

SDSS Project Summary



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SDSS Project

- Shibboleth Development and Support Services
- Goal is to provide a basic national infrastructure for use by other projects
 - Operate a development Shibboleth federation
 - Provide Shibboleth access to EDINA services
 - General support
 - Technology watch

Federation Defined

- A grouping of identity providers and service providers following defined rules.
- More a social construct than a technical one.
- Components:
 - Participant agreement → trust
 - Federation signup → metadata service
 - WAYF service (optional)

SDSS Federation Overview

Not like InQueue:

- Takes all comers, no guarantees of any kind
- Not full production:
 - Requires defined level of service guarantees
 - May require stronger participant guarantees
 - Administration scalable to all UK institutions
- SDSS is somewhere in between:
 - Sufficient trust to support delivery of licensed services
 - Few entry hurdles for development projects

SDSS Federation Policy

Agreement: Best practices Best efforts Privacy protection X.509 Certificates GlobalSign certificates required - Temporary SDSS CA certificates available

SDSS Federation Policy V1.0

• All members of the federation must:

 Observe best practice in the handling and use of your digital certificates and private keys

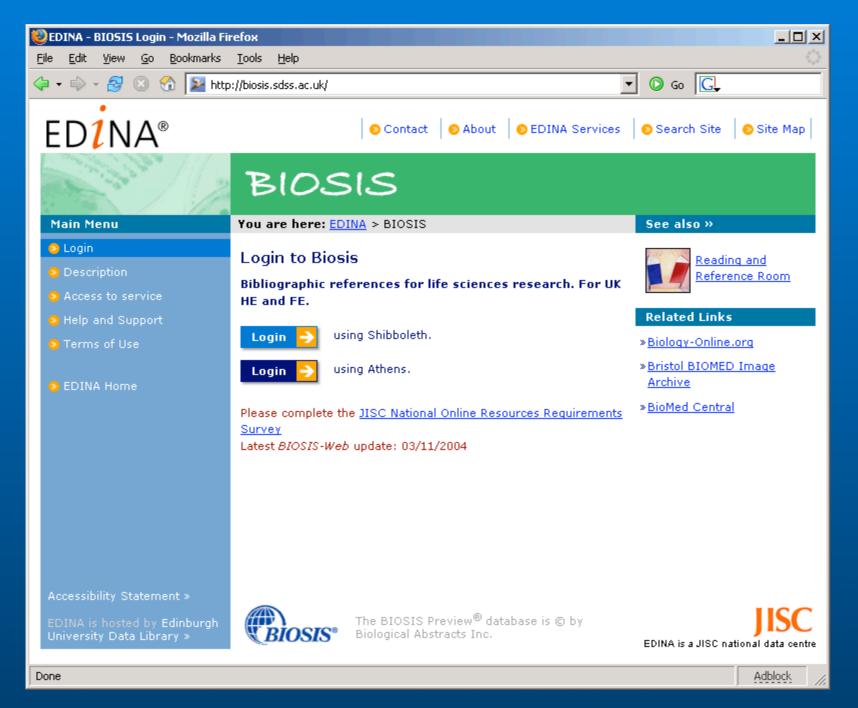
All identity providers (origins) must:

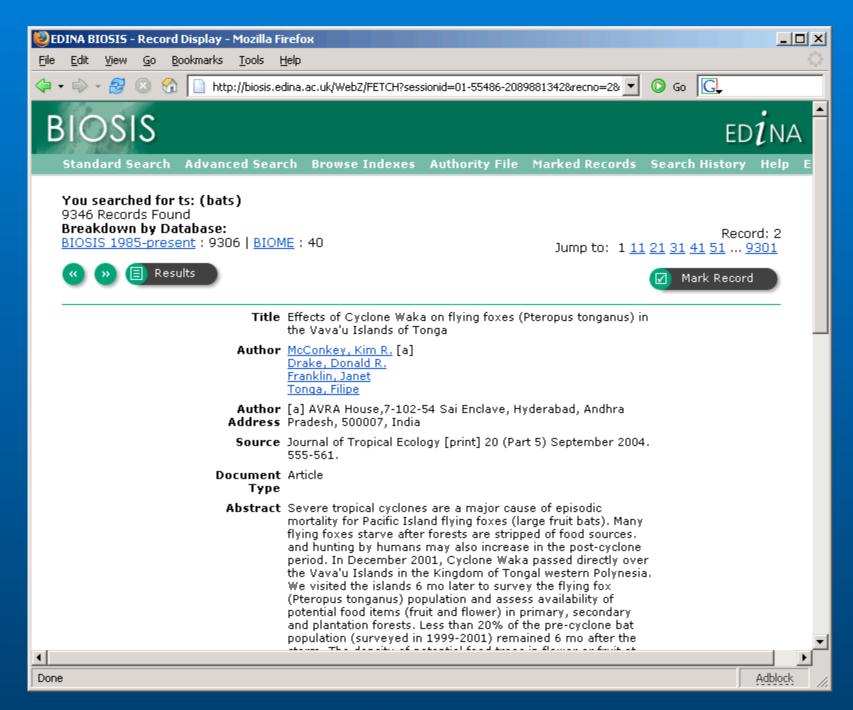
- Make reasonable attempts to ensure that only members of your institution are provided with credentials permitting authentication to your handle server, and that the assertions made to service providers by your attribute authority are correct.
- All service providers (targets) must:
 - Agree not to aggregate, or disclose to other parties, attributes supplied by identity providers.

SDSS Federation Membership

Identity providers: 5

- SDSS tests: 3
- Other projects: 2
- Institutional: 1
- Service providers: 11
 - SDSS tests: 4
 - Other projects: 1
 - Pending EDINA services: 4
 - Live EDINA services: 2





eduPersonScopedAffiliation

- MACE-Dir eduPerson attribute
- Example: member@ed.ac.uk
- Gives subject's relationship to a security domain
- Semantics: member of institution
- Many resources licensed on these terms
- Definition a little vague; working with MACE-Dir on this.

eduPersonEntitlement

- MACE-Dir eduPerson attribute
- Examples:
 - urn:mace:ac.uk:sdss.ac.uk:entitlement:resource
 - http://provider.co.uk/resource/contract.html
- Claims subject's entitlement to a particular resource
- Service provider must trust identity provider to issue any particular entitlement
- Good fine grained fall-back approach.

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eduPersonTargetedID

- MACE-Dir eduPerson attribute
- Example: sObw8cK7JJ6qqwj2v9O1tpidV4U=@ed.ac.uk
- A persistent pseudonym for the user, specific to a given service, intended to enable personal customisation
- Value is an opaque string
- Allows personalisation and saved state without compromising privacy
- Issues about stored vs. generated forms.

SDSS Federation Collateral

Web site: http://sdss.ac.uk/

- Policies and procedures
- Installation documentation
- Registries:
 - URN registry
 - OID registry
- Wiki (living documentation)
- Metadata service
- Root and signing certificates

To-do List

- More external providers
- More EDINA services
- Convert to final certificates
- Continue to improve documentation and packaging
- Encapsulate experience with authorisation:
 - Suggested service attribute requirements
 - Suggested attribute release policies
- Collate service information

EDINA Contacts

Talk: ian@iay.org.uk

Project: http://sdss.ac.uk/

- Project manager: sandy.shaw@ed.ac.uk
- Technical: ian@iay.org.uk
- Technical: Fiona.Culloch@btinternet.com

Scoped Attributes

- This is a MACE-Dir concept, embodied in the eduPerson specification.
- Scoped attributes have two parts:
 - Scope = security domain
 - Value relative to that scope
- Example: member@ed.ac.uk
- A principal may have multiple attribute values:
 - within the same scope
 - in different scopes.

 Definitely not the answer to all questions of attribute scoping; work continues.

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Scoped Attributes in Shibboleth

- Shibboleth 1.1 uses an informal attribute profile.
- Scoped Attributes assert a value within a security domain.
- In the directory, they are just a DirectoryString.
- Scoped attributes have XML structure in this profile.
- "Scope" XML attribute expresses security domain.
- <Attribute

AttributeName="urn:mace:dir:attribute-def:eduPersonPrincipalName" AttributeNamespace="urn:mace:shibboleth:1.0:attributeNamespace:uri"> <AttributeNamespace="urn:mace:shibboleth:1.0:attributeNamespace:uri"> <AttributeNamespace="urn:mace:shibboleth:1.0:attributeNamespace:uri"> <AttributeNamespace="urn:mace:shibboleth:1.0:attributeNamespace:uri"> <AttributeNamespace="urn:mace:shibboleth:1.0:attributeNamespace:uri"> <AttributeNamespace="urn:mace:shibboleth:1.0:attributeNamespace:uri"> <AttributeNamespace="urn:mace:shibboleth:1.0:attributeNamespace:uri"> <AttributeNamespace="urn:mace:shibboleth:1.0:attributeNamespace:uri"> <AttributeNamespace="urn:mace:shibboleth:1.0:attributeNamespace:uri">

Shibboleth filters such assertions using federation metadata.

SAML 2 LDAP Attribute Profile

- SAML 2.0 adds a standardised profile for encoding all X.500/LDAP attributes.
- Switch to standardised profile essential for interoperability.
- Attribute

NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri" Name="urn:oid:1.3.6.1.4.1.5923.1.1.1.6"> <AttributeValue>iay@iay.org.uk</AttributeValue> </Attribute>

- No XML structure in encoding of these attributes in this profile.
- Shibboleth will still filter according to federation metadata.

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