software (OSS) Community aims to engage and grow the Gaia-X developer community through outreach, onboarding, software development and the organization of the Gaia-X hackathon event.

55.1 References

[Gaia-X Open-Source Software Community - Gitlab repository](#)

56 Gaia-X Participant

The Gaia-X Participant is an entity, as defined in ISO/IEC 24760-1, which is onboarded and has a Gaia-X Participant Credential.

Note: A Participant is not necessarily a member of the Gaia-X Association.

56.1 References

Gaia-X Architecture Document 24.04- 3.2.2

56.2 See Also

- Entity
- Gaia-X Member

57 Gaia-X Policy Rules Committee (PRC)

The Policy Rules Committee (PRC) aims to translate the guiding principles of the Gaia-X initiative, e.g., transparency, data protection, cyber security, portability, and openness, into High-Level Objectives to safeguard the added value of the Gaia-X ecosystem. Furthermore, the PRC has the role to monitor, integrate and define the relationship with EU regulations and external standards.

57.1 References

[Gaia-X website](#)

57.2 See Also

- [Policy](#)
- [Gaia-X Ecosystem](#)

58 Gaia-X Policy Rules

The Policy Rules or Gaia-X Policy Rules define high-level objectives safeguarding the added value and principles of the Gaia-X ecosystem.

58.1 References

[Gaia-X Compliance Document 24.11- 2](#)

58.2 See Also

[Gaia-X Ecosystem](#)

59 Gaia-X Registry

The **Gaia-X Registry** is a public distributed, non-repudiable, immutable, permissionless database with a decentralised infrastructure and the capacity to automate code execution. The Gaia-X Registry is the backbone of the ecosystem governance, which stores information such as: - the list of the Trust Anchors – keyring. - the result of the Trust Anchors validation processes. - the potential revocation of Trust Anchors's identity. - the vote and results of the Gaia-X Association roll call vote. - the shapes and schemas for the Gaia-X VCs. - the URLs of Gaia-X Catalogue's credentials. - the text of the Terms and Conditions for Gaia-X Conformity.

59.1 References

Gaia-X Architecture Document 24.04- 6.1

60 Gaia-X Standard Compliance

The Gaia-X Standard Compliance level defines the minimal set of requirements to be able to participate in the Gaia-X ecosystem. The optional Label levels define additional criteria and conformance-ensuring measures such as certificates, to achieve additional levels of assurance and trust.

60.1 References

Gaia-X Compliance Document 24.11- 2

60.2 See Also

Gaia-X Ecosystem

61 Gaia-X Technical Committee

The Gaia-X Technical Committee defines and implements the technological vision of Gaia-X. It plans, develops, and is accountable for the Gaia-X technology roadmap and its contributors. It further communicates the Gaia-X technological vision and its related objectives to establish trust and credibility with members and third parties.

61.1 References

[Gaia-X website](#)

62 Gaia-X Trust Framework

The Gaia-X Trust Framework defines the process of going through and validating the set of automatically enforceable rules to achieve the minimum level of compatibility in terms of syntactic correctness, schema validity, cryptographic signature validation, attribute value consistency and attribute value verification. The Trust Framework ensures that all participants in the Gaia-X Ecosystem are adhering to the policy rules agreed between the participants of the Ecosystem itself.

62.1 References

Gaia-X Architecture Document 24.04 2.2

63 Gaia-X

The Gaia-X European Association for Data and Cloud (AISBL) also known as Gaia-X Association was established as a private not-for-profit Association in 2021. Gaia-X brings together a broad range of organisations (large companies and SMEs, developers and users of technology, industrial players, and members of academia) around one common goal: to boost the European data economy by enabling the creation of common data spaces, in full alignment with the objectives of the EU's Data Strategy. To this end, Gaia-X focuses on building a common standard for an open, transparent, and secure digital ecosystem that will serve as the basis for a new model of data infrastructure guaranteeing safe and trustworthy data exchange.

63.1 References

http://www.ejustice.just.fgov.be/tsv_pdf/2021/02/08/21017239.pdf

64 GXDCH (Gaia-X Digital Clearing House)

The Gaia-X Digital Clearing House operationalizes the Gaia-X mission. A GXDCH makes the various mechanisms and concepts applicable in practice as a ready-to-use service set. The GXDCH contains both mandatory and optional components. All the mandatory components of the GXDCH are open-source software. The development and architecture of the GXDCH is under the governance of the Gaia-X Association.

64.1 References

Gaia-X Architecture Document 24.04 - 11.1

64.2 See Also

Gaia-X

65 Holder

A role an entity might perform by possessing one or more verifiable credentials and generating verifiable presentations from them.

65.1 References

[W3C, Verifiable Credentials Data Model v2.0](#)

65.2 See Also

- [Verifiable Credentials](#)
- [verifiable presentations](#)

66 Identifier

Each Gaia-X participant provides a unique identifier that is associated with the attributes and the participant can cryptographically prove that this Identifier is under his control. The attributes are evaluated by the Participants to implement, enforce, and monitor permissions, prohibitions and duties when negotiating a contract for services or resources. An identifier is a unique attribute that is part of the Participant's Identity.

66.1 References

- [Gaia-X Architecture Document 24.04 4.4](#)
- [W3C Decentralized Identifiers](#)

66.2 See Also

Gaia-X Participant

67 Identity

An Identity is composed of a unique identifier and an attribute or set of attributes that uniquely describe an entity within a given context. Gaia-X uses existing Identities and does not maintain them directly.

67.1 References

Gaia-X Architecture Document 24.4 3.3.3.1

67.2 See Also

Identifier

68 Instantiated Virtual Resource

An Instantiated Virtual Resource represents an instance of a virtual resource. It is equivalent to a service instance and is characterized by endpoints and access rights.

68.1 References

Gaia-X Architecture Document 24.04 4.1

68.2 See Also

- [Virtual Resource](#)
- [Service Instance](#)

69 Issuer

A role an entity can perform by asserting claims about one or more subjects, creating a [verifiable credential](#) from these claims, and transmitting the [verifiable credential](#) to a [holder](#).

69.1 References

[W3C, Verifiable Credentials Data Model v2.0](#)

69.2 See Also

- [Claims](#)
- [Verifiable credential](#)
- [Holder](#)

70 Keypair

A private key and its corresponding public key; a key pair is used with an asymmetric-key (public-key) algorithm.

70.1 References

[NIST - Recommendation for Cryptographic Key Generation](#)

71 Knowledge graph

The Gaia-X credentials are the building blocks of a decentralized machine-readable knowledge graph of claims, each credential carrying a tamper-proof and authenticable part of the information of that graph.

71.1 References

Gaia-X Architecture Document 24.04- 3.3.1

71.2 See Also

- [Gaia-X Credentials](#)
- [Claims](#)

72 Label levels

Gaia-X distinguishes 3 levels of Labels, starting from Label Level 1 (the lowest), up to Label Level 3 (the highest), which represent different degrees of compliance with regard to the goals of transparency, autonomy, data protection, security, interoperability, portability, sustainability, and European Control.

72.1 References

Gaia-X Compliance Document 24.11- 4.7

73 Metadata

Data about other data, documents, or set of data that describes their content, context, structure, data format, provenance, and/or rights attached to them.

73.1 References

Data Exchange Document 23.10 - 2.2

73.2 See Also

Data

74 NIST planes

The three planes Trust plane, Management plane, and Usage plane. They represent three levels of interoperability, as described in the NIST Cloud Federation Reference Architecture.

74.1 References

- [NIST Cloud Federation Reference Architecture](#)
- [Gaia-X Architecture Document 23.10 - 3.1.2](#)

75 Notary

Notaries are entities accredited by the Gaia-X Association, which perform validation based on objective evidence from a Gaia-X Trusted Data sources, digitalizing an assessment previously made. The Notaries are converting “not machine readable” proofs into “machine-readable” proofs.

75.1 References

Gaia-X Architecture Document 24.04- 4.6.1

76 ODRL (Open Digital Rights Language)

The Open Digital Rights Language ([ODRL](#)) is a policy expression language that provides a flexible and interoperable information model, vocabulary, and encoding mechanisms for representing statements about the usage of content and services.

77 References

ODRL Information Model 2.2

78 Operator

Operators are Gaia-X Providers that have been approved by the ecosystem governance to operate federation services and the Federation, which are independent of each other. There can be one or more Operators per type of Federation Service.

78.1 References

Gaia-X Architecture Document 24.04- 3.2.2.2

78.2 See Also

Federation Services

79 Party Credential

The Party Credential is based upon the Verifiable Credentials Data Model v2.0 and is the basement for all IAA Parties such as Natural Persons, Services, Legal Persons, etc.

79.1 References

Identity, Credential and Access Management Document 24.07- 5

79.2 See Also

Verifiable Credentials Data Model v2.0

80 Permissible Standard

Permissible Standards shall identify standards respectively requirements/controls within such standards, where implementation shall be considered prima facie evidence of conformity with the related Gaia-X criterion.

80.1 References

Gaia-X Compliance Document - 3.2.5

81 Physical Resource

A physical resource is a resource that has a weight, position in space and represents a physical entity that hosts, manipulates, or interacts with other physical entities.

81.1 References

Gaia-X Architecture Document 24.04 - 4.1

81.2 See Also

Resource

82 Policy

Policy is defined as a statement of objectives, rules, practices, or regulations governing the activities of Participants within Gaia-X. From a technical perspective, Policies are statements, rules or assertions that specify the correct or expected behaviour of an entity.

82.1 References

Gaia-X Architecture Document 24.04 - 4.2.1

83 Portability

Portability describes the ability to move data or applications between two different services at a low cost and with minimal disruption.

83.1 References

Adapted from ISO/IEC 19941:2017(en)

84 Provider

A Provider operates resources in the Gaia-X ecosystem and offers them as services through Gaia-X service offering credentials.

84.1 References

Gaia-X Architecture Document 24.04 - 3.2.2.1

84.2 See Also

- [Resources](#)
- [Gaia-X Ecosystem](#)
- [Gaia-X Credential](#)

85 RDF (Resource Description Framework)

RDF is a standard model for data interchange on the Web. RDF has features that facilitate data merging even if the underlying schemas differ, and it specifically supports the evolution of schemas over time without requiring all the data consumers to be changed.

85.1 References

<https://www.w3.org/RDF/>

86 Resource

Resources describe in general the goods and objects of the [Gaia-X Ecosystem](#). A Resource can be a:

- Physical Resource
- Virtual Resource
- Instantiated Virtual Resource

86.1 References

Gaia-X Architecture Document 24.04- 4.1

87 Schema

The Gaia-X members define the Schema for Gaia-X credentials. It is used as the vocabulary of the claims about credential subjects and must be available in the form of SHACL shapes (cf. the W3C Shapes Constraint Language SHACL). The defined version of the Gaia-X Schema is maintained and made available through the Gaia-X Registry.

87.1 References

- [Gaia-X Architecture Document 23.10 - 3.3.1.1](#)
- <https://www.w3.org/TR/vc-data-model-2.0/#data-schemas>

87.2 See Also

- [Gaia-X Credential](#)
- [Claim](#)
- [Gaia-X Registry](#)

88 Self-Sovereign Identity (SSI)

SSI allow users to control and own their digital identities and other verifiable digital credentials locally. It is not required to use a predominant cloud service provider, nor is the establishment of a central Gaia-X Identity provider necessary. Users are thus completely independent of third parties and decide themselves which identity data they share with whom, as all identity data is securely stored only with the individual user in their SSI wallet.

88.1 References

- [Gaia-X secure and trustworthy ecosystems with Self Sovereign Identity - Whitepaper](#)
- https://en.wikipedia.org/wiki/Self-sovereign_identity

89 Service Offering

A Service Offering is a set of resources, which a provider aggregates and publishes as a single entry in a catalogue.

89.1 References

Gaia-X Architecture Document 24.04- 4.1

89.2 See Also

- Resources
- Provider
- Catalogue

90 Shape

The Gaia-X members define the Schema for Gaia-X credentials. It is used as the vocabulary of the claims about credential subjects and must be available in the form of SHACL shapes.

90.1 References

- [Gaia-X Architecture Document 24.04- 3.3.1.1](#)
- [W3C Shapes Constraint Language SHACL](#)

90.2 See Also

- [Gaia-X Credentials](#)
- [W3C Shapes Constraint Language SHACL](#)

91 Shapes Constraint Language (SHACL)

Language for validating [RDF](#) graphs against a set of conditions. These conditions are provided as shapes and other constructs expressed in the form of an [RDF](#) graph.

91.1 References

[SHACL](#) specifications.

91.2 See Also

- [RDF](#)
- [Shape](#)

92 Sovereignty

Sovereignty is the ability to exercise self-determination. It can translate into several meanings- political, economic, digital, and technical. Gaia-X does not provide any political or economic interpretation of sovereignty, but instead provides a framework to configure sovereignty from a digital and technical perspective.

92.1 References

[Gaia-X Vision & Strategy - 1.3](#)

92.2 See Also

- [Self Sovereign Identity](#)
- [Gaia-X](#)

93 Terms of Usage

A specific instantiation of a [data license](#) included in a [data product usage contract](#) listing all the constraints associated with a [data exchange](#).

93.1 References

Data Exchange Document 23.10 - 2.2

93.2 See Also

- [Data License](#)
- [Data Product Usage Contract](#)

94 Trust Anchor

Gaia-X Trust Anchors are bodies, parties, i.e., Conformity Assessment Bodies or technical means accredited by the Gaia-X Association to be parties eligible to issue attestations about specific claims. For each accredited Trust Anchor, a specific scope of attestation is defined.

94.1 References

Gaia-X Compliance Document 24.11- 6

94.2 See Also

- Accredited
- Scope of attestation

95 Trust Indexes

Scoring tools meant to be used by all parties in ecosystems as a measure of distance for interoperability and trust with regards to the other offerings in the ecosystem catalogues.

95.1 References

Gaia-X Architecture Document 24.04- 12

96 Trusted Data Source

Source of the information used by the issuer to validate attestations. Notaries perform validations and issue attestations based on objective evidences from Trusted Data sources. The accepted Trusted Data Source categories and Notaries are determined within the Gaia-X Compliance document, while the detailed list of valid Trusted Data Sources and Notaries resides in the Gaia-X Registry.

96.1 References

Gaia-X Compliance Document 24.11- 6.3

96.2 See Also

Evidences

97 Usage Control

Usage control is an extension to traditional access control. It is about the specification and enforcement of restrictions regulating what must (not) happen to data.

97.1 References

Data Exchange Document 23.11 - 2.6

97.2 See Also

- Access control
- Data

98 Usage Policy

Usage Policies, also known as Provider Policy constrains the consumer's use of a resource.

98.1 References

Gaia-X Architecture Document 23.10 - 4.2.2

98.2 See Also

- Consumer
- Resource

99 Verifiable Credential Wallet

A wallet, also known as Verifiable Credential Wallet enables to store, manage, and present verifiable credentials.

99.1 References

[Gaia-X Policy Rules Conformity Document - 11.4](#)

99.2 See Also

[Verifiable Credentials](#)

100 Verifiable Credential

A verifiable [credential](#) is a tamper-evident [credential](#) that has authorship that can be cryptographically verified. Verifiable credentials can be used to build verifiable presentations, which can also be cryptographically verified.

100.1 References

[W3C, Verifiable Credentials Data Model v2.0](#)

100.2 See Also

- [Credential](#)
- [Verifiable Presentation](#)

101 Verifiable Presentation

A verifiable presentation is a tamper-evident presentation encoded in such a way that authorship of the data can be trusted after a process of cryptographic verification. Certain types of verifiable presentations might contain data that is synthesized from, but do not contain, the original verifiable credentials (for example, zero-knowledge proofs).

101.1 References

W3C, Verifiable Credentials Data Model v2.0

101.2 See Also

- [Data](#)
- [Verifiable Credential](#)

102 Verifier

A role an entity performs by receiving one or more verifiable credentials, optionally inside a verifiable presentation for processing.

102.1 References

[W3C, Verifiable Credentials Data Model v2.0](#)

102.2 See Also

- [Verifiable Credential](#)
- [Verifiable Presentation](#)

103 Virtual Resource

A Virtual Resource represents static data in any form and necessary information such as dataset, configuration file, license, keypair, an AI model, neural network weights, etc.

103.1 References

Gaia-X Architecture Document 24.04 - 4.1

103.2 See Also

Resource

III. Acronyms

104 Acronyms

The following table contains the list of the acronyms used within Gaia-X.

Acronym	Meaning
AD	Architecture Document
BoD	Board of Directors
<u>CAB</u>	Conformity Assessment Body
CD	Compliance Document
<u>CSP</u>	Cloud Service Provider
DEX	Data Exchange (referred to the respective WG or deliverable)
DSBA	Data Spaces Business Alliance
DSBC	Data and Services Business Committee
<u>DSSC</u>	Data Spaces Support Centre
<u>EEA</u>	European Economic Area
EU Cloud CoC	European Cloud Code of Conduct
EFTA	European Free Trade Association
<u>EUCS</u>	European Cloud Scheme
FAIR	Findable, Accessible, Interoperable and Reusable
GA	General Assembly
GAB	Governmental Advisory Board
<u>GDPR</u>	General Data Protection Regulation
GXDCH	Gaia-X Digital Clearing House
ICAM	Identity, Credentials and Access Management (referred to the respective WG or deliverable)
LHP	Lighthouse Project
<u>ODRL</u>	Open Digital Rights Language
OGA	Ordinary General Assembly
PRC	Policy Rules Committee

Acronym	Meaning
TA	Trust Anchor
TC	Technical Committee
TCK	Technical Compatibility Kit
TISAX	Trusted Information Security Assessment Exchange
TSP	Trust Service Provider
VC	Verifiable Credential
W3C	Worldwide Web Consortium
WG	Working Group