

PCTF Glossary Draft RecommendationV1.0

This Draft Recommendation has been developed by the <u>Digital ID & Authentication Council of Canada</u> (DIACC) Trust Framework Expert Committee (TFEC). The TFEC operates under the controlling policies of the DIACC. Comments submitted by the public are subject to the <u>DIACC Contributor Agreement</u>.

DIACC expects to modify and improve this Draft Recommendation based upon public comments. The purpose of the open commentary is to ensure transparency in development and diversity of truly Pan-Canadian input. Comments made during the review will be considered for incorporation to the next draft. DIACC will prepare a disposition of comments to provide transparency with regard to how each comment was handled.

Forthcoming PCTF releases will expand, clarify, and refine the content of this document.

The intended target audience for this Draft Recommendation are decision makers who may or may not be domain technology experts. When reviewing this draft, please consider the following and note that responses to these questions are non-binding and serve to improve the Pan-Canadian Trust Framework.

 1. Generally, do the definitions in the PCTF Glossary align with your understanding when reading the PCTF documentation?

2. Are there other terms used in the PCTF documentation that you would suggest be added to or removed from the PCTF Glossary?3. Are the definitions for terms clear and unambiguous?

 4. For the terms listed, please suggest relevant examples or non-examples from your domain.

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1 Scope and Objectives

- 73 The PCTF Glossary provides definitions and examples for terms that appear across DIACC
- 74 PCTF documentation. The objective of the PCTF Glossary is to ensure all stakeholders have a
- shared and consistent understanding of terms used in the context of the PCTF. As terms and
- usage can vary across industry, the glossary is recommended reading for anyone wanting a
- 77 strong baseline understanding of the PCTF.
- 78 The content of the PCTF Glossary is:
 - 1. Terms The words or phrases that appear frequently and that are used with a specific intent (i.e., not their everyday English meaning) in the PCTF documentation
 - 2. Definitions A statement that provides the accepted and precise meaning of the associated term in the PCTF context
 - 3. Examples Examples or non-examples may be included to help clarify the intended meaning of a term
 - 4. Synonyms Terms with same or similar meaning used in other communities of interest
- Within the Glossary definitions, terms that are capitalized refer to glossary definitions of that term, which may differ from their everyday English meaning.

1.1 Scope

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- 89 This list of terms in the PCTF Glossary has been assembled and defined based on their use in
- 90 the Pan-Canadian Trust Framework Model and PCTF Component documents that are
- 91 in "recommendation or discussion draft" status. Earlier TFEC work to define key terms and
- 92 definitions were used as a starting point for the Glossary design team discussions and
- 93 worksheet. Efforts were made to keep the list of glossary terms to the essentials: terms used
- 94 with their everyday, English dictionary meaning (e.g., stakeholders) were not included; terms
- 95 with the same or similar meanings were collapsed to a single entry with synonyms.
- 96 The terms included for the current version of the Glossary are those used across PCTF
- 97 components. Terms that are specific to a single PCTF component are defined in the Terms and
- 98 Definitions section of that component, and not repeated in this Glossary.

1.2 Methodology

- The PCTF Glossary is a living document that will evolve as the PCTF model and its components evolve. The guidelines for creating definitions for the terms in the Glossary are:
 - The definition of a term should reflect the <u>information-mapping methodology</u> for defining concepts. The definition should clearly indicate the larger category to which the concept belongs, and the critical attributes or characteristics of that concept that distinguish it from others;
 - The meaning of the term should reflect the current usage of the term in a recommendation or discussion draft of the PCTF Model Overview or a PCTF Component document; and

- 3. Consult existing digital identity standards or frameworks as sources for definitions, with preference being given to Canadian sources.
- 111 As a result of guidelines 1 and 2, most existing definitions could not be taken verbatim, but 112 would need to be modified (e.g., change person to Subject) to be considered a valid definition in 113 the context of the PCTF.
 - As an example of applying the methodology, consider the diagram in Figure 1 that depicts types of entities and their distinguishing characteristics.

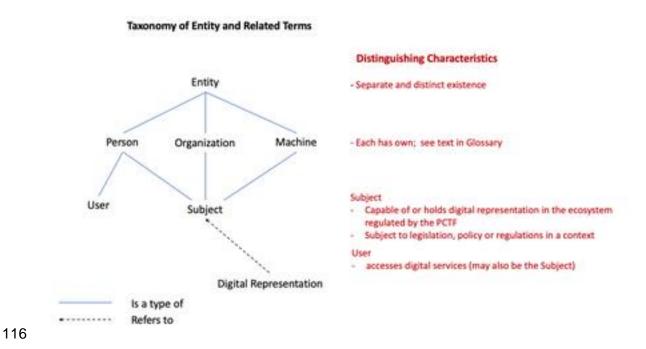


Figure 1. Taxonomy of Entity and Related Terms

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2 PCTF Glossary of Terms

121 2.1 Agreed Upon Terms

122 **Authoritative Party**

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- 123 A Participant that provides an assurance of the accuracy of Identity Information or Identity
- 124 Evidence to Relying Parties.
- Examples: a bank; government department of immigration; government driver's license program; a business registry; a telecommunications company
- Non-examples: a network provider; a mobile device manufacturer
- Synonyms: Identity Provider (role); Disclosing Organization (role in Notice and Consent);
 assurance party

Authoritative Source

- 131 A collection or registry of identity records maintained by an Authoritative Party that meets
- the PCTF Conformance Criteria for establishing evidence of identity.
- Examples: vital statistics register; verified person record; business registry; bank account record
- Non-examples: Facebook newsfeed
- Synonyms: Assurance Source

137 Conformance Criteria

- 138 Requirements used to assess the trustworthiness and reliability of a specific process defined in
- 139 the PCTF.
- Examples: strength of an encryption key, check expiry data on an identity document;
- Non-examples: requirements for website branding

142 Consent

- Permission, given from a User authorized to do so, to share Identity and/or Personal Information
- about a Subject as per the terms defined in a Notice. In the context of the PCTF, consent is
- 145 equated to "Meaningful Consent" as described by the Office of the Privacy Commissioner of
- 146 Canada.
- Examples: clicking OK to consent to use of cookies
- Non-examples: not agreeing to share information
- Synonyms: consent decision; meaningful consent

151 **Contextual Identity**

- 152 Evidence of Identity that establishes the existence and Digital Representations of Entities within
- a specific context and for a specific purpose.
- Examples: bank account; health record; provincially-issued driver's license; Canadian passport; business account with a telco; better business bureau record
 - Non-examples: coffee loyalty card; blood donor card; fake passport; valid paper birth certificate; website of closed business
 - Synonyms: supporting identity

159 **Digital Identity**

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- A type of Digital Representation that uniquely identifies a Subject within a context, and is used
- 161 exclusively by that same Subject, or by a Person acting on behalf of an Organization, to access
- online services with trust and confidence.
- Examples: passport chip content; BC Services Card chip; verified person record in a digital wallet;
 - Non-examples: photocopy of a passport; driver's license; paper certificates; paper certificate of incorporation;
- Synonyms: trusted digital identity, identity record

Digital Identity Ecosystem

- An interconnected system for the exchange and verification of digital Identity Information,
- involving public and private sector Organizations that comply with a common Trust Framework
- for the management and use of digital identities, and the Subjects of those digital identities.
- Examples: the DIACC-endorsed Canadian digital identity ecosystem; another country's digital identity ecosystem; a provincial ecosystem consisting of an Identity Provider and several relying parties that enable a set of services for citizens, following a common provincial identity framework;
 - Non-examples: an Identity Provider itself; a digital service that acts as a Relying Party and Identity Provider itself, that is not part of a greater interconnected system or framework;

Digital Representation

- An electronic dataset that refers or is related to a Subject. In the context of the PCTF, there are
- 181 currently three types of Digital Representations: Digital Identities, Credentials, and
- 182 Authenticators.
 - Examples: voice signature, QR code; a session of a logged-in user that has access to data that contains the user's name, date of birth; purchase history
 - Non-examples: a loyalty card without a mag-stripe or secure element

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187 Entity

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- 188 Something that has a separate and distinct existence and that can be identified in a context.
- Examples: a physical person; a pet dog; a smart appliance such as a refrigerator; an automobile; a passport in paper form
 - Non-examples: wildlife (no identifier); an online service such as a search engine

192 Evidence of Identity

- An information record consisting of Identity Information and Attributes maintained by an
- 194 Authoritative Source that supports the integrity and accuracy of identity claims made by a
- 195 Subject. There are two categories of evidence of identity: Foundational and Contextual.
- Examples (foundational): provincial birth record; federal immigration record; certificate of incorporation
 - Examples (contextual): bank account; health record; provincially-issued driver's license; Canadian passport; business bank account
- Non-examples: fake driver's license
- Synonyms: identity evidence

Foundational Identity

- 203 Evidence of Identity that establishes the existence and Digital Representation of real, legally
- recognized Entities based on fact-based foundational events (e.g., birth, immigration,
- 205 incorporation). The establishment and maintenance of foundational identity evidence is the
- 206 exclusive domain of the public sector, specifically for Persons it is the Vital Statistics
- 207 organizations of the provinces and territories, and Immigration, Refugees, and Citizenship
- 208 Canada; for Organizations it is Provincial business registrars and Corporations Canada.
- Examples: provincial birth record; federal immigration record; certificate of incorporation
- Non-examples: driver's license; business bank account

211 **Identity**

- 212 Physical or digital information about a Subject that uniquely identifies a Subject within a context,
- and is used exclusively by that same Subject, or by a Person acting on behalf of an
- 214 Organization, to access online services with trust and confidence.
 - Examples: driver's licence; birth certificate; immigration documents; SIN card
- Non-examples: username and password shared among a group; undocumented birth(s)

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Identity Information / Attributes

- 219 Properties about a Subject in any format that alone or in combination may be used to distinguish
- one Subject from other similar entities in a given context, and describe the Subject as required
- by the program or service.

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- Examples: name; age; year of birth; permission to operate a vehicle; date of incorporation; annual revenue; number of employees
- Non-examples: nickname; gender; colour of car
- Synonyms: identity credential

Identity Attribute Provider

- 227 A Role that consists of processes that create and manage Digital Identity Attributes.
- Examples: municipality that confirms home address; telco that conforms mobile phone number; employer that confirms employment status
- Non-examples: a social media feed
- Synonyms: credential (W3C) provider; attribute provider

232 **Identity Provider**

- 233 A Role that consists of processes that create and manage Digital Identities.
- Examples: provincial government; telecommunications company; business registrar may perform this Role
- Non-examples: technology infrastructure provider
- Synonyms: identity service provider; authoritative source; identity issuers

238 **Machine**

- 239 Software and hardware that can act as intelligent agents to conduct transactions independently
- 240 (i.e., requires identity verification of the machine). Machines that can act autonomously are
- currently not in scope of the PCTF, but may be included in future versions.
- Examples: a fridge that connects to the internet to place an order for more milk, pays for it, and specifies delivery address; automated stock broker application;
- Non-examples: a fridge that alerts its owners that they need milk; a drill press; crane;
 a living organism; applications that store some credit card info and automatically renew a
 software license

Notice

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- A statement that is formulated to describe the collection, use, disclosure, and retention of
- 250 Personal Information and inform a User.
- Examples: use of cookies on website notice
- Non-examples: generic statement that does not comply with applicable legislation
- Synonyms: consent form; notice statement

Organization

- 255 An Entity that consists of a person or organized body of people with a particular purpose,
- and whose existence is established by legal statute.
- Examples: businesses (e.g., sole proprietorships, partnerships, and corporations);
 258 associations and trade unions; government agencies; co-operatives; registered charities
 - Non-examples: unregistered charity (e.g., Gofundme); community sports league (e.g., high-tech volleyball league)

261 **Person**

- 262 An Entity that is an individual, human being who is alive or deceased.
 - Examples: residents of a jurisdiction (e.g., country, province); customers of a business;
 - Non-examples: a living entity that is not human; any inanimate object with the exception of a deceased human; an avatar of a human

Participant

- An Organization that performs one or more Roles in the Digital Identity Ecosystem and agrees to comply with the parameters of the PCTF.
- Examples: Identity Provider such as a provincial government or government department of immigration; telecommunications provider; network provider; technology company that operates a website and a digital service
 - Non-examples: general public; Subjects in the ecosystem; lawyers for the organization; potential or past participant (i.e., not actively participating); Observer, critic or watchdog; Privacy commissioner; Software company that builds identity management products; Google as an Identity Provider that does not follow PCTF.

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Personal Information

- Any factual or subjective information, recorded or not, about an identifiable individual (Source:
- 279 PIPEDA in Brief, Office of the Privacy Commissioner of Canada What is personal
- 280 <u>information?</u>). Note: The Privacy Component further delineates Subject-Specific and Service-
- Specific types of Personal Information; for details see the PCTF Privacy Component Overview.
- Examples: name; email address; phone number; mailing address; date of birth; account information; service-specific pseudonymous identifiers; transaction records; proofs of transactions including consent
 - Non-examples: a subway token; a brand of car

Relying Party

- An Organization or Person who consumes digital Identity Information created and managed by Participants to conduct digital transactions with Subjects.
- Examples: bank when opening a new account for a Subject; a car dealer when verifying credit of a buyer; service provider who needs some level of identity verification
 - Non-examples: a network provider; a telecommunications company delivering mobile connectivity
 - Synonyms: Requesting Organization (role in Notice and Consent); digital identity consumer

295 **Role**

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- A set of functions that are made up of one or more Trusted Processes defined as part of the common Trust Framework of the Digital Identity Ecosystem.
- Examples: Identity Provider; Credential Provider; Authentication Service Provider; Relying Party; Infrastructure Provider; Assessor; Governor
 - Non-examples: a mother; a condo developer; a User; a Subject

301 **Subject**

- A Person, Organization, or Machine that holds or is in the process of obtaining a digital representation in the digital identity ecosystem system regulated by the PCTF, and that can be subject to legislation, policy and regulations within a context.
 - Examples: individual with Canadian citizenship; charitable organization; smart refrigerator that can order groceries when inventory is low; self-driving car
 - Non-examples: individual born in the wild with no identity documents; individual with only physical birth certificate (i.e. no digital id yet); pet dog; wildlife; online service; passport

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Trust Framework 310 311 A formalized scheme of agreed-upon definitions, principles, conformance criteria, assessment 312 approach, standards, and specifications to ensure the trustworthiness of processes that create, 313 manage and use digital Identity Information. 314 Examples: Pan-Canadian Trust Framework, Open Identity Exchange (OIX), New 315 Zealand's Digital Trust Framework Non-examples: Aviation Trust Framework or UN Collaborative Trust Frameworks 316 317 **Trusted Process** 318 A set of business or technical activities that transform an input condition to an output condition, 319 and that is assessed according to conformance criteria defined in the Pan-Canadian Trust 320 Framework. 321 Examples: identity verification, record consent 322 Non-examples: process to make soup User 323 324 A Person representing a Subject and is intentionally accessing a digital service or digital 325 program. 326 Examples: visitor to Canada accessing Government of Canada tourism site; Canadian 327 resident registering to vote online; small business owner filing annual report online; a daughter filing a tax return on behalf her mother 328 329 Non-examples: a senior without access to a computer; a pet dog or cat sitting on the 330 keyboard of my computer; simply reading a public website article **Validation** 331 332 A process that confirms the accuracy of digital Identity Information about a Subject as 333 established by an Authoritative Party. 334 Examples: a driver's license application process that confirms information as presented 335 on physical documents or by means of electronic validation service Non-examples: showing age id going into movie theatre 336

339 A process that confirms that the digital Identity Information being presented relates to the 340 Subject who is making the assertion 341 Examples: asking a presenting Person questions that only they would know (e.g., credit 342 history questions, shared secrets, mailed-out access codes); a financial tracking process 343 that confirms that the organization performs its listed services and that the owner 344 appears in the applicable registrar 345 Non-examples: tapping a credit card for payment 2.2 Terms In Progress 346 **Authenticator** 347 348 Information or biometric characteristics under the control of a Subject, and that is a specific 349 instance of: something the Subject has, something the Subject knows, or something the Subject 350 is or does. 351 Examples: private signing keys, user passwords, responses to challenge questions, or a 352 person's face 353 Non-examples: bank account number; serial number; username Credential 354 355 A type of Digital Representation that describes a set of attributes or properties of a Subject. This 356 information may exist on its own (e.g., as a credential that contains no personal information, 357 only a unique string identifier) or be related to Personal Information. 358 Examples: a data structure that references education levels (e.g., a university degree in 359 engineering) and/or age of a Subject 360 Non-examples: anonymized purchase history 361 Synonyms: identity credential; W3C credential **Levels of Assurance** 362 363 A measure of certainty that a Subject is who or what they claim to be, or that a Subject has 364 maintained control over an Authenticator, and that the Authenticator has not been compromised. In the context of the PCTF, Levels of Assurance are those defined by 365 the Government of Canada Directive on Identity Management - Appendix A: Standard on 366 367 Identity and Credential Assurance. 368 369

Verification

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