



**International
Standard**

ISO/IEC 25831-1

**Information technology — OpenID
identity assurance 1.0 —**

**Part 1:
General**

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OpenID Identity Assurance 1.0

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in their work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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This document was prepared by the OpenID Foundation (OIDF) (as Identity Assurance 1.0) and drafted in accordance with its editorial rules. It was adopted, under the JTC 1 PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

Introduction

This extension to OpenID Connect standardizes how relying parties request and receive identity information with additional assurance metadata. This document is aimed at enabling use cases requiring strong assurance, for example, to comply with regulatory requirements such as anti-money laundering laws or access to health data, risk mitigation, or fraud prevention.

In such use cases, the relying party (RP) needs to understand the trustworthiness or assurance level of the claims about the end-user that the OpenID provider (OP) is willing to communicate, along with process-related information and evidence used to verify the end-user claims.

The `acr` claim, as defined in section 2 of the OpenID Connect specification [OpenID], is suited to assure information about the authentication performed in an OpenID Connect transaction. Identity assurance, however, requires a different representation. While authentication is an aspect of an OpenID Connect transaction, assurance and associated verification and validation details, are properties of a certain claim or a group of claims. Several of them will typically be conveyed to the RP as the result of an OpenID Connect transaction.

For example, the assurance an OP typically will be able to give for an e-mail address will be "self-asserted" or "verified". The family name of an end-user, in contrast, might have been verified in accordance with the respective anti-money laundering law by showing an ID card to a trained employee of the OP operator.

Identity assurance requires a way to convey assurance data along with and coupled to the respective claims about the end-user. This document defines a suitable representation and mechanisms the RP will utilize to request verified claims about an end-user along with

assurance data and for the OP to represent these verified claims and accompanying assurance data.

1. Scope

This document is a definition of the technical mechanism to allow a relying party to request one or more verified claims about the end-user and to enable an OpenID provider to provide a relying party with a verified claim ("the tools").

Additional facets needed to deploy a complete solution for identity assurance, such as legal aspects (including liability), trust frameworks, or commercial agreements are out of scope. It is up to the particular deployment to complement the technical solution based on this document with the respective definitions ("the rules").

Note: Although such aspects are out of scope, the aim of the specification is to enable implementations of the technical mechanism to be flexible enough to fulfill different legal and commercial requirements in jurisdictions around the world. Consequently, such requirements will be discussed in this document as examples.

2. Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applied. For undated references, the latest edition of the referenced document (including any amendments) applies.

- [OIDC](#) OpenID Connect Core 1.0 incorporating errata set 1
- [RFC 7519](#) JSON Web Token (JWT)
- [OIDC4IDA](#) OpenID Identity Assurance 1.0 predefined identifier values