

# Requested Attributes

## Requested Attributes in Metadata

Requested attributes in SP metadata are sometimes used by the IdP to make runtime decisions with respect to attribute release. Along with other [user interface elements](#), requested attributes are also used to construct the user consent page at the IdP (if one exists). It is recommended that all SP metadata contain the SP's required and optional attributes, as described in this document.

At runtime, requested attributes may be presented to the user on the consent page. The user will be asked whether or not the requested attributes should be released to the SP, so care should be taken to request only those attributes actually needed by the service.

The administrative interface has input fields for one or more requested attributes. By submitting these fields, the administrator adds the corresponding attributes to metadata.

From the drop-down menu labeled *Attribute Name*, simply choose the desired attribute. If the chosen attribute is `eduPersonEntitlement`, an optional *Attribute Values* field will appear. Enter the requested attribute value(s) (if any) separated by commas. Repeat the input process for each requested attribute.

Next to each requested attribute is a checkbox labeled "Required?" If the requested attribute is a required attribute, check the checkbox. If you do that, an `isRequired="true"` XML attribute will be inserted into the corresponding `<md:RequestedAttribute>` element. If the "Required?" checkbox is not checked, an `isRequired` XML attribute is **not** inserted into the `<md:RequestedAttribute>` element.

Once the Save button is pressed, an `<md:AttributeConsumingService>` element (containing `<md:RequestedAttribute>` elements) is inserted into your metadata. One `<md:RequestedAttribute>` element will be inserted into metadata for every attribute chosen from the drop-down menu. See below for details.

\* Denotes a required field

**User Interface Elements:** ([Help](#))

\* SP Display Name:

SP Description:

SP Information URL:

SP Privacy Statement URL:

SP Logo HTTPS URL:

SP Logo Width x Height:  x  (pixels)

**Requested Attributes:** ([Help](#))

|                   |                                                   |           |                                     |
|-------------------|---------------------------------------------------|-----------|-------------------------------------|
| Attribute Name:   | <input type="text" value="displayName"/>          | Required? | <input checked="" type="checkbox"/> |
| Remove Attribute: | <input type="checkbox"/>                          |           |                                     |
| Attribute Name:   | <input type="text" value="eduPersonEntitlement"/> |           |                                     |
| Attribute Values: | <input type="text" value="test, hello"/>          |           | (comma separated list)              |
| Remove Attribute: | <input type="checkbox"/>                          |           |                                     |
| Attribute Name:   | <input type="text" value="Choose one"/>           | Required? | <input type="checkbox"/>            |
| Attribute Name:   | <input type="text" value="Choose one"/>           | Required? | <input type="checkbox"/>            |
| Attribute Name:   | <input type="text" value="Choose one"/>           | Required? | <input type="checkbox"/>            |

[Save](#) | [Cancel](#)



### The semantics of the `isRequired` XML attribute

The meaning of the `isRequired="true"` XML attribute is given in the SAML V2.0 Metadata specification, which is quoted here for convenience: The optional `isRequired` "XML attribute indicates if the service requires the corresponding SAML attribute in order to function at all (as opposed to merely finding an attribute useful or desirable)."

## Technical Details

The SAML V2.0 Metadata specification (one of the [SAML V2.0 family of specifications](#)) supports zero or more `<md:AttributeConsumingService>` elements each containing one or more `<md:RequestedAttribute>` elements in SP metadata. These static elements are used to communicate SP attribute requirements to IdPs.

InCommon metadata supports at most one `<md:AttributeConsumingService>` element. An example follows:

```
<!-- Requested Attributes for InCommon SPs -->
<md:AttributeConsumingService index="1"
  xmlns:md="urn:oasis:names:tc:SAML:2.0:metadata"
  xmlns:saml="urn:oasis:names:tc:SAML:2.0:assertion">
  <md:ServiceName xml:lang="en">...</md:ServiceName>
  <md:ServiceDescription xml:lang="en">...</md:ServiceDescription>
  <!-- SAML V2.0 attribute syntax -->
  <md:RequestedAttribute isRequired="true"
    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"
    FriendlyName="eduPersonPrincipalName"/>
  <md:RequestedAttribute
    NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri"
    Name="urn:oid:2.16.840.1.113730.3.1.241"
    FriendlyName="displayName"/>
</md:AttributeConsumingService>
```

Note that **one** `<md:RequestedAttribute>` element is inserted into metadata for every attribute selected from the interface. Each `<md:RequestedAttribute>` element inserted into metadata is a SAML2-formatted attribute. SAML1-formatted `<md:RequestedAttribute>` elements in metadata are not supported.



#### The isRequired XML Attribute

In the above example, note that the (optional) `isRequired` XML attribute is included on one of the `<md:RequestedAttribute>` elements but omitted from the other. This is just an example. You, the deployer, must decide whether or not to include the `isRequired` XML attribute on any `<md:RequestedAttribute>` elements in metadata.

The `<md:ServiceName>` and `<md:ServiceDescription>` child elements of the `<md:AttributeConsumingService>` element correspond to the `<mdui:DisplayName>` and `<mdui:Description>` child elements of the `<mdui:UIInfo>` element, respectively. The administrator enters a single pair of values that the software synchronizes across both pairs of elements. See the [User Interface Elements](#) topic for more detail about the `<mdui:UIInfo>` element.

## Software Support

[uApprove 2.2](#) (and later) consumes the `<md:AttributeConsumingService>` element (containing `<md:RequestedAttribute>` elements) in SP metadata. The requested attributes in metadata are displayed to the user on the consent page.