



Attribute definitions for  
individual data

## Introduction

These schema definitions are intended to facilitate information exchange among European, and possibly international, academic and research institutions.

In its current version, the SCHAC schemas are not oriented to any particular technology. They define a set of attributes to describe individuals in the academic and research institutions. Appropriate profiles, at least for LDAP and XML, will be defined in other documents.

These definitions assume that other attributes describing individuals are already available and properly coded, according with the following standards:

- The **eduPerson** schema v. 200312, as defined at <http://www.educause.edu/eduperson/>
- The **person** schema, as defined by X.521 (2001)
- The **organizationalPerson** schema, as defined by X.521 (2001)
- The **inetOrgPerson** schema, as defined by RFC 2798
- The **naturalPerson** schema, as defined by RFC 2985

## Attributes defined by SCHAC

Name	<b>schacMotherTongue</b>
Description	Is the language a person learns first. Correspondingly, the person is called a native speaker of the language. Usually a child learns the basics of their first language from their family.
Format	- ISO 639: 2-letter codes if the code is defined for our language - ISO 639: 3-letter codes if the 2-letter code is not defined - If ISO 639: 3-letter codes is not defined for our language we need to use a code defined in another classification.
# of values	Single
Mandatory	N
References	<ul style="list-style-type: none"> <li>● ISO 639 - Language Codes</li> <li>● RFC 2798 - Definition of the inetOrgPerson LDAP Object Class</li> <li>● RFC 3066 - Tags for the Identification of Languages</li> </ul>
Examples	schacMotherTongue = fr

Name	<b>schacHomeOrganization</b>
Description	Specifies a person's home organization using the domain name of the organization
Format	Domain name according to RFC 1035

Name	<b>schacHomeOrganization</b>
# of values	Single
Mandatory	N
References	<ul style="list-style-type: none"> <li>● RFC 1035 - Domain names - implementation and specifications</li> </ul>
Examples	schacHomeOrganization = terena.nl

Name	<b>schacHomeOrganizationType</b>
Description	Type of a Home Organization
Format	urn:SCHACPREFIX:homeOrgType:<country-code>:<string> <ul style="list-style-type: none"> <li>● The &lt;country-code&gt; must be a valid two-letter ISO 3166 country code identifier.</li> <li>● &lt;string&gt; from a nationally controlled vocabulary</li> </ul>
# of values	Single
Mandatory	N
Examples	schacHomeOrganizationType = urn:SCHACPREFIX:homeOrgType:ch:vho schacHomeOrganizationType = urn:SCHACPREFIX:homeOrgType:es:opi

Name	<b>schacSn1</b>
Description	First surname of a person ("the surname" in international terms)
Format	<ul style="list-style-type: none"> <li>● Free string</li> <li>● The following notes have been taken from the inetOrgPerson specification. If the person has a multi-part sn (whether hyphenated or not), store the multi-part name as one value and each component as separate values in this multi-valued attribute. That yields the best results for the broadest range of clients doing name searches.</li> <li>● Resource has to be able to support UTF-8 encoded accented character strings</li> </ul>
# of values	Multi
Mandatory	N
Examples	If sn = Lopez de la Moraleda y de Las Altas Alcornias schacSn1 = Lopez de la Moraleda

Name	<b>schacSn2</b>
Description	Second surname of a person

Name	<b>schacSn2</b>
Format	<ul style="list-style-type: none"> <li>● Free string</li> <li>● The following notes have been taken from the inetOrgPerson specification. If the person has a multi-part sn (whether hyphenated or not), store the multi-part name as one value and each component as separate values in this multi-valued attribute. That yields the best re-sults for the broadest range of clients doing name searches.</li> <li>● Resource has to be able to support UTF-8 encoded accented character strings</li> </ul>
# of values	Multi
Mandatory	N
Examples	If sn = Lopez de la Moraleda y de Las Altas Alcornias schacSn2 = de Las Altas Alcornias

Name	<b>schacPersonalUniqueID</b>
Description	Specifies a "unique identifier" for an entity representing a person. For a person, this might be the DNI, FIC, NIN, ...
Format	urn:SCHACPREFIX:uniqueID:<country-code>:<idType>:<idValue> <ul style="list-style-type: none"> <li>● The &lt;country-code&gt; must be a valid two-letter ISO 3166 country code identifier.</li> <li>● &lt;idType&gt;. Acceptable values must be declared per each country code.</li> <li>● &lt;idValue&gt;</li> </ul>
# of values	Multi
Mandatory	N
References	<ul style="list-style-type: none"> <li>● ISO 3166 - Codes for the representation of names of countries and their subdivisions</li> </ul>
Examples	schacPersonalUniqueID = urn:SCHACPREFIX:uniqueID:es:NIF:31241312L schacPersonalUniqueID = urn:SCHACPREFIX:uniqueID:fi:FIC:260667-123F schacPersonalUniqueID = urn:SCHACPREFIX:uniqueID:se:NIN:12345678

Name	<b>schacEntityUniqueID</b>
Description	Unique identifiers assigned to an entity (not personal). For an organisational unit, it might be a department code.

Name	<b>schacEntityUniqueID</b>
Format	urn:SCHACPREFIX:uniqueID:<country-code>:<idType>:<idValue> <ul style="list-style-type: none"> <li>● The &lt;country-code&gt; must be a valid two-letter ISO 3166 country code identifier.</li> <li>● &lt;idType&gt;. Acceptable values must be declared per each country code.</li> <li>● &lt;idValue&gt;</li> </ul>
# of values	Multi
Mandatory	N
References	● <b>ISO 3166</b> - Codes for the representation of names of countries and their subdivisions
Examples	schacEntityUniqueID = urn:SCHACPREFIX:uniqueID:es:ouCode:31822169

Name	<b>schacPersonalTitle</b>
Description	The Personal Title attribute type specifies a personal title for a person. Examples of personal titles are "Ms", "Dr", "Prof", "Rev", "Sr".
Format	Free format string
# of values	Single
Mandatory	N
References	● <b>RFC1274</b> - The COSINE and Internet X.500 Schema personal title Sections 9.3.30
Examples	schacPersonalTitle = Prof

Name	<b>schacUserPrivateAttribute</b>
Description	Used to store a set of denied access attributes. The organization defines a private attributes set. You can deny access to a particular attribute when you put its name in schacUserPrivateAttribute.
Format	An attribute name There also exists two special values all To deny access to all attributes in defined in the private attributes set entry To deny access to whole data
# of values	Multi
Mandatory	N

Name	<b>schacUserPrivateAttribute</b>
Examples	<ul style="list-style-type: none"> <li>Attributes mail and telephoneNumber will not be returned in a query  schacUserPrivateAttribute = mail  schacUserPrivateAttribute = telephoneNumber</li> <li>It will not be possible to obtain any attributes defined in the private attributes set  schacUserPrivateAttribute = all</li> <li>The entry will not be returned in a query  schacUserPrivateAttribute = entry</li> </ul>

Name	<b>schacUserPresenceID</b>
Description	To store a set of values related to network presence protocols
Format	urn:SCHACPREFIX:presence:<NSS> <NSS> is a Namespace Specific String as defined in RFC 2141
# of values	Multi
Mandatory	N
References	<ul style="list-style-type: none"> <li><b>RFC 2141</b> - URN Syntax</li> </ul>
Examples	schacUserPresenceID = urn:SCHACPREFIX:presence:xmpp: <a href="mailto:pepe@im.univx.es">pepe@im.univx.es</a> schacUserPresenceID = urn:SCHACPREFIX:presence:sip: <a href="mailto:pepe@myweb.com">pepe@myweb.com</a> schacUserPresenceID = urn:SCHACPREFIX:presence:sip: <a href="mailto:jose.perez@univx.es">jose.perez@univx.es</a> schacUserPresenceID = urn:SCHACPREFIX:presence:h323: <a href="mailto:pepe@myweb.fi">pepe@myweb.fi</a> :808;pars

Name	<b>schacUserStatus</b>
Description	Used to store a set of user status
Format	urn:SCHACPREFIX:status:<NSS> <ul style="list-style-type: none"> <li>&lt;NSS&gt; is a Namespace Specific String as defined in RFC 2141</li> </ul>
# of values	Multi
Mandatory	N
References	<ul style="list-style-type: none"> <li><b>RFC 2141</b> - URN Syntax</li> </ul>

Name	<b>schacUserStatus</b>
Examples	<ul style="list-style-type: none"> <li>To store different user activity states in the UMA University we could store:            schacUserStaus = urn:SCHACPREFIX:status:uma.es:affiliation:expired            schacUserStaus = urn:SCHACPREFIX:status:uma.es:sendMail:expired            schacUserStaus = urn:SCHACPREFIX:staus:uma.es:getMail:active         </li> </ul>

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