Canadian Access Federation: Trust Assertion Document (TAD)

1. Purpose

A fundamental requirement of Participants in the Canadian Access Federation is that they assert authoritative and accurate identity attributes to resources being accessed, and that Participants receiving an attribute assertion protect it and respect privacy constraints placed on it by the asserting Participant.

To accomplish this practice, CANARIE requires Participants to make available to all other Participants answers to the questions below.

1.1 Canadian Access Federation Requirement

Currently, the community of trust is based on “best effort” and transparency of practice. Each Participant documents, for other Participants, their identity and access management practices, which they can confidently meet. Each Participant should make available to other Participants basic information about their identity management system and resource access management systems registered for use within the Canadian Access Federation. The information would include how supported identity attributes are defined and how attributes are consumed by services.

1.2 Publication

Your responses to these questions must be:

1. submitted to CANARIE to be posted on the CANARIE website; and
2. posted in a readily accessible place on your web site.

You must maintain an up-to-date Trust Assertion Document.
2. Canadian Access Federation Participant Information

2.1.1. Organization name: University of Waterloo

2.1.2. Information below is accurate as of this date: 23-OCT-2013

2.2 Identity Management and/or Privacy information

2.2.1. Where can other Canadian Access Federation Participants find additional information about your identity management practices and/or privacy policy regarding personal information?

Details of identity management practices and procedures are not published publicly. Inquire for details.

https://uwaterloo.ca/privacy/

2.3 Contact information

2.3.1. Please list person(s) or office who can answer questions about the Participant’s identity management system or resource access management policy or practice.

   Name: Jason Testart
   Title or role: Director, Information Security Services
   Email address: jason.testart@uwaterloo.ca
   Telephone: 519.888.4567
3. Identity Provider Information

Two criteria for trustworthy attribute assertions by Identity Providers are: (1) that the identity management system be accountable to the organization's executive or business management, and (2) the system for issuing end-user credentials (e.g., userids/passwords, authentication tokens, etc.) has in place appropriate risk management measures (e.g. security practices, change management controls, audit trails, accountability, etc.).

3.1 Community

3.1.1. As an Identity Provider, how do you define the set of people who are eligible to receive an electronic identity? If exceptions to this definition are allowed, who must approve such an exception?

People are eligible to receive an electronic identity if they:

- Are, or have been employed by the institution
- Are, or have studied at the institution
- Are currently sponsored by an administrator of the identity management system

3.1.2. What subset of persons registered in your identity management system would you identify as a “Participant” in SAML identity assertions to CAF Service Providers?

- All

3.2 Electronic Identity Credentials

3.2.1. Please describe, in general terms, the administrative process used to establish an electronic identity that results in a record for that person being created in your electronic identity database? Please identify the office(s) of record for this purpose.

Identity creation is performed programmatically by polling three systems of record for transactions occurring since the last poll. Correlation of data to existing accounts is done using campus student and employee Ids.

The systems of record are:

- Human Resources
- Registrar
- Telephone Services

3.2.2. What authentication technologies are used for your electronic identity credentials (e.g., Kerberos, userID/password, PKI, ...) that are relevant to Canadian Access Federation activities? If more than one type of electronic credential is issued, how is it determined
who receives which type? If multiple credentials are linked, how is this managed (e.g., anyone with a Kerberos credential also can acquire a PKI token) and audited?

UserId/Password

3.2.3. If your electronic identity credentials require the use of a secret password or PIN, and there are circumstances in which that secret would be transmitted across a network without being protected by encryption (e.g., “clear text passwords” are used when accessing campus services), please identify who in your organization can discuss with any other Participant concerns that this might raise for them:

Please inquire at soc@uwaterloo.ca

3.2.4. If you support a “single sign-on” (SSO) or similar campus-wide system to allow a single user authentication action to serve multiple applications, and you will make use of this to authenticate people for CAF Service Providers, please describe the key security aspects of your SSO system including whether session timeouts are enforced by the system, whether user-initiated session termination is supported, and how use with “public access sites” is protected.

University of Waterloo does not support a “single sign-on” system for CAF Service Providers.

3.2.5. Are your primary electronic identifiers for people, such as “NetID,” eduPersonPrincipalName, or eduPersonTargetedID considered to be unique for all time to the individual to whom they are assigned? If not, what is your policy for re-assignment and what is the interval between such reuse?

There current IDM implementation does not allow for the re-use of account names.

Account names used by the previous identity management system (pre 2008) must have been idle for five years before the current implementation will re-use.

3.3 Electronic Identity Database

3.3.1. How is information in your electronic identity database acquired and updated? Are specific offices designated by your administration to perform this function? Are individuals allowed to update their own information on-line?

Information changes from HRMS are polled by the IDM system. For accounts maintained by the authoritative sources, those sources remain in control of most identity attributes, with the exception of a ‘nickname’, phone, fax, personal web page, and email address.

Administrators are able to override most attributes, but the authoritative sources will reaffirm their data over all others.

Keeping manually maintained accounts current is the responsibility of their sponsor.
3.3.2. What information in this database is considered “public information” and would be provided to any interested party?

Identities are searchable by first, last, and nickname by the public. Users with an active identity may also search by account name and email address. Identity information displayed is full name, department (if available), email address (if available), phone (if available), and office (if available). Users are permitted to ‘hide’ all details from search results within the current IDM implementation.

3.4 Uses of Your Electronic Identity Credential System

3.4.1. Please identify typical classes of applications for which your electronic identity credentials are used within your own organization.

Infrastructure: workstation and lab computers, wireless network access

Enterprise systems: Registrar, Human Resources, most departmental applications

3.5 Attribute Assertions

Attributes are the information data elements in an attribute assertion you might make to another Canadian Access Federation Participant concerning the identity of a person in your identity management system.

3.5.1. Please describe the reliability of your identity provider attribute assertions?

_Sufficient for granting access to network (eduroam)_

3.5.2. Would you consider your attribute assertions to be reliable enough to:

a) control access to on-line information databases licensed to your organization?
   Yes

b) be used to purchase goods or services for your organization?
   No

c) enable access to personal information such as student record information?
   Yes

3.6 Privacy Policy

Canadian Access Federation Participants must respect the legal and organizational privacy constraints on attribute information provided by other Participants and use it only for its intended purposes.

3.6.1. What restrictions do you place on the use of attribute information that you might provide to other Canadian Access Federation participants?

_Suitable for granting access to network (eduroam) only._
3.6.2. What policies govern the use of attribute information that you might release to other Canadian Access Federation participants?

- https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-8
- https://uwaterloo.ca/privacy/

3.6.3. Please provide your privacy policy URL.

https://uwaterloo.ca/privacy/
4. Service Provider Information

Service Providers, who receive attribute assertions from another Participant, shall respect the other Participant's policies, rules, and standards regarding the protection and use of that data. Such information must be used only for the purposes for which it was provided.

Service Providers are trusted to ask for only the information necessary to make an appropriate access control decision, and to not misuse information provided to them by Identity Providers. Service Providers must describe the basis on which access to resources is managed and their practices with respect to attribute information they receive from other Participants.

4.1 Attributes

4.1.1. What attribute information about an individual do you require in order to manage access to resources you make available to other Participants? Describe separately for each service application that you offer to CAF participants.

Access to Eduroam requires credentials from a user's home institution in the form of a userid and password.

4.1.2. What use do you make of attribute information that you receive in addition to basic access control decisions?

Authentication success and failure messages are logged for troubleshooting purposes.

4.1.3. Do you use attributes to provide a persistent user experience across multiple sessions?

No.

4.1.4. Do you aggregate session access records or record specific information accessed based on attribute information?

No.

4.1.5. Do you make attribute information available to other services you provide or to partner organizations?

No.

4.2 Technical Controls

4.2.1. What human and technical controls are in place on access to and use of attribute information that might refer to only one specific person (i.e., personally identifiable information)? For example, is this information encrypted for storage in your system?

Please inquire.
4.2.2. Describe the human and technical controls that are in place on the management of super-user and other privileged accounts that might have the authority to grant access to personally identifiable information?

Requests are initiated via an online request tracking system, validated by identity management administrator, and require approval by Director, Information Security Services.

4.2.3. If personally identifiable information is compromised, what actions do you take to notify potentially affected individuals?

Adherence to Provincial and Federal regulations.
5. Other Information

5.1 Technical Standards, Versions and Interoperability

5.1.1. Identify the SAML products you are using. If you are using the open source Internet2 Shibboleth products identify the release that you are using.

Shibboleth-1.3.3

5.1.2. What operating systems are the implementations on?

RHEL

5.1.3. What versions of the SAML protocol (1.1 or 2.0) do you support in your implementations.

SAML 1.1
SAML 2.0

5.2 Other Considerations

5.2.1. Are there any other considerations or information that you wish to make known to other Canadian Access Federation Participants with whom you might interoperate? For example, are there concerns about the use of clear text passwords or responsibilities in case of a security breach involving identity information you may have provided?

No.