

06 Federation Onboarding Requirements

Trusted Digital Identity Framework

Release 4.8 - Feb 2023

PUBLISHED VERSION



Department of Finance (Finance)

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Conventions

References to TDIF documents, abbreviations and key terms (including the words *MUST*, *MUST NOT*, and *MAY*) are denoted in italics are to be interpreted as described in the current published version of the *TDIF: 01 – Glossary of Abbreviations and Terms*.

TDIF requirements and references to *Applicants* are to be read as also meaning *Accredited Participants*, and vice versa. The scope of *TDIF* requirements are to be read as applying to the identity system under *Accreditation* and not to the organisation's broader operating environment.

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Document management

Finance has reviewed and endorsed this document for release.

Change log

| Document Version | Release Version | Date | Author | Description of the changes |
|------------------|-----------------|-----------|---------|--|
| 0.1 | | Oct 2019 | AV | Initial version |
| 0.2 | | Dec 2019 | AV | Updated to incorporate feedback provided by stakeholders during the second round of collaboration on TDIF Release 4 |
| 0.4 | | Mar 2020 | AV | Updated to incorporate feedback provided during the third consultation round on TDIF Release 4 |
| 1.0 | 4.0 | May 2020 | | Published version |
| 1.1 | 4.4 | June 2021 | AV, SJP | CRID0018 – Moved content to the TDIF Functional and Role Requirements documents: See the Change Log for full list of requirements changes. |
| 1.2 | 4.6 | Mar 2022 | AV | CRID0028 – FED-02-01-12 – Requirement changed from MAY to MUST |
| NA | 4.7 | June 2022 | | No changes to document |
| NA | 4.8 | Feb 2023 | | No changes to document |

All changes made to the TDIF are published in the TDIF Change Log which is available at <https://www.digitalidentity.gov.au/privacy-and-security/trusted-digital-identity-framework>.

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Introduction

This document sets out the *TDIF* federation onboarding requirements to be met by an *Applicants* in order to achieve *TDIF* accreditation if they are also seeking to connect to the *Australian Government Digital Identity System*.

These *TDIF* federation onboarding requirements do not replace, remove or diminish existing obligations imposed on government agencies or organisations through other policies, legislation or regulations, or by any other means. These *TDIF* federation onboarding requirements supplement existing obligations and apply specifically to identity services that undergo the *TDIF Accreditation Process*.

The intended audience for this document includes:

- *Accredited Participants*
- *Accredited Providers*
- *Applicants*
- *Assessors*
- *Relying Parties*.

Technical requirements

2.1 Common functional requirements

2.1.1 Technical integration standards

TDIF Req: FED-02-01-01; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MUST** implement the following profiles as specified in the *TDIF: 06B - OpenID Connect 1.0 Profile*:

- a) *Relying Party to Identity Exchange Profile*.
- b) *Identity Exchange to Identity Service Provider Profile*.

TDIF Req: FED-02-01-02; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MAY** implement the following profiles as specified in the *TDIF: 06C - SAML 2.0 Profile*:

- a) *Relying Party to Identity Exchange Profile*.
- b) *Identity Exchange to Identity Service Provider Profile*.

TDIF Req: FED-02-01-03; **Updated:** Mar-20; **Applicability:** A

The *Applicant* **MUST** implement the *Relying Party to Identity Exchange* profile specified in either the:

- a) TDIF: 06B - OpenID Connect 1.0 Profile; or
- b) The TDIF: 06C - SAML 2.0 Profile.

TDIF Req: FED-02-01-04; **Updated:** Mar-20; **Applicability:** I

The *Applicant* **MUST** implement the *Identity Exchange to Identity Service Provider* profile specified in either the:

- a) TDIF: 06B - OpenID Connect 1.0 Profile; or
- b) The TDIF: 06C - SAML 2.0 Profile.

TDIF Req: FED-02-01-05; **Updated:** Mar-20; **Applicability:** A, I, X

The *Applicant* **MUST** test their implementation of a *Federation Protocol* in accordance with the *Technical Testing* requirements set out in section 6 of the *TDIF: 04 – Functional Requirements*.

2.1.2 Security considerations

TDIF Req: FED-02-01-06; **Updated:** Mar-20; **Applicability:** A, C, I X

The *Applicant* **MUST** conform to the applicable recommendations in the security considerations section set out in [RFC 6749] and those set out in the 'OAuth 2.0 threat model and security considerations' document [RFC 6819].

TDIF Req: FED-02-01-06a; **Updated:** Mar-20; **Applicability:** A, C, I X

The *Applicant's* conformance with the security considerations **MUST** be considered as part of its *System Security Plan* as per PROT-04-01-11a.

2.1.3 Functional data requirements

This section operates in addition to the requirements for *Audit Logs* outlined in section 4.2.6 of the *TDIF 04 – Functional requirements*.

TDIF Req: FED-02-01-07; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to PRIV-03-09-03.

TDIF Req: FED-02-01-07a; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-02-01.

TDIF Req: FED-02-01-08; **Updated:** Jun-21; **Applicability:** X

The *Applicant's Audit logs* MUST store a record of all federated identity interactions that relate to an *Individual*, including any requests and responses between a *Relying Party* and an *Identity Exchange*, or an *Identity Service Provider* and an *Identity Exchange*.

TDIF Req: FED-02-01-08a; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to PROT-04-02-22e.

2.1.4 Reporting to the Oversight Authority

This section lists requirements to be met by *Applicants* in relation to their reporting obligations to the *Oversight Authority*. These requirements replace similar requirements set out in *TDIF 04: Functional Requirements* and *TDIF 05: Role Requirements*. Each requirement below lists the requirement it replaces.

TDIF Req: FED-02-01-09; **Updated:** Jun-21; **Applicability:** A, C, I, X

The *Applicant* MUST develop and use procedures to report incidents of *fraud* or suspected *fraud* to the *Oversight Authority*

TDIF Req: FED-02-01-09a; **Updated:** Jun-21; **Applicability:** A, C, I, X

As soon as they become aware the *Applicant* MUST report incidents of *fraud* or suspected *fraud* to the *Oversight Authority* (this replaces FRAUD-02-05-06).

TDIF Req: FED-02-01-09b; **Updated:** Jun-21; **Applicability:** A, C, I, X

The *Applicant* MUST include the following information when reporting on incidents of *fraud* or suspected fraud:

- a) Date and time of the *fraud* incident.
- b) Quantity of *fraud* incidents and their level of severity.
- c) Time taken to respond to the *fraud* incident.
- d) Measures taken in response to the *fraud* incident.

- e) Type(s) of fraud.
- f) If applicable, the *Identity Proofing Level* and *Credential Level* of the impacted identity record(s).
- g) Any other supporting information (e.g. attack vectors used by the fraudster).

Depending on the nature of the *fraud* incident and legal advice obtained, the *Oversight Authority* may advise impacted stakeholders of the outcome of a *fraud* investigation (this replaces FRAUD-02-05--06a).

TDIF Req: FED-02-01-10; **Updated:** Jun-21; **Applicability:** A, C, I, X

An *Applicant*, covered by the *Privacy Act*, **MUST** report eligible data breaches to affected individuals and the *Information Commissioner* as required under the *Privacy Act*¹ and also report the eligible data breach to the *Oversight Authority* (this replaces PRIV-03-04-01).

TDIF Req: FED-02-01-10a; **Updated:** Jun-21; **Applicability:** A, C, I, X

An *Applicant*, not covered by the *Privacy Act*, **MUST** report eligible data breaches as defined in the *Privacy Act 1988* to affected individuals and the *Oversight Authority* (this replaces PRIV-03-04-01a).

TDIF Req: FED-02-01-11; **Updated:** Jun-21; **Applicability:** A, C, I, X

The *Applicant* **MUST** include a statement in their privacy notices advising that the *Applicant* may use the *Individual's* information as required by the *Oversight Authority*, including to detect, manage and investigate fraud (this replaces PRIV-03-05-02).

TDIF Req: FED-02-01-12; **Updated:** Jun-21; **Applicability:** A, C, I, X

The *Applicant* **MUST** include a statement in their privacy notices advising that the *Applicant* may provide the *Individual's system metadata* to the *Oversight Authority* to enable it to perform the *Oversight Authority's* functions related to fraud management.

¹ See Part IIIC of <https://www.legislation.gov.au/Details/C2019C00025> for the definition of an eligible data breach including exceptions to reporting.

TDIF Req: FED-02-01-13; **Updated:** Jun-21; **Applicability:** A, C, I, X

If it discloses *Personal information* to an overseas recipient that is not the individual, the *Applicant* **MUST** demonstrate to the *Oversight Authority*'s reasonable satisfaction it has appropriate contractual and practical measures to ensure the overseas recipient complies with these *TDIF* privacy requirements (this replaces PRIV-03-10-02a).

TDIF Req: FED-02-01-14; **Updated:** Jun-21; **Applicability:** A, C, I, X

The *Applicant* **MUST** develop and use procedures that ensure:

- a) All elements of the *Applicant's System Security Plan* are achieved.
- b) *Cyber security incidents* are investigated, responded to and reported to the *Oversight Authority*.
- c) Relevant security policy or legislative obligations are met.

(This replaces PROT-04-01-06).

TDIF Req: FED-02-01-15; **Updated:** Jun-21; **Applicability:** A, C, I, X

The *Applicant* **MUST** develop and use procedures to report *Cyber security incidents* to the *Oversight Authority*.

TDIF Req: FED-02-01-15a; **Updated:** Jun-21; **Applicability:** A, C, I, X

As soon as they become aware the *Applicant* **MUST** report *Cyber security incidents* to the *Oversight Authority* (this replaces PROT-04-02-14).

TDIF Req: FED-02-01-15b; **Updated:** Jun-21; **Applicability:** A, C, I, X

The *Applicant* **MUST** include the following information when reporting *Cyber security incidents*:

- a) Date and time of the *Cyber security incident*.
- b) Quantity of *Cyber security incidents* and their level of severity.
- c) Time taken to respond to the *Cyber security incident*.
- d) Measures taken in response to the *Cyber security incident*.
- e) If applicable, the *Identity Proofing Level* and *Credential Level* of the impacted identity record(s).
- f) Any other supporting information (e.g. attack vectors used).

Depending on the nature of the *Cyber security incident* and legal advice sought, the *Oversight Authority* may advise impacted stakeholders of the outcome of a security investigation (this replaces PROT-04-02-14a).

2.2 Technical testing requirements

TDIF Req: FED-02-02-01; **Updated:** Mar-20; **Applicability:** A, C, I, X

For all the requirements in this document, the *Applicant* **MUST** demonstrate conformance with the *Technical Testing* requirements set out in section 6 of the *TDIF: 04 – Functional Requirements*.

2.3 Feature-specific technical integration requirements

The section sets out the technical integration requirements for specific features of the *Identity Federation*.

2.3.1 Identity resolution

2.3.1.1 Pairwise Identifiers

TDIF Req: FED-02-03-01; **Updated:** Mar-20; **Applicability:** I, X

The *Applicant* **MUST** generate *Pairwise Identifiers* in accordance with section 8.1 of the OpenID Connect Core 1.0 specification [OpenIDCore] and use these to interact with Relying Parties regardless of the *Federation Protocol* the Applicant is using to communicate with other Participants in the *Australian Government Digital Identity System*.

TDIF Req: FED-02-03-02; **Updated:** Mar-20; **Applicability:** I, X

The *Applicant* **MUST** send through a *Pairwise Identifier* in response to a successful *Authentication Request*.

TDIF Req: FED-02-03-03; **Updated:** Mar-20; **Applicability:** X

The Applicant **MUST** use a different *Pairwise Identifier* to an *Identity Service Provider* to identify the subject of an *Authentication* to the *Relying Party*.

TDIF Req: FED-02-03-04; **Updated:** Mar-20; **Applicability:** X

An *Identity Exchange* **MUST** implement an identity mapping process that maps the *Pairwise Identifier* presented by an *IdP* in response to an authentication request to the *Pairwise Identifier* for the user at the *Relying Party* that initiated the *Authentication* interaction.

TDIF Req: FED-02-03-05; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MUST** be able to receive *Pairwise Identifiers* of up to 255 ASCII characters.

TDIF Req: FED-02-03-06; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MUST** support the configuration of a sector identifier for a *Relying Party* in accordance with Section 8.1 of the [OpenIDCore].

TDIF Req: FED-02-03-07; **Updated:** Mar-20; **Applicability:** X

The process for the registration of *OIDC* clients by the *Applicant* **MUST** ensure that only valid and authorised clients for the *Relying Party* can use the same configured *sector_identifier_uri*.

TDIF Req: FED-02-03-08; **Updated:** Mar-20; **Applicability:** I

The *Applicant* **MUST NOT** generate *Pairwise Identifiers* greater than 255 ASCII characters.

TDIF Req: FED-02-03-09; **Archived:** Jun-21

This requirement has been archived in version 1.1.

2.3.1.2 Deduplication

TDIF Req: FED-02-03-10; **Updated:** Jun-21; **Applicability:** X

The *Applicant* **MUST** have a process to conduct *Deduplication* of *Digital Identities* which pass through an *Identity Exchange* to ensure that a *User* with multiple *Digital Identities* is presented as the same user to a *Relying Party*.

TDIF Req: FED-02-03-11; **Updated:** Jun-21; **Applicability:** X

The *Applicant* **MUST** only deduplicate *Digital Identities* which have been proved to the same *Identity Proofing Level*.

TDIF Req: FED-02-03-12 **Updated:** Mar-20; **Applicability:** I

If the TDIF EDI attribute is requested by an *Identity Exchange*, the *Applicant* **MUST**

return an *EDI* constructed using the document specified in Table 1 (as updated by *Finance* from time to time) according to the *Identity Proofing Level* used in the authentication context.

TDIF Req: FED-02-03-13 **Updated:** Mar-20; **Applicability:** I

The *Applicant* *MUST* return an *EDI* constructed using only such documents specified in Table 1 (as updated by *Finance* from time to time) as are bound to the current authentication context.

TDIF Req: FED-02-03-14 **Updated:** Mar-20; **Applicability:** I

The *Applicant* *MUST* ensure that the documents and attributes used to construct an *EDI* reflect the most up to date documents and attributes bound to the current authentication context.

TDIF Req: FED-02-03-15; **Updated:** Mar-20; **Applicability:** I

When constructing an *EDI* using a document the *Applicant* *MUST* concatenate the document type code *URN* from section 6.1 of the *TDIF: 06D - Attribute Profile* and the attributes specified in Table 2 in the order specified in Table 2, for that document, using the attribute formats specified in Table 3.

TDIF Req: FED-02-03-15a **Updated:** Mar-20; **Applicability:** I

If the *User* has not verified any of the documents in Table 1 (as updated by *Finance* from time to time), the *Applicant* *MUST* construct an *EDI* by concatenating the *IP Link* for the *User* and a suitable globally-unique identifier for the *Applicant* (e.g. OIDC Issuer URI).

TDIF Req: FED-02-03-15b; **Updated:** Mar-20; **Applicability:** I

The string resulting from either TDIF Req FED-02-03-15 or TDIF Req FED-02-03-15a *MUST* then be encoded using UTF-8, before being hashed using the SHA-256 algorithm.

Table 1: Documents used to build an *EDI*

| IP Level | Details |
|--------------------------------|--|
| IP 1 | The first available document from the following list: <ol style="list-style-type: none"> 1. Verified Email Address 2. Verified Mobile Number |
| IP 1 PLUS IP 2 IP 2 PLUS | The first available document from the following list: <ol style="list-style-type: none"> 1. Birth Certificate 2. Citizenship Certificate 3. Visa 4. Passport 5. Driver Licence 6. ImmiCard 7. Medicare Card |
| IP 3 | The first available document from the following list: <ol style="list-style-type: none"> 1. Birth Certificate 2. Citizenship Certificate 3. Visa 4. Passport |
| IP 4 | The first available document from the following list: <ol style="list-style-type: none"> 1. Birth Certificate 2. Citizenship Certificate 3. Visa |

Table 2: Document Attributes used to build an *EDI*

| Document type | Specified Attributes |
|-----------------------|--|
| Passport | <ul style="list-style-type: none"> • Passport Number |
| NSW Birth Certificate | <ul style="list-style-type: none"> • Certificate Number if available, else use Registration number • Document Date of Birth • Document Issuer State |
| ACT Birth Certificate | <ul style="list-style-type: none"> • Certificate Number if available, else use Registration number • Document Date of Birth • Document Issuer State |
| NT Birth Certificate | <ul style="list-style-type: none"> • Certificate Number if available, else use Registration number |

| Document type | Specified Attributes |
|-------------------------|---|
| | <ul style="list-style-type: none"> • Document Date of Birth • Document Issuer State |
| QLD Birth Certificate | <ul style="list-style-type: none"> • Certificate Number if Available • Document Date of Birth • Document Issuer State • Registration Date |
| WA Birth Certificate | <ul style="list-style-type: none"> • Certificate Number if available, else use Registration number • Document Date of Birth • State or Territory of Issue |
| SA Birth Certificate | <ul style="list-style-type: none"> • Certificate Number if available, else use Registration number • Document Date of Birth • Document Issuer State |
| TAS Birth Certificate | <ul style="list-style-type: none"> • Certificate Number if available, else use Registration number • Document Date of Birth • Document Issuer State • Registration Date |
| VIC Birth Certificate | <ul style="list-style-type: none"> • Registration Number • Document Date of Birth • Document Issuer State |
| Citizenship Certificate | <ul style="list-style-type: none"> • Document Date of Birth • Stock Number |
| Visa | <ul style="list-style-type: none"> • Document Date of Birth • Foreign Passport Number |
| Driver Licence | <ul style="list-style-type: none"> • Licence Number • Document Issuer State |
| Medicare Card | <ul style="list-style-type: none"> • Medicare Card Number • Individual Reference Number • Card Colour |
| ImmiCard | <ul style="list-style-type: none"> • ImmiCard Number |

Table 3: Specified attribute data format

| Attribute/sub-attribute | Type | Format | Maximum Length |
|---------------------------|--------|---|----------------|
| Document Issuer State | String | Values are “NSW”, “QLD”, “VIC”, “TAS”, “WA”, “SA”, “ACT”, “NT” | 3 |
| Document Identifier | String | 0 or more characters. This includes Certificate Number, Passport Number, Registration Number, Stock Number, Licence Number and Foreign Passport Number. | 50 |
| Document Date of Birth | String | ISO 8601:2004 format: YYYY-MM-DD. Note partial dates are also valid, i.e. YYYY, YYYY-MM | 10 |
| Registration Date | String | ISO 8601:2004 format: YYYY-MM-DD. Note partial dates are also valid, i.e. YYYY, YYYY-MM | 10 |
| Document Country of Issue | String | 1 or more characters | 50 |

TDIF Req: FED-02-03-16; **Updated:** Mar-20; **Applicability:** I

The *Applicant* **MUST NOT** provide access to an *EDI* to any party other than an *Identity Exchange*.

TDIF Req: FED-02-03-17; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MUST NOT** store an *EDI* received from an *Identity Service Provider* or use it as their *Pairwise Identifier* for the *User* being authenticated.

TDIF Req: FED-02-03-18; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MUST NOT** provide access to an *EDI* to any other party in the *Australian Government Digital Identity System*.

TDIF Req: FED-02-03-19; **Updated:** Mar-20; **Applicability:** X

If the *Applicant* uses the *EDI* to conduct *Deduplication*, it **MUST NOT** do so across the *Identity Federation*, but instead only conduct deduplication at a sector identifier level.

TDIF Req: FED-02-03-20; **Updated:** Mar-20; **Applicability:** X

The *Applicant* MAY request an *EDI* to conduct *Deduplication* as part of an authentication request made to an *Identity Service Provider*.

2.3.2 *Single Sign-on/Single Logout*

TDIF Req: FED-02-03-21; **Updated:** Jun-21; **Applicability:** X

If the *Applicant* supports *Single Sign-on*, it MUST support the ability for a *Relying Party* to request *Authentication* for a particular *User* using the method specified in the *Federation Protocol* being used. See section 4.2 for more detail on how an *Identity Exchange* can support this.

TDIF Req: FED-02-03-22; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-03-02.

TDIF Req: FED-02-03-23; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-03-02a.

TDIF Req: FED-02-03-24; **Updated:** Mar-20; **Applicability:** C I, X

If the *Applicant* is using securely cached attributes for *Single Sign-on*, and the *Applicant* receives an *Authentication Request* which cannot be fulfilled using the cached information and can't retrieve additional *Attributes* without further requiring user interaction, it MUST send an *Authentication Request* to an *Identity Service Provider*.

TDIF Req: FED-02-03-25; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-03-03a.

TDIF Req: FED-02-03-26; **Archived:** Jun-21

This requirement has been archived in version 1.1.

TDIF Req: FED-02-03-27; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-03-03.

TDIF Req: FED-02-03-28; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-03-04.

TDIF Req: FED-02-03-29; **Archived:** Jun-21

This requirement has been archived in version 1.1.

TDIF Req: FED-02-03-30; **Archived:** Jun-21

This requirement has been archived in version 1.1.

Attribute Service Provider requirements

This section sets out the unique technical requirements that *Attribute Service Providers* must comply with to onboard onto the *Identity Federation* in addition to the other applicable requirements set out in this document.

3.1 Technical requirements

TDIF Req: FED-03-01-01; **Updated:** Mar-20; **Applicability:** A

The *Applicant* **MUST** publish a schema for any *Attributes* it provides. This schema must enumerate the valid values for any *Attributes* that have a defined set of values, and be done in a format which complies with the platform through which it provides access to an *Identity Exchange*, and the *Federation Protocols* which a *Relying Party* may use to request the *Attributes* from an *Identity Exchange*.

TDIF Req: FED-03-01-02; **Updated:** Mar-20; **Applicability:** A

The *Applicant* **MUST** use the *Pairwise Identifiers* generated by an *Identity Exchange* for it as a *Relying Party* to associate the attributes that it provides with the *Digital Identity* brokered by an *Identity Exchange*.

TDIF Req: FED-03-01-03; **Updated:** Mar-20; **Applicability:** A

The *Applicant* **MUST** provide an *API* that enables the attributes it provides to be shared with *Relying Parties*.

TDIF Req: FED-03-01-04; **Updated:** Mar-20; **Applicability:** A

The *Applicant* **MUST** authorise an accredited *Identity Exchange* to securely access the *API* it provides.

TDIF Req: FED-03-01-05; **Updated:** Mar-20; **Applicability:** A

The *Applicant* **MAY** implement the *API* as a *REST API*.

TDIF Req: FED-03-01-06; **Updated:** Mar-20; **Applicability:** A

Where the *Applicant* provides a *REST API*, the *Applicant* **MAY** authorise access in accordance with the *JSON Web Token Profile for OAuth 2.0 Client Authentication and Authorization Grants* [RFC 7523].

TDIF Req: FED-03-01-07; **Updated:** Mar-20; **Applicability:** A

The *Applicant* MAY allow *Attributes* to be directly requested from it by a *Relying Party* using a security token returned by an *Identity Exchange* to the *Relying Party*.

3.2 Audit logging

These requirements operate in addition to the requirements outlined in the *TDIF 04 – Functional Requirements* specifying what needs to be included in an *Attribute Service Providers audit log*.

TDIF Req: FED-03-02-01; **Updated:** Jun-21; **Applicability:** A

The *Applicant's Audit Log* MUST include any *User Consent* managed by the *Applicant* that enables the sharing of attributes with a *Relying Party*.

TDIF Req: FED-03-02-02; **Updated:** Jun-21; **Applicability:** A

The *Applicant's Audit Log* MUST include the value of the RP Audit Id *Attribute* received from an *Identity Exchange* for the following events:

- The retrieval of *Attributes* by an *Identity Exchange*.
- The binding of any *Attributes* to a *Digital Identity* brokered by an *Identity Exchange*.

TDIF Req: FED-03-02-03; **Archived:** Jun-21

This requirement has been archived in version 1.1.

Identity Exchange requirements

This section sets out the unique technical requirements that *Identity Exchanges* must comply with to onboard onto the *Australian Government Digital Identity System* in addition to the applicable requirements throughout the rest of this document.

4.1 Integration requirements

4.1.1 Audit IDs

TDIF Req: FED-04-01-01; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-01-01.

TDIF Req: FED-04-01-01a; **Updated:** Jun-21; **Applicability:** X

In addition to the requirements in section 6.1 of the *TDIF 05 – Role Requirements*, the *Applicant* MUST implement the following requirements.

TDIF Req: FED-04-01-02; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-01-02.

TDIF Req: FED-04-01-03; **Updated:** Jun-21; **Applicability:** X

The *Applicant* MUST provide the unique audit id described in IDX-06-01-01 to the *Relying Party* using the *RP_audit_id Attribute* in response to every logical interaction between a *Relying Party* (including an *Attribute Service Provider*) and an *Identity Exchange*.

TDIF Req: FED-04-01-04; **Updated:** Jun-21; **Applicability:** X

When the *Applicant* calls an *API* provided by an *Attribute Service Provider*, they MUST include the value of the unique audit id that has been generated by the *Identity Exchange* for the *Relying Party* that requested the *Attributes*.

TDIF Req: FED-04-01-05; **Updated:** Jun-21; **Applicability:** X

The *Applicant* MUST NOT send the unique audit id that has been generated by the *Identity Exchange* for the *Relying Party* that requested the *Attributes* to an *Identity Service Provider*.

4.1.2 Audit history, consumer history and user dashboard

TDIF Req: FED-04-01-06; **Updated:** Jun-21; **Applicability:** X

The *Applicant* **MUST** implement a *User Dashboard* in accordance with the requirements in section 6.4 of the TDIF 05 – Role Requirements.

TDIF Req: FED-04-01-07; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-04-02.

TDIF Req: FED-04-01-08; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-04-03.

4.1.3 Attribute Service Provider integration

TDIF Req: FED-04-01-09; **Updated:** Mar-20; **Applicability:** X

When the *Applicant* receives an *Authentication Request* from a *Relying Party* that includes *Attributes* supplied by an *Attribute Service Provider* then it **MUST** call the *API* provided by the *Attribute Service Provider* to make these *Attributes* available to the *Relying Party* in the *Authentication* response.

TDIF Req: FED-04-01-10; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MAY** make *Attributes* requested by a *Relying Party* available by authorising the *Relying Party* to directly retrieve the *attributes* from the *Attribute Service Provider* using a security token, if a *Relying Party* has requested to do so.

TDIF Req: FED-04-01-11; **Updated:** Mar-20; **Applicability:** X

Security tokens issued by the *Applicant* to a *Relying Party* **MUST NOT** reveal the *Pairwise Identifier* of the *User* at the *Attribute Service Provider*.

TDIF Req: FED-04-01-12; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MUST** call an *Attribute Service Provider's API* using the *Pairwise Identifier* it has issued to assist in identifying the required *Attributes*.

4.1.4 IdP selection

TDIF Req: FED-04-01-13; **Archived:** Jun-21; **Applicability:** X

The *Applicant* **MUST** implement *IdP Selection* in accordance with the requirements in section 6.5 of the *TDIF 05 – Role Requirements*.

TDIF Req: FED-04-01-14; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-05-01b.

TDIF Req: FED-04-01-15; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-05-02a.

TDIF Req: FED-04-01-16; **Archived:** Jun-21

This requirement has been archived in version 1.1. The content of this requirement has been moved to IDX-06-05-02.

4.2 Federation protocol mapping requirements

The following requirements describe how an *Identity Exchange* performs mapping of *Federation Protocols*. Applicability of these requirements is dependent on what *Federation Protocols* the *Identity Exchange* supports.

TDIF Req: FED-04-02-01; **Archived:** Jun-21

This requirement has been archived in version 1.1.

4.2.1 Levels of Assurance

Levels of Assurance are special *Attributes* used to describe the *Identity Proofing Level* and *Credential Levels* described in the TDIF. The *Levels of Assurance* used in the *Australian Government Digital Identity System* are defined in Table 4: Level of Assurance Combinations. *Levels of Assurance* are ranked from the lowest degree of confidence in the *Authentication* process to the highest degree. *Relying Parties* are given the option of requesting a minimum level of assurance in both the *TDIF 06B –*

OpenID Connect 1.0 Profile and the TDIF 06C – SAML 2.0 Profile, with the rankings of ACRs specified in Table 4: Level of Assurance Combinations.

Table 4: Level of Assurance Combinations.

| IP Level | Credential Level | URN | Ranking (Lowest to Highest) |
|----------|------------------|---------------------------------|-----------------------------|
| IP1 | CL1 | urn:id.gov.au:tdif:acr:ip1:cl1 | 1 |
| | CL2 | urn:id.gov.au:tdif:acr:ip1:cl2 | 2 |
| | CL3 | urn:id.gov.au:tdif:acr:ip1:cl3 | 3 |
| IP1 PLUS | CL1 | urn:id.gov.au:tdif:acr:ip1p:cl1 | 4 |
| | CL2 | urn:id.gov.au:tdif:acr:ip1p:cl2 | 5 |
| | CL3 | urn:id.gov.au:tdif:acr:ip1p:cl3 | 6 |
| IP2 | CL2 | urn:id.gov.au:tdif:acr:ip2:cl2 | 7 |
| | CL3 | urn:id.gov.au:tdif:acr:ip2:cl3 | 8 |
| IP2 PLUS | CL2 | urn:id.gov.au:tdif:acr:ip2p:cl2 | 9 |
| | CL3 | urn:id.gov.au:tdif:acr:ip2p:cl3 | 10 |
| IP3 | CL2 | urn:id.gov.au:tdif:acr:ip3:cl2 | 11 |
| | CL3 | urn:id.gov.au:tdif:acr:ip3:cl3 | 12 |
| IP4 | CL3 | urn:id.gov.au:tdif:acr:ip4:cl3 | 13 |

4.2.2 OIDC to OIDC brokering

TDIF Req: FED-04-02-02; **Updated:** Mar-20; **Applicability:** X

When the *Applicant* is accepting *Authentication Requests* from a *Relying Party* using *OIDC* and translating those requests to an *Identity Service Provider* using *OIDC*, the *Applicant* **MUST** interact with the *Identity Service Provider* as per the *TDIF: 06B - OpenID Connect 1.0 Profile* [TDIF.OIDC], and the requirements set out below.

4.2.2.1 Mapping claims and scopes

TDIF Req: FED-04-02-03; **Updated:** Jun-21; **Applicability:** X

Scopes and claims that are received from the *Relying Party* **MUST** be included by the *Applicant* in the *Authentication Request* to the *Identity Service Provider* in accordance with the following processing rules

- a. All *Attributes* included in the *Relying Party's Authentication Request* which are found in section 3 of the *TDIF: 06D – Attribute Profile* MUST be included in the *Authentication Request* sent to the *Identity Service Provider* in either scopes or claims.
- b. Scopes that are defined in the *Authentication Request* MAY be expanded into the underlying claims described in section 4.1 of the *TDIF: 06D – Attribute Profile*.
- c. If the `sub` (subject) claim is specified then it MUST be processed as per the requirements in section 4.2.2.2.

TDIF Req: FED-04-02-04; **Updated:** Mar-20; **Applicability:** X

Scopes and claims not in the *TDIF: 06D – Attribute Profile* MUST be ignored by the *Applicant*.

TDIF Req: FED-04-02-04a; **Updated:** Mar-20; **Applicability:** X

Where scopes or claims are ignored, the *Applicant* MUST NOT raise an error.

4.2.2.2 Handling of sub claim

TDIF Req: FED-04-02-05; **Updated:** Mar-20; **Applicability:** X

The *Applicant* MUST resolve a *Pairwise Identifier* included in the `sub` (subject) claim in the *Authentication Request* from a *Relying Party* to an existing *Pairwise Identifier* for the *User* at the required *Identity Service Provider*.

TDIF Req: FED-04-02-06; **Updated:** Mar-20; **Applicability:** X

If no *Pairwise Identifier* for the *User* at the *Identity Service Provider* can be resolved then the *Applicant* MAY return an error.

TDIF Req: FED-04-02-07; **Updated:** Mar-20; **Applicability:** I, X

The *Applicant* MAY support the `sub` (subject) claim.

4.2.2.3 Mapping Assurance Levels

TDIF Req: FED-04-02-08; **Updated:** Mar-20; **Applicability:** X

Where the `acr_values` or `acr` claim received from the *Relying Party* is a single value the *Applicant* MUST pass the set of *ACR* values that meet or exceed the value

of the requested *ACR* value to the *Identity Service Provider* in the generated *Authentication Request* according to the ranking in **Table 4**.

TDIF Req: FED-04-02-09; **Updated:** Mar-20; **Applicability:** X

Where the `acr` claim is marked as essential within the *Authentication Request* from the *Relying Party* it **MUST** be marked as essential when the *Applicant* sends the request to an *Identity Service Provider*.

TDIF Req: FED-04-02-10; **Updated:** Jun-21; **Applicability:** X

The *Applicant* **MUST** evaluate the *ACR* returned from the *Identity Service Provider* and if the *ACR* meets or exceeds the originally requested value(s), return one of the originally requested values.

4.2.2.4 Other *OIDC* request parameters

The following sections specify processing rules for *OIDC* parameters that a *Relying Party* may include in an *OIDC Authentication Request* to an *Identity Exchange*.

4.2.2.4.1 Prompt parameter

TDIF Req: FED-04-02-11; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MUST** implement the processing rules for *OIDC* prompt parameters described in Table 5.

Table 5: Processing rules for *OIDC* prompt parameters

| Value received in <i>OIDC</i> request from Relying Party | Value sent in <i>OIDC</i> request to Identity Service Provider |
|--|---|
| None | None |
| Consent | Ignored. The <i>Identity Exchange</i> must implement <i>Consent</i> for the release of <i>Attributes</i> in accordance with the <i>Attribute Sharing Policy</i> defined within the <i>TDIF: 06D – Attribute Profile</i> |
| Login | Login |

4.2.2.4.2 *id_token_hint* parameter

TDIF Req: FED-04-02-12 **Updated:** Mar-20; **Applicability:** X

If the *id_token_hint* mechanism defined in [TDIF.OIDC] is supported the following processing rules **MUST** apply:

- a. Where the *Identity Exchange* receives an *id_token_hint* within an *Authentication Request* from a *Relying Party* the *Identity Exchange* is required to validate the *Identity Token* and extract the subject. The *Identity Exchange* must resolve this to a subject identifier at the *Identity Service Provider* as per section 4.2.2.2.
- b. The *Identity Exchange* must include the resolved subject identifier in the *Authentication Request* to the *Identity Service Provider* using the `sub` (subject) Claim as per section 5.5 of the [OpenID.Core] with `essential=true`.

TDIF Req: FED-04-02-13; **Archived:** Jun-21

This requirement has been archived in version 1.1.

TDIF Req: FED-04-02-14; **Archived:** Jun-21

This requirement has been archived in version 1.1.

4.2.3 OIDC to SAML brokering

TDIF Req: FED-04-02-15; **Updated:** Mar-20; **Applicability:** X

When the *Applicant* is accepting *Authentication Requests* from a *Relying Party* using *OIDC* and translating those *Authentication Requests* to an *Identity Service Provider* using *SAML*, the *Identity Exchange* **MUST** interact with the *Identity Service Provider* as per the *TDIF: 06C – SAML 2.0 Profile* [TDIF.SAML] with the following processing rules.

4.2.3.1 *Mapping Claims to Scopes*

TDIF Req: FED-04-02-16; **Updated:** Mar-20; **Applicability:** X

Scopes and claims that are received from the *Relying Party* **MUST** be included by the *Applicant* in the *Authentication Request* to the *Identity Service Provider* in accordance with the following processing rules:

- a. All *Attributes* included in the *Relying Party's Authentication Request* which are found in section 3 of the *TDIF: 06D – Attribute Profile* MUST be included in the *Authentication Request* sent to the *Identity Service Provider* in either scopes or claims.
- b. Scopes that are defined in the *Authentication Request* MAY be expanded into the underlying claims described in section 4.1 of the *TDIF: 06D – Attribute Profile* and then mapped according to section 4.3.1 of the *TDIF: 06D – Attribute Profile*.
- c. If the sub (subject) claim is specified then it MUST be processed as per section 4.2.2.2. Once it is resolved to a sub claim, then it should include the resolved subject identifier in the *Authentication Request* to the *Identity Service Provider* by including it in a `<saml:Subject>` element in the *SAML <AuthnRequest>* message.
- d. Scopes and claims not in the *TDIF: 06D – Attribute Profile* MUST be ignored. Where scopes or claims are ignored, the *Identity Exchange* MUST NOT raise an error.

4.2.3.2 Mapping Assurance Levels

TDIF Req: FED-04-02-17; **Updated:** Mar-20; **Applicability:** X

Where the `acr_values` or `acr claim` received from the *Relying Party* is a single value the *Applicant* MUST pass the set of `<saml:AuthnContextClassRef>` values that meet or exceed the value of the requested *ACR* to the *Identity Service Provider* in the generated *Authentication Request* according to the ranking described in **Table 4**.

TDIF Req: FED-04-02-18; **Updated:** Mar-20; **Applicability:** X

Where the `acr` claim is marked as essential within the request from the *Relying Party* the `<samlp:RequestedAuthnContext>` comparison *Attribute* MUST be set to minimum when sent to the *Identity Service Provider*.

TDIF Req: FED-04-02-19; **Updated:** Jun-21; **Applicability:** X

The *Applicant* MUST evaluate the `<saml:AuthnContextClassRef>` returned from the *Identity Service Provider* and if the `<saml:AuthnContextClassRef>` meets or exceeds the originally requested *ACR* value(s), return one of the originally requested values.

4.2.3.3 Other OIDC Request Parameters

The following sections provide information on the transformation and passing of specific *Attributes* from the *OIDC Authentication Request* from a *Relying Party* to an *Identity Service Provider* using the *SAML Federation Protocol*.

4.2.3.3.1 Prompt parameter

TDIF Req: FED-04-02-20; **Updated:** Mar-20; **Applicability:** X

The *Applicant* ***MUST*** implement the processing rules for *OIDC* prompt parameters as specified in **Table 6**.

Table 6: Processing rules for *OIDC* prompt parameters

| Value received in OIDC request from Relying Party | Value sent in OIDC request to Identity Service Provider |
|---|---|
| none | <code>isPassive</code> attribute is set to true on the <code><AuthnRequest></code> message |
| consent | Ignored. The Identity Exchange <i>MUST</i> implement consent for the release of attributes in accordance with the Attribute Sharing Policy defined within <i>TDIF: 06D - Attribute Profile</i> |
| login | <code>ForceAuthn</code> attribute is set to true on the <code><AuthnRequest></code> message |
| select_account | Ignored. |

4.2.3.3.2 id_token_hint Parameter

TDIF Req: FED-04-02-21; **Updated:** Mar-20; **Applicability:** X

A *Relying Party* ***MAY*** include an *ID Token* previously issued by an *Identity Exchange* in the *Authentication Request* to identify a specific *User* that requires *Authentication*.

TDIF Req: FED-04-02-22; **Updated:** Mar-20; **Applicability:** X

This specification does not require support for this mechanism by an *Identity Exchange*, but where it is supported the following processing rules ***MUST*** apply:

- a. Where the *Identity Exchange* receives an `id_token_hint` within an *Authentication Request* from a *Relying Party* the *Identity Exchange* is required to validate the token and extract the subject. The *Identity Exchange* must resolve this to an *IP Link* at the *Identity Service Provider* as per 4.2.2.2.
- b. The *Identity Exchange* should include the resolved subject identifier in the authentication request to the *Identity Service Provider* by including it in a `<saml:Subject>` element in the SAML 2.0 `<AuthnRequest>` message.

4.2.3.3.3 *max_age* Parameter

A *Relying Party* may include a value for the `max_age` parameter in the *OIDC Authentication Request*, as per section 3.1.2.1 of the OpenID Connect Core specification [OpenID.Core].

TDIF Req: FED-04-02-23; **Updated:** Mar-20; **Applicability:** X

In order to support this functionality the *Identity Exchange* **MUST** implement the following processing:

- a. On receiving the authentication response, an *Identity Exchange* must calculate the elapsed time since the *User was Authenticated* using the value of the `AuthInstant` attribute in the *SAML* response from the *Identity Service Provider*.
- b. If the elapsed time is greater than the `max_age` value requested by the *Relying Party* then the *Identity Exchange* must generate a fresh *Authentication Request* with the `ForceAuthn Attribute` is set to true on the `<AuthnRequest>` message.

4.2.3.3.4 *Other OIDC parameters*

TDIF Req: FED-04-02-24; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MUST** implement the processing rules for *OIDC* parameters as specified in Table 7.

Table 7: Other parameters

| Value received in OIDC request from Relying Party | Value sent in OIDC request to Identity Service Provider |
|---|---|
| display | No SAML 2.0 equivalent. The Identity Service Provider is responsible for detecting the capabilities of the user agent and presenting the appropriate display. |
| login_hint | Ignored. |

4.2.4 SAML to SAML brokering

TDIF Req: FED-04-02-25; **Updated:** Mar-20; **Applicability:** X

When an *Identity Exchange* is accepting *Authentication Requests* from a *Relying Party* using *SAML* and translating those requests to an *Identity Service Provider* using *SAML*, the *Identity Exchange* **MUST** interact with the *Identity Service Provider* as per the *TDIF: 06C – SAML 2.0 Profile*.

4.2.4.1 Mapping Attributes

TDIF Req: FED-04-02-26; **Updated:** Mar-20; **Applicability:** X

Where the *Attributes* required are predefined within the *Relying Parties* metadata, the set of required *Attributes* **MUST** be included in the *Authentication Request* to the *Identity Service Provider* with the following processing rules:

- a. Where the requested *Attributes* contained within the *Relying Party*'s metadata are the same as the *Identity Exchanges* requested *Attributes* in its metadata exchanged with the *Identity Service Provider*, the *Identity Exchange* creates a standard *Authentication Request*.
- b. Where the requested attributes are not available in the requested *Attributes* as part of the metadata shared with the *Identity Service Provider* by the *Identity Exchange*; the *Identity Exchange* is required to create an *Authentication Request* to the *Identity Service Provider* using extensions to request the *Attributes* required by the *Relying Party*.

TDIF Req: FED-04-02-27; **Updated:** Mar-20; **Applicability:** X

Where the *Attributes* requested by a *Relying Party* are requested via extensions the *Identity Exchange* MUST copy those *Attributes* into the *Authentication Request* to the *Identity Service Provider* as extensions.

4.2.4.2 Subjects within Requests

TDIF Req: FED-04-02-28; **Updated:** Mar-20; **Applicability:** X

The *Relying Party* MAY include a *SAML Subject* in the *Authentication Request*.

TDIF Req: FED-04-02-28a; **Updated:** Mar-20; **Applicability:** X

As the subject identifier is the *Pairwise Identifier* for the *User* at the *Relying Party*, the *Identity Exchange* MUST resolve this *Pairwise Identifier* in any *Authentication Request* to an existing *Pairwise Identifier* for the *User* at the required *Identity Service Provider*. If no *Pairwise Identifier* for the *User* at the *Identity Service Provider* can be resolved then the *Identity Exchange* should return an error.

TDIF Req: FED-04-02-28b; **Updated:** Mar-20; **Applicability:** X

The *Applicant* MAY include the resolved *Pairwise Identifier* in the *Authentication Request* to the *Identity Service Provider*.

4.2.4.3 Mapping Assurance Levels

TDIF Req: FED-04-02-29; **Updated:** Mar-20; **Applicability:** X

Where the *Relying Party* includes a `<RequestedAuthnContext>` in the *Authentication Request*, the *Applicant* MUST send the set of `<AuthnContextClassRef>` to the *Identity Service Provider* that meet or exceed the originally requested `<RequestedAuthnContext>` according to the rankings described in **Table 4**.

TDIF Req: FED-04-02-30; **Updated:** Mar-20; **Applicability:** X

The `Comparison` attribute for the `<RequestedAuthnContext>` MUST be set to `exact` or `minimum`.

4.2.4.4 Other SAML Request Parameters

4.2.4.4.1 ForceAuthn Attribute

TDIF Req: FED-04-02-31; **Updated:** Mar-20; **Applicability:** X

When the ForceAuthn Attribute is set to true within the Authentication Request from the Relying Party the Applicant **MUST** pass this Attribute through in the Authentication Request sent by the Applicant to the Identity Service Provider.

4.2.4.4.2 isPassive Attribute

TDIF Req: FED-04-02-32; **Updated:** Mar-20; **Applicability:** X

When the isPassive Attribute is set to true within the Authentication Request from the Relying Party the Applicant **MUST** pass this Attribute through in the Authentication Request sent by the Applicant to the Identity Service Provider.

4.2.5 SAML to OIDC brokering

TDIF Req: FED-04-02-33; **Updated:** Mar-20; **Applicability:** X

When the Identity Exchange is accepting Authentication Requests from a Relying Party using the SAML Federation Protocol and translating those requests to an Identity Service Provider using the OIDC Federation Protocol, the Applicant **MUST** interact with the Identity Service Provider as per the [TDIF.OIDC].

4.2.5.1 Mapping Attributes to Claims or Scopes

TDIF Req: FED-04-02-34; **Updated:** Mar-20; **Applicability:** X

The Attributes requested within the Authentication Request either through extensions or via the Relying Party's metadata **MUST** be processed by the Applicant in accordance with the following rules:

- a. All Attributes included in the Relying Party's Authentication Request which are found in section 3 of the TDIF: 06D – Attribute Profile must be included in the Authentication Request sent to the Identity Service Provider in either scopes or claims. The Applicant **MUST** use the mappings between SAML and OIDC described in section 4.3.1 of the TDIF: 06D – Attribute Profile.

- b. Where the *Attributes* can be mapped fully into an available scope an *Identity Exchange* MAY request those scopes from an *Identity Service Provider*.
- c. Where the *Attributes* do not map fully into a scope the *Identity Exchange* MUST request those *Attributes* as claims from the *Identity Service Provider*.

4.2.5.2 Mapping Assurance Levels

TDIF Req: FED-04-02-35; **Updated:** Mar-20; **Applicability:** X

Where the *Relying Party* includes a <RequestedAuthnContext> in the *Authentication Request*, the *Applicant* MUST send the set of `acr` values to the *Identity Service Provider* that meet or exceed the originally requested <RequestedAuthnContext> according to the rankings described in Table 4.

TDIF Req: FED-04-02-36; **Updated:** Mar-20; **Applicability:** X

The *Applicant* MAY use the `acr` claim or the `acr_values` parameter.

TDIF Req: FED-04-02-37; **Updated:** Mar-20; **Applicability:** X

The `Comparison` attribute for the <RequestedAuthnContext> MUST be set to `exact` or `minimum`.

4.2.5.3 Other SAML Request Parameters

4.2.5.3.1 ForceAuthn

TDIF Req: FED-04-02-38; **Updated:** Mar-20; **Applicability:** X

Where the `ForceAuthn` attribute is included in the *Authentication Request* from the *Relying Party*, the *Applicant* MUST set the `prompt` parameter to `login` in the *OIDC Authentication Request* to the *Identity Service Provider*.

4.2.5.3.2 isPassive

TDIF Req: FED-04-02-39; **Updated:** Mar-20; **Applicability:** X

Where the `isPassive` *Attribute* is included in the *Authentication Request* from the *Relying Party*, the *Identity Exchange* MUST set the `prompt` parameter to `none` in the *OIDC Authentication Request* to the *Identity Service Provider*.

4.2.5.3.3 Subject

Where a `Subject` is included in the *Authentication Request* from the *Relying Party* the *Identity Exchange* is required to validate the token and extract the subject.

TDIF Req: FED-04-02-40; **Updated:** Mar-20; **Applicability:** X

The *Applicant* MUST resolve the value of the subject to a subject identifier at the *Identity Service Provider* as per 4.2.2.2.

TDIF Req: FED-04-02-40a; **Updated:** Mar-20; **Applicability:** X

The *Applicant* MAY include the resolved subject identifier in the *Authentication Request* to the *Identity Service Provider* using the `sub` (subject) claim.

Attribute Requirements

The *Attributes* passed through the *Australian Government Digital Identity System* are defined in the *TDIF: 06D - Attribute Profile*. This section of the *TDIF: 06 - Federation Onboarding Requirements* references that document as the source of the information required to be shared in the *Australian Government Digital Identity System*.

5.1 Attribute Requirements

TDIF Req: FED-05-01-01; **Updated:** Jun-21; **Applicability:** X

The *Applicant* **MUST** support the disclosure of all *Attributes* described in section 3.1 of the *TDIF: 06D - Attribute Profile* using one of the *federation protocols* specified in section 2.1.1 of the *TDIF 06 – Federation Onboarding Requirements*.

TDIF Req: FED-05-01-02; **Updated:** Jun-21; **Applicability:** I

The *Applicant* **MUST** support the disclosure of all *Attributes* listed as mandatory in section 3.1 of the *TDIF: 06D - Attribute Profile* using one of the *federation protocols* specified in section 2.1.1 of the *TDIF 06 – Federation Onboarding Requirements*.

TDIF Req: FED-05-01-03; **Updated:** Jun-21; **Applicability:** I

The *Applicant* **MAY** support the disclosure of an *Attribute* listed as optional in section 3.1 of *TDIF: 06D - Attribute Profile* using one of the *federation protocols* specified in section 2.1.1 of the *TDIF 06 – Federation Onboarding Requirements*.

TDIF Req: FED-05-01-04; **Updated:** Jun-21; **Applicability:** I

The *Applicant* **MUST** support the disclosure of all *Attributes* listed as mandatory in section 3.2 of the *TDIF: 06D - Attribute Profile* using one of the *federation protocols* specified in section 2.1.1 of the *TDIF 06 – Federation Onboarding Requirements*.

TDIF Req: FED-05-01-05; **Updated:** Mar-20; **Applicability:** X

The *Applicant* **MUST** be able to include any of the *Attributes* described in section 3.2 of *TDIF: 06D - Attribute Profile* in an *Authentication Request* to an *Identity Service Provider*.

TDIF Req: FED-05-01-06; **Updated:** Jun-21; **Applicability:** X

The *Applicant* MUST support the disclosure of all *Attributes* described in section 3.3 of *TDIF: 06D - Attribute Profile* using one of the *federation protocols* specified in section 2.1.1 of the *TDIF 06 – Federation Onboarding Requirements*.

TDIF Req: FED-05-01-07; **Updated:** Jun-21; **Applicability:** X

The *Applicant* MUST support the disclosure of all *Attributes* described in section 3.5 of *TDIF: 06D - Attribute Profile* using one of the *federation protocols* specified in section 2.1.1 of the *TDIF 06 – Federation Onboarding Requirements*.

5.2 Computed attributes

TDIF Req: FED-05-02-01; **Updated:** Mar-20; **Applicability:** A, I, X

The *Applicant* MAY define support for additional computed *Attributes* derived from the *Attributes* in an *Attribute Set*. *Finance* will add any computed attributes to the *TDIF: 06D - Attribute Profile*.

TDIF Req: FED-05-02-02; **Updated:** Jun-21; **Applicability:** X

The *Applicant* MUST support the disclosure of additional computed attributes described in section 3.4 of the *TDIF: 06D - Attribute Profile* using one of the *federation protocols* specified in section 2.1.1 of the *TDIF 06 – Federation Onboarding Requirements*.

TDIF Req: FED-05-02-03; **Updated:** Mar-20; **Applicability:** X

The *Applicant* MAY source a computed attribute from an *Attribute Service Provider* or *Identity Service Provider*.

5.3 Attribute Service Provider attributes

TDIF Req: FED-05-03-01; **Updated:** Jun-21; **Applicability:** X

The *Applicant* MAY support the disclosure of *Attributes* an *Attribute Service Provider* is accredited to provide. These *Attributes* are defined in section 5 of the *TDIF: 06D - Attribute Profile*.

TDIF Req: FED-05-03-02; **Updated:** Jun-21; **Applicability:** A

The *Applicant* MUST ensure that it only disclosure, or provides to an *Identity Exchange* to be shared, *Attributes* that are relevant to the *Relying Party* requesting the *Attributes*.

5.4 Attribute sharing policies

TDIF Req: FED-05-04-01; **Updated:** Jun-21; **Applicability:** X

The *Applicant* **MUST** only disclose *Attributes* with *Relying Parties* in accordance with the *Attribute Sharing Policy* specified for the *Attribute Set* which an *Attribute* is part of as described in section 2.2 of the *TDIF: 06D - Attribute Profile*.

5.5 Attribute data representation

TDIF Req: FED-05-05-01; **Updated:** Jun-21; **Applicability:** A, I, X

When disclosing *Attributes* to other *Participants* in the *Identity Federation*, the *Applicant* **MUST** use the attribute data representation for *Attributes* specified in section 6 of the *TDIF: 06D - Attribute Profile*.