

# Terminology

[A][B][C][D][E][F][G][H][I][J][K][L][M][N][O][P][Q][R][S][T][U][V][W][X][Y][Z]

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## A

### AAI

Acronym for "Authentication and Authorization Infrastructure".

### (SAML) Assertion

A digital statement issued by an IdP, derived from the [Digital Identity](#) of an [End User](#). Typically an Assertion is digitally signed and optionally encrypted.

### Authentication

Process of identifying of a previously registered user.

### Authorization

Process of granting or denying access to a resource for an authenticated user.

### (Authorization) Attributes

User data (such as name, affiliation, study branch, etc.) needed for access control decisions. The attributes used by eduGAIN are defined in the [eduGAIN Attribute Profile](#).

### Attribute Authority

The AA is a component of the Identity Provider. It issues attributes on behalf of an organization.

### Attribute Release Policy (ARP)

It defines which attributes are going to be released to a requesting resource (the attribute filter). It is a mechanism to implement privacy and data protection.

### Attribute Resolver

A component of the [Identity Provider](#). It retrieves attributes from various data sources (LDAP, Active Directory, ...) and performs the necessary transformations for [SAML](#) transport.

## B

## C

## D

### Digital Identity

A set of information that is attributable to an [End User](#) It is issued and managed by an [IdP Operator](#) on the basis of the identification of the [End User](#).

### Discovery Service

Technical term/synonym for [WAYF](#).

## E

### End User

Typically, a human person who belongs to an organization, typically an employee or student, who uses Federated Authentication via its [IdP](#). However, an End User can also be a legal person, a virtual artifact (e.g. a computer process, an application), a tangible object (e.g. a device) or a group of other entities (e.g. an organization) of an organization.

### Entitlement

Entitlements form a specialized class of [Authorization Attributes](#) important enough to call out separately. They can be used to identify a user's eligibility to access a given resource such as an e-journal, see [common-lib-terms](#).

## **EntityID**

The EntityID is a unique identifier, identifying each [Service Provider](#) and [Identity Provider](#).

## **F**

### **Federated Authentication**

An [End User](#) uses his [Digital Identity](#) to authenticate for accessing services offered by SP Operators within the same or a different organization.

### **Federated Identity Management**

The management and use of identity information across security domains, e.g. between individual universities. It deals with issues such as interoperability, liability, security, privacy and trust.

### **Federation**

A federation is a collection of organizations that agree to interoperate under a certain rule set.

### **Federation Member**

A Federation Member is an organization (such as a university, library, etc.) that runs one [Identity Provider](#) and any number of AAI-enabled [Resources](#). Federation Members usually have to agree on a common set of policies and rules defined in a service/federation agreement.

### **Federation Operator**

The organization managing the Federation, operating the central components and acting as a competence centre. SWITCH is for example the Federation Operator of the [SWITCHaai Federation](#), the Swiss identity federation.

### **Federation Technology Profile**

The technology profiles specify how to use which subsets of a specific federation technology in the context of a [Federation](#).

## **G**

## **H**

### **Home Organization, Home Institution**

A participating organization representing a user community, e.g. a university, library, university hospital etc. A Home Organization registers users and stores information about them. Furthermore, it is able to authenticate its users and it operates an [IdP](#).

## **I**

### **Identity Provider (IdP)**

The system component that issues [Assertions](#) on behalf of [End Users](#) who use them to access the services of [SPs](#).

### **IdP Operator**

The organization operating an [IdP](#). IdP Operator refers to the legal entity that signs contracts, is a [Federation Participant](#) and is responsible for the overall processes supporting the IdP.

### **Interfederation**

Interfederation takes place if a user from one [federation](#) accesses a service which is registered in another federation. eduGAIN is the most known and largest academic Interfederation service to exchange trusted identity information across boundaries of (national) identity federations.

## **J**

## K

## L

### Lazy Session Establishment

This special form of session establishment allows access to a URL or resource prior to authentication. The point is that the application decides when a user has to authenticate. More information is available for example on the [SWITCHaai Demo Resource](#).

## M

### Metadata

The Metadata contains technical details and descriptive information about the [IdPs](#) and [SPs](#). For interoperability in a specific context, the Metadata format definition is part of a [Federation Technology Profile](#).

## N

## O

## P

### Federation Participant

An organization that participates in an [Identity Federation](#).

## Q

## R

### Relying Party

In general, one or more Service Provider or Identity Provider that is sender or recipient of an Assertion. A relying party could be a single Service Provider or a group of Service Providers. The SPs and IdPs can be grouped into a relying party by including them into an *EntitiesDescriptor* element in the [Metadata](#). Such a group of Service Providers can then for example be used tell an Identity Provider to use a special way to transmit the attributes to the components of this relying party.

### Resource

Web application, web site, information system, etc. An AAI-enabled Resource requests [attributes](#) about users from an IdP and makes access decisions (authorization) based on these attributes.

## S

### SAML

[SAML](#) - the Security Assertion Markup Language - is an XML framework for exchanging authentication and authorization information. SAML is a standard of [OASIS](#). The software [Shibboleth](#) is based on SAML.

### Service Provider (SP)

The system component that evaluates the [Assertion](#) from an [IdP](#) and uses the information from the Assertion for controlling access to protected services. Synonym for an AAI-enabled [Resource](#), although used in a more technical sense.

### Shibboleth

The name an open source SAML implementation developed by [Shibboleth Consortium](#). Shibboleth is based on [SAML](#) and allows the implementation of an AAI. eduGAIN makes use of SAML.

#### **Simple SAML PHP**

[SimpleSAML PHP](#) is another very popular open source SAML software. It supports SAML and additional protocols that can be used for federated identity management.

#### **SP Operator**

The organization operating an SP. SP Operator refers to the legal entity that signs contracts, is a [Federation Participant](#) and is responsible for the overall processes supporting the SP.

#### **Single Sign-On (SSO)**

Single Sign-On enables the user to gain access to multiple Resources by authenticating only once.

**T**

**U**

**V**

**W**

#### **WAYF (Where Are You From)**

The WAYF service, also called Discovery Service, lets the user choose his [Home Organization](#) from a list and then redirects the user to this Home Organization's login page for authentication.

**X**

**Y**

**Z**

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Many of the above entries were with permission copied from [SWITCHaai Glossary](#).