

Treasury Board of Canada Secrétariat du Conseil du Trésor Secretariat du Canada



Government of Canada Enterprise Architecture Review Board (GC EARB)

Pan-Canadian Trust Framework Update (May 2, 2019)

https://canada-ca.github.io/PCTF-CCP/

Presentation for:	EARB Appearance:	Contact Information:
□Information	☐ Follow-up	Presenter(s): Tim Bouma Ken McMillan Imraan Bashir

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What is a Trusted Digital Identity?

What is it?

Trusted digital identity is an electronic equivalent of who you are as a real person, used exclusively by you, to receive valued services and to carry out transactions with trust and confidence.

Trusted Digital Identity confirms that 'you are who you say you are' in an online context.



Why does it matter?

Digital Identity is the foundation to moving more services online, where our citizens expect to be.

Digital ID Vision

Target State User Experience for Canadians











1. Any ID partner

Federal, provincial government departments, banks.



2. Any device Smart phones, TVs, cars, personal AI assistants etc.



3. Any platform GM, LinkedIn, Expedia etc.



4. Any service Passport renewal, filing taxes, collecting social benefits etc.



Canadians can sign in once using their trusted digital identity, instantly accessing GC services across GC departments on any device



Trusted digital identity will enable one-time identity-proofing (tell us once), streamlining government processes, creating a better user experience



The digital identity ecosystem can be leveraged by any partner, such as other GC departments, provinces, banks, etc. to validate/verify client identities

What is the Pan-Canadian Trust Framework?

Trusted Digital Identity



Identity
Assurance

Is it a real existing person?





Pan-Canadian Trusted Supporting Infrastructure
Security, Privacy, User Experience, Communications

The Pan-Canadian Trust Framework is a set of standards and specifications to ensure that all jurisdictions abide by a common, agreed-upon set of rules to trust and accept each other's digital identities.



PCTF synopsis

Background

- The Pan-Canadian Trust Framework (PCTF) tactically implements the Whitehorse Declaration. An initial draft of the PCTF was published in 2016.
- The PCTF is a set of standards and specifications to ensure that all jurisdictions abide by a common, agreed-upon set of rules to trust and accept each other's digital identities.
- It will standardize how we create, issue, and accept trusted digital identities between jurisdictions and across different sectors within Canada and internationally.
- Currently, TBS and ESDC are jointly leading a pilot in collaboration with the Province of Alberta, which involves the federal acceptance of a provincial Trusted Digital Identity in accordance with the PCTF. The anticipated date for this pilot launch is March 2019.
- The draft PCTF continues to be refined and validated with such pilots, proofs-of-concept, as well as production service launches.

Mar 2019

Publish PCTF overview
Aug 2016

Apr 2019

IMSC-PCTF Ver 1.0

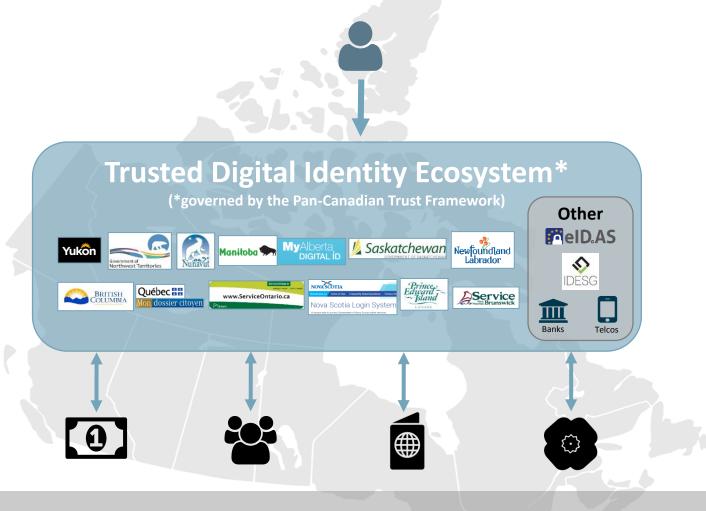
Release Candidate

Publish IMSC-PCTF
Ver. 1.0

Continue pilots and assessments with provinces

Ongoing

Approach to Trusted Digital Identity



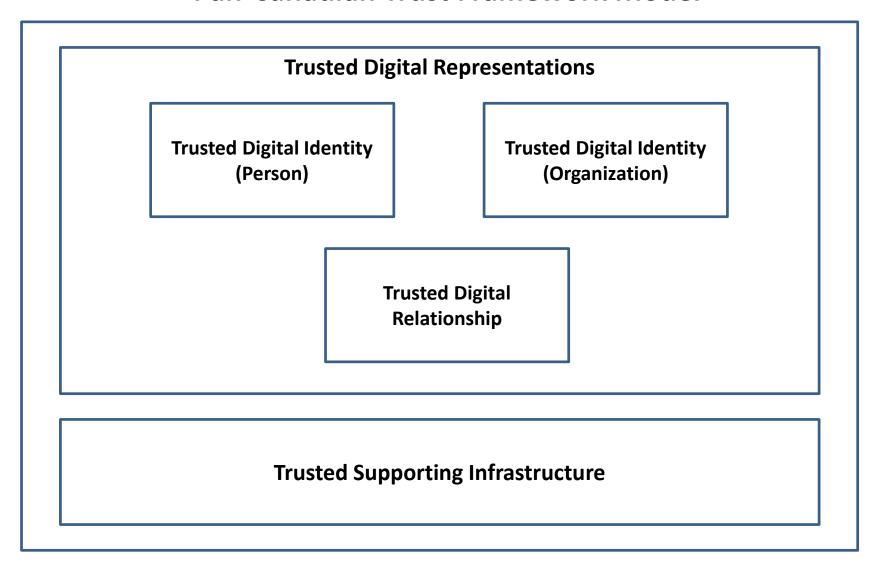
The GC vision is to build a federated, digital identity ecosystem where trusted digital identities are used to deliver GC services in a seamless manner on any platform, with any partner, on any device.

Characteristics of the PCTF

- 1. A simple and integrative framework that is easy to understand yet capable of being applied in a complex environment
- **2. Technology-agnostic**: provides flexibility and logical precision in assessing the trustworthiness of digital identity solutions and digital identity providers
- **3. Complements existing frameworks** (security, privacy, service delivery, etc.)
- **4.** Provides clear links to applicable policy, regulation, and legislation by defining conformance criteria that can be easily mapped
- **5. Normalizes (standardizes) key processes and capabilities** to enable cross-sector collaboration and ecosystem development

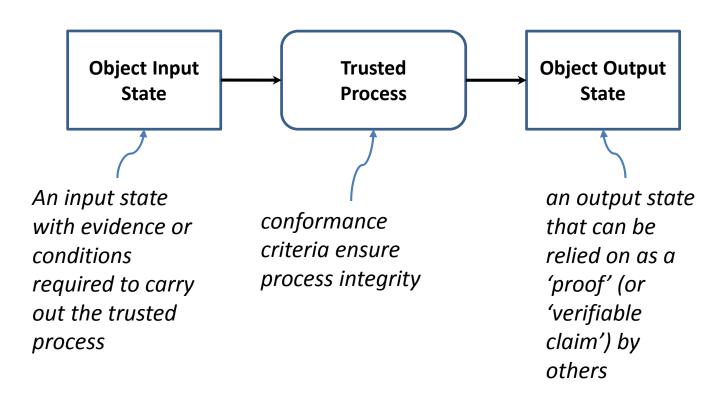
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Pan-Canadian Trust Framework Model



Trusted Process Model

A trusted process is an activity (or set of activities) that results in the state transition of an object; the object's output state can be relied on by other trusted processes.



Formalizing (and standardizing) the **trusted processes**, the **input states**, the **output states**, and the **conformance criteria**, is the essence of defining the trust framework!

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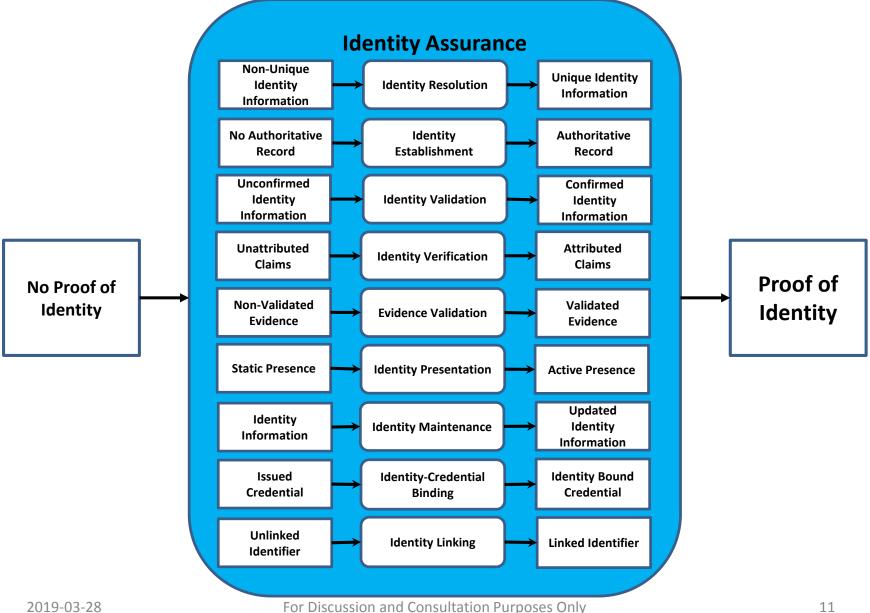
Trusted Process Proofs and Conveyance

Trusted process inputs and outputs (i.e., proofs) are **independent** of the conveyance model.

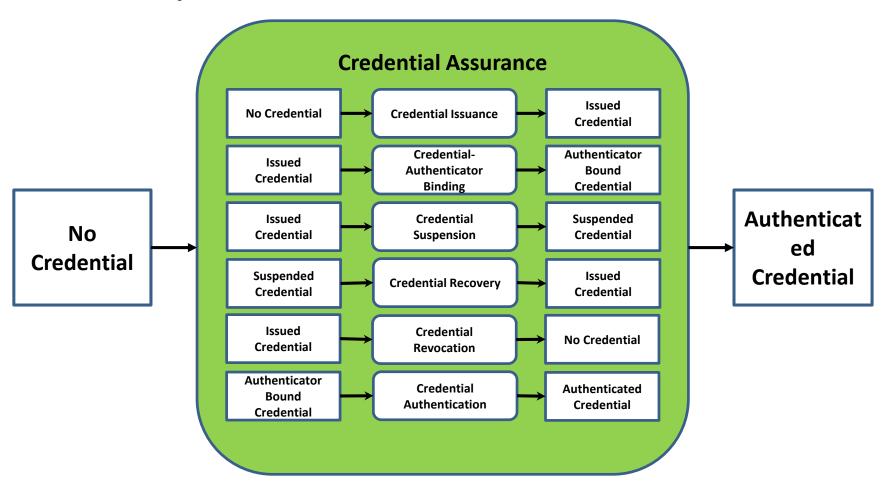
Conveying Proofs between Parties Conveyance **Traditional/Centralized Model** Method **Trusted** Party B Party A **Third** Input **Trusted** Output Input **Trusted** Output State State State Process State **Process Party Decentralized Model Distributed** Party A Party B Ledger; Output **Trusted** Input Input **Trusted** Output **Tokenized** State State State **Process** State **Process Payment** System; **Blockchain**

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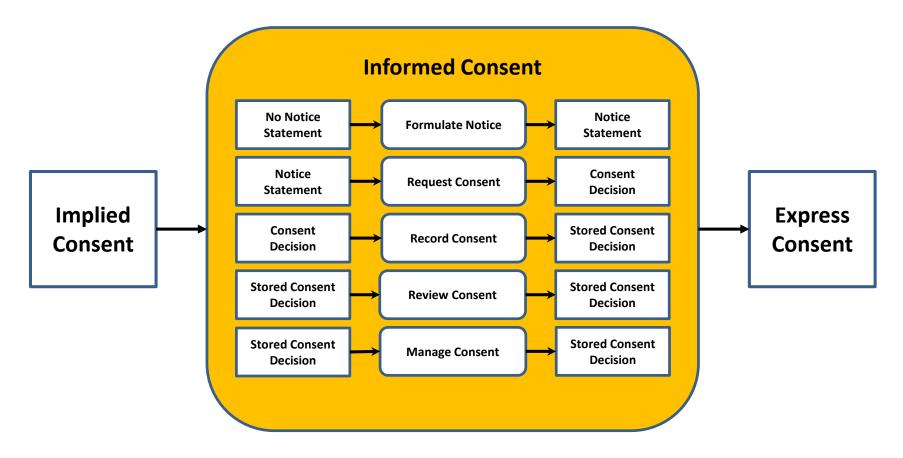
Compound Trusted Process: Identity Assurance



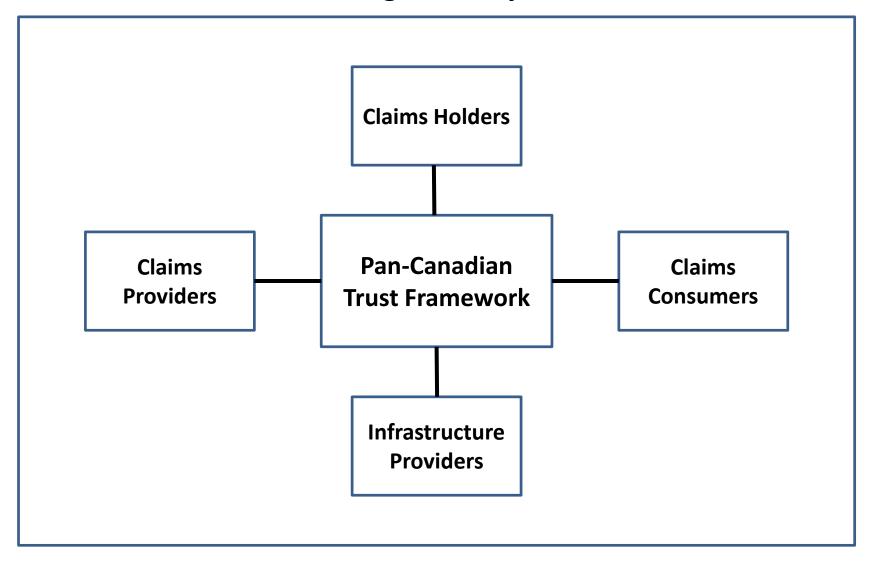
Compound Trusted Process: Credential Assurance



Compound Trusted Process: Informed Consent



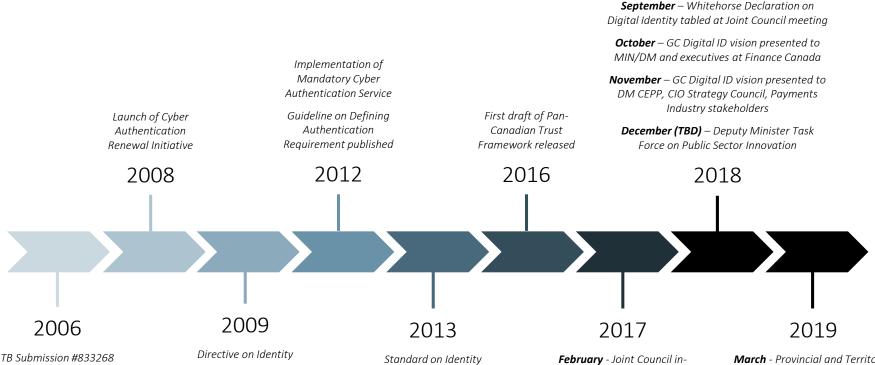
Canadian Digital Ecosystem Roles



Trusted Processes can be carried out by multiple parties (e.g., a Provincial/Territorial Trusted Digital Identity being consumed by a Federal service)

No.	Trusted Process	LOA	Trusted Digital Identity (TDI) Provider	Relying Party (as a TDI Consumer)
1	Identity Resolution		Province/Territory	Federal service
2	Identity Establishment	3	Province/Territory	Federal service
3	Identity Validation	3	Province/Territory	
4	Identity Verification	3	Province/Territory	
5	Evidence Validation	3	Province/Territory	
6	Identity Presentation		Province/Territory	
7	Identity Maintenance	3	Province/Territory	
8	Identity-Credential Binding		Province/Territory	
9	Identity Linking			Federal service
10	Credential Issuance	2	Province/Territory	
11	Credential-Authenticator Binding	2	Province/Territory	
12	Credential Suspension	2	Province/Territory	
13	Credential Recovery	2	Province/Territory	
14	Credential Revocation	2	Province/Territory	
15	Credential Authentication	2	Province/Territory	
16	Formulate Notice		Province/Territory	Federal service
17	Request Consent		Province/Territory	Federal service
18	Record Consent		Province/Territory	Federal service
19	Review Consent		Province/Territory	Federal service
20	Manage Consent		Province/Territory	Federal service
21	Signature			Federal service

Digital Identity Work to Date



TB Submission #833268 approved, providing authority for all secure authentication services to be mandatory for government-wide use Directive on Identity Management published (updated in 2017)

Standard on Identity and Credential Assurance published

February - Joint Council inperson meeting, identity management identified as top priority

April - FPT Clerks and Cabinet Secretaries request identity management be accelerated March - Provincial and Territorial Joint Council representatives from most provinces and territories have endorsed the Declaration. Endorsements from Nunavut and Ontario are expected shortly. Quebec has also indicated that it supports the Declaration.

April - Anticipated launch of MyAlberta Digital ID pilot with the Province of Alberta, ESDC and TBS

Government of Canada Digital StandardsA Set of Guiding Principles



Design with users



Build in accessibility from the start



Iterate and improve frequently



Empower staff to deliver better services



Work in the open by default



Be good data stewards



Use open standards and solutions



Design ethical services



Address security and privacy risks



Collaborate widely