

Example of a standard attribute resolver for Shibboleth IdP

Check the comments in the XML and replace any values as needed.

attribute-resolver.xml for Shibboleth IDP 3.2.1 and newer

```
<?xml version="1.0" encoding="UTF-8"?>
<resolver:AttributeResolver xmlns:resolver="urn:mace:shibboleth:2.0:resolver" xmlns:xsi="http://www.w3.org/2001
/XMLSchema-instance"
xmlns:pc="urn:mace:shibboleth:2.0:resolver:pc" xmlns:ad="urn:mace:shibboleth:2.0:
resolver:ad"
xmlns:dc="urn:mace:shibboleth:2.0:resolver:dc" xmlns:enc="urn:mace:shibboleth:2.0:
attribute:encoder"
xmlns:sec="urn:mace:shibboleth:2.0:security"
xsi:schemaLocation="urn:mace:shibboleth:2.0:resolver classpath:/schema/shibboleth-
2.0-attribute-resolver.xsd
urn:mace:shibboleth:2.0:resolver:pc classpath:/schema/shibboleth-
2.0-attribute-resolver-pc.xsd
urn:mace:shibboleth:2.0:resolver:ad classpath:/schema/shibboleth-
2.0-attribute-resolver-ad.xsd
urn:mace:shibboleth:2.0:resolver:dc classpath:/schema/shibboleth-
2.0-attribute-resolver-dc.xsd
urn:mace:shibboleth:2.0:attribute:encoder classpath:/schema
/shibboleth-2.0-attribute-encoder.xsd
urn:mace:shibboleth:2.0:security classpath:/schema/shibboleth-
2.0-security.xsd">

  <!-- ===== -->
  <!-- Attribute Definitions -->
  <!-- ===== -->

  <!-- Schema: Core schema attributes-->
  <!--
  If you have a Active Directory data source change the sourceAttributeID to sAMAccountName for the following
  attribute.
  -->
  <resolver:AttributeDefinition xsi:type="ad:Simple" id="uid" sourceAttributeID="uid">
    <resolver:Dependency ref="myLDAP" />
    <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:uid" />
    <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:0.9.2342.19200300.100.1.1"
friendlyName="uid" />
  </resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="email" sourceAttributeID="mail">
    <resolver:Dependency ref="myLDAP" />
    <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:mail" />
    <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:0.9.2342.19200300.100.1.3"
friendlyName="mail" />
  </resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="homePhone" sourceAttributeID="homePhone">
    <resolver:Dependency ref="myLDAP" />
    <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:homePhone" />
    <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:0.9.2342.19200300.100.1.20"
friendlyName="homePhone" />
  </resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="homePostalAddress" sourceAttributeID="
homePostalAddress">
    <resolver:Dependency ref="myLDAP" />
    <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
homePostalAddress" />
    <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:0.9.2342.19200300.100.1.39"
friendlyName="homePostalAddress" />
  </resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="mobileNumber" sourceAttributeID="mobile">
    <resolver:Dependency ref="myLDAP" />
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<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:mobile" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:0.9.2342.19200300.100.1.41"
friendlyName="mobile" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="pagerNumber" sourceAttributeID="pager">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:pager" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:0.9.2342.19200300.100.1.42"
friendlyName="pager" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="commonName" sourceAttributeID="cn">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:cn" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.3" friendlyName="cn" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="surname" sourceAttributeID="sn">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:sn" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.4" friendlyName="sn" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="locality" sourceAttributeID="l">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:l" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.7" friendlyName="l" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="stateProvince" sourceAttributeID="st">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:st" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.8" friendlyName="st" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="street" sourceAttributeID="street">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:street" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.9" friendlyName="street" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="organizationName" sourceAttributeID="o">
<resolver:Dependency ref="staticAttributes" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:o" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.10" friendlyName="o" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="organizationalUnit" sourceAttributeID="ou">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:ou" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.11" friendlyName="ou" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="title" sourceAttributeID="title">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:title" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.12" friendlyName="title" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="postalAddress" sourceAttributeID="postalAddress">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:postalAddress" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.16" friendlyName="
postalAddress" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="postalCode" sourceAttributeID="postalCode">
<resolver:Dependency ref="myLDAP" />
<resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:postalCode" />
<resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.17" friendlyName="postalCode" />
</resolver:AttributeDefinition>
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/>
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="postOfficeBox" sourceAttributeID="postOfficeBox">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:postOfficeBox" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.18" friendlyName="
postOfficeBox" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="telephoneNumber" sourceAttributeID="telephoneNumber">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:telephoneNumber"
/>
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.20" friendlyName="
telephoneNumber" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="givenName" sourceAttributeID="givenName">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:givenName" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.42" friendlyName="givenName"
/>
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="initials" sourceAttributeID="initials">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:initials" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.5.4.43" friendlyName="initials" />
</resolver:AttributeDefinition>

<!-- Schema: inetOrgPerson attributes-->
<resolver:AttributeDefinition xsi:type="ad:Simple" id="departmentNumber" sourceAttributeID="
departmentNumber">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
departmentNumber" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.16.840.1.113730.3.1.2"
friendlyName="departmentNumber" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="displayName" sourceAttributeID="displayName">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:displayName" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.16.840.1.113730.3.1.241"
friendlyName="displayName" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="employeeNumber" sourceAttributeID="employeeNumber">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:employeeNumber"
/>
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.16.840.1.113730.3.1.3"
friendlyName="employeeNumber" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="employeeType" sourceAttributeID="employeeType">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:employeeType" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.16.840.1.113730.3.1.4"
friendlyName="employeeType" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="jpegPhoto" sourceAttributeID="jpegPhoto">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:jpegPhoto" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:0.9.2342.19200300.100.1.60"
friendlyName="jpegPhoto" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition xsi:type="ad:Simple" id="preferredLanguage" sourceAttributeID="

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preferredLanguage">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
preferredLanguage" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:2.16.840.1.113730.3.1.39"
friendlyName="preferredLanguage" />
</resolver:AttributeDefinition>

<!-- Schema: eduPerson attributes -->
<resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonAffiliation" sourceAttributeID="
eduPersonAffiliation">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
eduPersonAffiliation" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.1"
friendlyName="eduPersonAffiliation" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonEntitlement" sourceAttributeID="
eduPersonEntitlement">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
eduPersonEntitlement" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.7"
friendlyName="eduPersonEntitlement" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonNickname" sourceAttributeID="
eduPersonNickname">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
eduPersonNickname" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.2"
friendlyName="eduPersonNickname" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonOrgDN" sourceAttributeID="eduPersonOrgDN">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:eduPersonOrgDN"
/>
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.3"
friendlyName="eduPersonOrgDN" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonOrgUnitDN" sourceAttributeID="
eduPersonOrgUnitDN">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
eduPersonOrgUnitDN" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.4"
friendlyName="eduPersonOrgUnitDN" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonPrimaryAffiliation" sourceAttributeID="
eduPersonPrimaryAffiliation">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
eduPersonPrimaryAffiliation" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.5"
friendlyName="eduPersonPrimaryAffiliation" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonPrimaryOrgUnitDN" sourceAttributeID="
eduPersonPrimaryOrgUnitDN">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
eduPersonPrimaryOrgUnitDN" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.8"
friendlyName="eduPersonPrimaryOrgUnitDN" />
</resolver:AttributeDefinition>

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<!--
Change the scope on the following two attributes to the scope of the IDP.
-->
<resolver:AttributeDefinition xsi:type="ad:Scoped" id="eduPersonPrincipalName" scope="SCHAC_HOME_ORG"
sourceAttributeID="LdApUsErAtTr">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1ScopedString" name="urn:mace:dir:attribute-def:
eduPersonPrincipalName" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2ScopedString" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.6"
friendlyName="eduPersonPrincipalName" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Scoped" id="eduPersonScopedAffiliation" scope="SCHAC_HOME_ORG"
sourceAttributeID="eduPersonAffiliation">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1ScopedString" name="urn:mace:dir:attribute-def:
eduPersonScopedAffiliation" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2ScopedString" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.9"
friendlyName="eduPersonScopedAffiliation" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonAssurance" sourceAttributeID="
eduPersonAssurance">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
eduPersonAssurance" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.11"
friendlyName="eduPersonAssurance" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonUniqueId" sourceAttributeID="
eduPersonUniqueId">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:
eduPersonUniqueId" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.13"
friendlyName="eduPersonUniqueId" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition xsi:type="ad:Simple" id="eduPersonOrcid" sourceAttributeID="eduPersonOrcid">
  <resolver:Dependency ref="myLDAP" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:eduPersonOrcid"
/>
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.16"
friendlyName="eduPersonOrcid" />
</resolver:AttributeDefinition>

<!-- The source for this attribute is from the database StoredId and no longer the classic computedID -->
  <resolver:AttributeDefinition xsi:type="ad:SAML2NameID" id="eduPersonTargetedID"
nameIdFormat="urn:oasis:names:tc:SAML:2.0:nameid-format:persistent"
sourceAttributeID="persistentId">
  <resolver:Dependency ref="StoredId" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1XMLObject" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.10" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2XMLObject" name="urn:oid:1.3.6.1.4.1.5923.1.1.1.10"
friendlyName="eduPersonTargetedID" />
</resolver:AttributeDefinition>

  <!-- Do NOT use the version of eduPersonTargetedID defined below unless you understand
why it was deprecated and know that this reason does not apply to you. -->
  <!--
  <resolver:AttributeDefinition xsi:type="ad:Scoped" id="eduPersonTargetedID.old" scope="SCHAC_HOME_ORG"
sourceAttributeID="computedID">
  <resolver:Dependency ref="computedID" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1ScopedString" name="urn:mace:dir:attribute-def:
eduPersonTargetedID" />
</resolver:AttributeDefinition>
  -->

  <!-- Schema: norEdu* attributes -->
  <resolver:AttributeDefinition id="norEduPersonLegalName" xsi:type="ad:Simple"
xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="norEduPersonLegalName">

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<resolver:Dependency ref="myLDAP" />

<resolver:AttributeEncoder xsi:type="enc:SAML1String"
  xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
  name="urn:mace:dir:attribute-def:norEduPersonLegalName" />

<resolver:AttributeEncoder xsi:type="enc:SAML2String"
  xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
  name="urn:oid:1.3.6.1.4.1.2428.90.1.10" friendlyName="norEduPersonLegalName" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="norEduPersonNIN" xsi:type="ad:Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="NiNcRePlAcE">
  <resolver:Dependency ref="myLDAP" />

  <resolver:AttributeEncoder xsi:type="enc:SAML1String"
    xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:norEduPersonNIN" />

  <resolver:AttributeEncoder xsi:type="enc:SAML2String"
    xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.2428.90.1.5" friendlyName="norEduPersonNIN" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="norEduPersonLIN" xsi:type="ad:Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="norEduPersonLIN">
  <resolver:Dependency ref="myLDAP" />

  <resolver:AttributeEncoder xsi:type="enc:SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:norEduPersonLIN" />

  <resolver:AttributeEncoder xsi:type="enc:SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.2428.90.1.4" friendlyName="norEduPersonLIN" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="norEduOrgAcronym" xsi:type="ad:Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="norEduOrgAcronym">
  <resolver:Dependency ref="staticAttributes" />

  <resolver:AttributeEncoder xsi:type="enc:SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:norEduOrgAcronym" />

  <resolver:AttributeEncoder xsi:type="enc:SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.2428.90.1.6" friendlyName="norEduOrgAcronym" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="norEduPersonBirthDate" xsi:type="ad:Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="norEduPersonBirthDate">
  <resolver:Dependency ref="myLDAP" />

  <resolver:AttributeEncoder xsi:type="enc:SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:norEduPersonBirthDate" />

  <resolver:AttributeEncoder xsi:type="enc:SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.2428.90.1.3" friendlyName="norEduPersonBirthDate" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="norEduOrgUniqueIdentifier" xsi:type="ad:Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="norEduOrgUniqueIdentifier">
  <resolver:Dependency ref="myLDAP" />

  <resolver:AttributeEncoder xsi:type="enc:SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:norEduOrgUniqueIdentifier" />

  <resolver:AttributeEncoder xsi:type="enc:SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.2428.90.1.7" friendlyName="norEduOrgUniqueIdentifier" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="norEduOrgUnitUniqueIdentifier" xsi:type="ad:Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="
norEduOrgUnitUniqueIdentifier">
```

```

<resolver:Dependency ref="myLDAP" />

<resolver:AttributeEncoder xsi:type="enc:SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
  name="urn:mace:dir:attribute-def:norEduOrgUnitUniqueIdentifier" />

<resolver:AttributeEncoder xsi:type="enc:SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
  name="urn:oid:1.3.6.1.4.1.2428.90.1.8" friendlyName="norEduOrgUnitUniqueIdentifier" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="norEduOrgNIN" xsi:type="ad:Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="norEduOrgNIN">
  <resolver:Dependency ref="myLDAP" />

  <resolver:AttributeEncoder xsi:type="enc:SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:norEduOrgNIN" />

  <resolver:AttributeEncoder xsi:type="enc:SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.2428.90.1.12" friendlyName="norEduOrgNIN" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="norEduOrgUniqueNumber" xsi:type="ad:Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="norEduOrgUniqueNumber">
  <resolver:Dependency ref="myLDAP" />

  <resolver:AttributeEncoder xsi:type="enc:SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:norEduOrgUniqueNumber" />

  <resolver:AttributeEncoder xsi:type="enc:SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.2428.90.1.1" friendlyName="norEduOrgUniqueNumber" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="norEduOrgUnitUniqueNumber" xsi:type="ad:Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="norEduOrgUnitUniqueNumber">
  <resolver:Dependency ref="myLDAP" />

  <resolver:AttributeEncoder xsi:type="enc:SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:norEduOrgUnitUniqueNumber" />

  <resolver:AttributeEncoder xsi:type="enc:SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.2428.90.1.2" friendlyName="norEduOrgUnitUniqueNumber" />
</resolver:AttributeDefinition>

<!-- Country name -->
<resolver:AttributeDefinition id="friendlyCountryName" xsi:type="Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="co">
  <resolver:Dependency ref="staticAttributes" />
  <resolver:AttributeEncoder xsi:type="enc:SAML1String" name="urn:mace:dir:attribute-def:co" />
  <resolver:AttributeEncoder xsi:type="enc:SAML2String" name="urn:oid:0.9.2342.19200300.100.1.43"
friendlyName="co" />
</resolver:AttributeDefinition>

<!-- Country ISO-3166 code -->
<resolver:AttributeDefinition id="countryName" xsi:type="Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="c">
  <resolver:Dependency ref="staticAttributes" />
  <resolver:AttributeEncoder xsi:type="SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:c" />
  <resolver:AttributeEncoder xsi:type="SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:2.5.4.6" friendlyName="c" />
</resolver:AttributeDefinition>

<resolver:AttributeDefinition id="schacHomeOrganization" xsi:type="Simple"
  xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="schacHomeOrganization">
  <resolver:Dependency ref="staticAttributes" />
  <resolver:AttributeEncoder xsi:type="SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:schacHomeOrganization" />
  <resolver:AttributeEncoder xsi:type="SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.25178.1.2.9" friendlyName="schacHomeOrganization" />
</resolver:AttributeDefinition>

```

```

<resolver:AttributeDefinition id="schacHomeOrganizationType" xsi:type="Simple"
    xmlns="urn:mace:shibboleth:2.0:resolver:ad" sourceAttributeID="schacHomeOrganizationType">
  <resolver:Dependency ref="staticAttributes" />
  <resolver:AttributeEncoder xsi:type="SAML1String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:mace:dir:attribute-def:schacHomeOrganizationType" />
  <resolver:AttributeEncoder xsi:type="SAML2String" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="urn:oid:1.3.6.1.4.1.25178.1.2.10" friendlyName="schacHomeOrganizationType" />
</resolver:AttributeDefinition>

  <resolver:AttributeDefinition id="principal" xsi:type="PrincipalName" xmlns="urn:mace:shibboleth:2.0:
resolver:ad">
  <resolver:AttributeEncoder xsi:type="enc:SAML2StringNameID" xmlns="urn:mace:shibboleth:2.0:attribute:
encoder"
    nameFormat="urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified" />
  </resolver:AttributeDefinition>

  <!-- Name Identifier related attributes -->
<!-- As of Shibboleth 3.2.0 this is handled in saml-nameid.xml
  <resolver:AttributeDefinition id="transientId" xsi:type="ad:TransientId">
    <resolver:AttributeEncoder xsi:type="enc:SAML1StringNameIdentifier" nameFormat="urn:mace:shibboleth:1.0:
nameIdentifier"/>
    <resolver:AttributeEncoder xsi:type="enc:SAML2StringNameID" nameFormat="urn:oasis:names:tc:SAML:2.0:
nameid-format:transient"/>
  </resolver:AttributeDefinition>
-->

<!-- ===== -->
<!--      Data Connectors      -->
<!-- ===== -->

<!--
Example LDAP Connector

The connectivity details can be specified in ldap.properties to
share them with your authentication settings if desired.

If you have a Active Directory data source change the string "uid" in the filterTemplate to "sAMAccountName"
-->
<resolver:DataConnector id="myLDAP" xsi:type="dc:LDAPDirectory"
  ldapURL="%{idp.attribute.resolver.LDAP.ldapURL}"
  baseDN="%{idp.attribute.resolver.LDAP.baseDN}"
  principal="%{idp.attribute.resolver.LDAP.bindDN}"
  principalCredential="%{idp.attribute.resolver.LDAP.bindDNCredential}">
  <dc:FilterTemplate>
    <![CDATA[
      (uid=${requestContext.principalName})
    ]]>
  </dc:FilterTemplate>
  <dc:StartTLSTrustCredential id="LDAPtoIdPCredential" xsi:type="sec:X509ResourceBacked">
    <sec:Certificate>%{idp.attribute.resolver.LDAP.trustCertificates}</sec:Certificate>
  </dc:StartTLSTrustCredential>
</resolver:DataConnector>

<!-- Static data connector for organization -->
<!--
Update the following attributes to the correct values for your organization
-->
<resolver:DataConnector id="staticAttributes" xsi:type="dc:Static" xmlns="urn:mace:shibboleth:2.0:resolver:
dc">
  <Attribute id="o">
    <Value>ORGANIZATION_NAME</Value>
  </Attribute>
  <Attribute id="norEduOrgAcronym">
    <Value>ORGANIZATION_ACRONYM</Value>
  </Attribute>
  <Attribute id="c">
    <Value>ISO_COUNTRY_CODE</Value>
  </Attribute>

```



```

    <Attribute id="co">
      <Value>ISO_COUNTRY_NAME</Value>
    </Attribute>
    <Attribute id="schacHomeOrganization">
      <Value>SCHAC_HOME_ORG_DOMAIN_NAME</Value>
    </Attribute>
    <Attribute id="schacHomeOrganizationType">
      <Value>urn:schac:homeOrganizationType:eu:higherEducationInstitution</Value>
<!-- This value is for EU higher education institution, other allowed values are:
    - urn:schac:homeOrganizationType:eu:educationInstitution
    - urn:schac:homeOrganizationType:int:NREN
    - urn:schac:homeOrganizationType:int:universityHospital
    - urn:schac:homeOrganizationType:int:NRENAffiliate
    - urn:schac:homeOrganizationType:int:other
-->
  </Attribute>
</resolver:DataConnector>

<!-- Computed targeted ID connector -->
<!--
<resolver:DataConnector xsi:type="dc:ComputedId"
    id="computedID"
    generatedAttributeID="computedID"
    sourceAttributeID="uid"
    salt="your random string here">
  <resolver:Dependency ref="myLDAP" />
</resolver:DataConnector>
-->

<!--
This connector relies on global.xml for the Managed connection to the db.
If you have a Active Directory data source change the sourceAttributeID to sAMAccountName
-->
<resolver:DataConnector id="StoredId"
  xsi:type="StoredId"
  xmlns="urn:mace:shibboleth:2.0:resolver:dc"
  generatedAttributeID="persistentId"
  sourceAttributeID="uid"
  salt="your random string here">
  <resolver:Dependency ref="uid" />

  <dc:BeanManagedConnection>MyGlobalDataSource</dc:BeanManagedConnection>

</resolver:DataConnector>

<!-- ===== -->
<!-- Principal Connectors -->
<!-- ===== -->
<!--
Principal Connectors for shibTransient, saml1Unspec, saml2Transient are now taken care of in saml-nameid.xml
-->

</resolver:AttributeResolver>

```