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 Saskatchewan

2.1.2. Information below is accurate as of this date: October 2, 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?

   Identity Management:

   http://www.usask.ca/its/accounts/nsid.php

   Privacy & Personal Information:

   http://www.usask.ca/corporate_admin/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: Chad Coller

   Title or role: Director, ICT Platform Services

   Email address: chad.coller@usask.ca

   Telephone: +1 306 9665605
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?

The set of people who are eligible to receive an electronic identity is expansive, but primarily includes students, instructors, researchers and employees of the U of S. Beyond this primary group, electronic identities are issued to many external individuals and organizations that interact with the university and make use of its information systems. The criteria that determine eligibility for external parties are broad, and few exceptions need to be approved. Where the need for entirely new criteria arises, an identity management steering committee exists to review and approve the creation of such.

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?

We identify as “participant”, persons with one or both of the following values in the eduPersonAffiliation attribute of our LDAP directory:

- Students (those identified as active as per our Student Information System)
- Employees (those identified as active as per our HR/Payroll System)

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.

A student applying for admission provides data that establishes identity, and credentials are issued as part of the admissions process. Our person information database and student information system act as the sources of this information, and the university Registrar is the officer of record. A newly hired employee provides data that establishes their identity, and credentials are issued as part of the on-boarding process. Our person information database and HR/payroll information system act as the sources of this information, and the Associate VP of Human Resources is the officer of record. Other administrative processes exist to establish electronic identities for smaller non-student/employee sets (external patrons of the university library, sponsored external guests, etc.)
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?

The university makes use of a campus-wide credential called the Network Services ID (NSID), issued to all members of the university community. This credential is used in conjunction with an associated password to authenticate for all services that are relevant to CAF activities. In addition, the university makes use of two-factor authentication via one-time passwords (as implemented by Yubikeys) to strengthen the authentication process for several classes of user within particularly sensitive systems, although these are not systems which will be relevant to CAF activities.

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:

Storage or transmission of passwords “in the clear” is not performed for any applications that use University of Saskatchewan NSIDs. CAF authentication requests will take place via HTTP encrypted with SSL/TLS.

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.

We support JASIG CAS for single sign-on, with an idle timeout period of 100 minutes. Each application is configured to manage its own session information, and must thus implement its own “log out” button. There is no enterprise-wide “log out of all CAS-authenticated applications” button implemented.

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?

Yes, U of S NSIDs are considered unique to the individual for all time. Guest wireless IDs (used for conference attendees, etc.) are also technically NSIDs, and are reused, but exist in a reserved portion of the NSID space that does not overlap with “regular” NSIDs. These guest wireless IDs would also not be identified as a “participant” or have an eduPersonAffiliation attribute, and should not form part of CAF activities.
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?

Attributes in the identity database are updated according to administrative updates in the systems of record for each attribute (our Person Information Database, Student Information System for students, and our HR/Payroll system for employees). There is some delegation of update permission to various offices with business need (Student Enrolment Services, Human Resources, University Advancement and Community Engagement, etc.). Individuals may update some aspects of their own information online, such as their mailing address, telephone number, etc.

3.3.2. What information in this database is considered “public information” and would be provided to any interested party?

Public information, provided to any party, includes U of S employee contact information.

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.

Nearly all information and communication technology systems within the university use the NSID for authentication and authorization purposes. This includes email, access to the campus portal, learning management systems, student information system, HR/payroll system, access to wireless networking, access to student computer labs, etc.

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? Highly reliable

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?
   Yes

c) enable access to personal information such as student record information?
   Yes
   No
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?

Attributes are to be used in accordance with the policy and procedures defined in the University of Saskatchewan Freedom of Information and Protection of Privacy Policy, available at the link provided in section 3.6.3.

3.6.2. What policies govern the use of attribute information that you might release to other Canadian Access Federation participants?

Saskatchewan Local Authority Freedom of Information and Protection of Privacy Act

U of S Freedom of Information and Protection of Privacy Policy

U of S Data Management, Data Access and Data Use Policy

3.6.3. Please provide your privacy policy URL.

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.

________________________________________________________________________

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

________________________________________________________________________

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

________________________________________________________________________

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

________________________________________________________________________

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

________________________________________________________________________

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?

________________________________________________________________________

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

5.1.2. What operating systems are the implementations on?

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?