
Requests for Multiple Resources for XACML 2.0:

Modifications to the XACML 2.0 specification if XACML Profile for Requests for Multiple Resources is approved.

Coordinated with

- XACML Profile for Requests for Multiple Resources, Working Draft 02, 4 June 2004, and
- **eXtensible Access Control Markup Language (XACML) Version 2.0**, Working draft 11, 14 May 2004

Questions:

1. Do we want to add a **non-normative section on “Profiles”**, in which we could describe all the currently available profiles and their scopes? I think this might be useful, but there is the problem that Profiles will not necessarily become standards on the same schedule as XACML 2.0.

3.6 Identifiers

[Remove ?:]

urn:oasis:names:tc:xacml:1.0:resource:scope

4.1.1 Example policy

[Change ?:]

There can be only one `<Resource>` per *decision request*.

To:]

There can be only one `<Resource>` per *decision request*¹

[Add footnote:]

1. Some exceptions are described in the XACML Profile for Requests for Multiple Resources [MULT].

6.1 Element `<Request>`

[Change:]

The `<Request>` element contains `<Subject>`, `<Resource>`, `<Action>` and `<Environment>` elements. There may be multiple `<Subject>` elements.

To:]

The `<Request>` element contains `<Subject>`, `<Resource>`, `<Action>` and `<Environment>` elements. There may be multiple `<Subject>` elements, and, under some conditions, multiple `<Resource>` elements¹.

[Change, both here and in schema:

```
context:Resource"/>
```

```
<xs:element ref="xacml-
```

To:]

```
context:Resource" minOccurs="unbounded"/>
```

```
<xs:element ref="xacml-
```

[Change:]

<Resource> [Required]

Specifies information about the **resource** for which **access** is being requested by listing a sequence of <Attribute> elements associated with the **resource**. It MAY include a <ResourceContent> element.

To:]

<Resource> [One to Many]

Specifies information about the **resource** or **resources**¹ for which **access** is being requested by listing a sequence of <Attribute> elements associated with the **resource**. It MAY include a <ResourceContent> element.

[Add footnote:]

1. The conditions under which multiple <Resource> elements are allowed are described in the XACML Profile for Requests for Multiple Resources [MULT].

6.3 Element <Resource>

[Change:]

The <Resource> element MUST contain no more than one <Attribute> with an AttributeId of “urn:oasis:names:tc:xacml:1.0:resource:resource-id”.

To:]

The <Resource> element MAY contain more than one <Attribute> with an AttributeId of “urn:oasis:names:tc:xacml:1.0:resource:resource-id”, but all such <Attribute>s SHALL represent alternative normative names for the same single resource.

6.9 Element <Response>

[Change:]

The <Response> element encapsulates the **authorization decision** produced by the **PDP**. It includes a sequence of one or more results, with one <Result> element per requested **resource**. Multiple results MAY be returned when the value of the “urn:oasis:xacml:2.0:resource:scope” resource **attribute** in the request **context** is “Descendants” or “Children”. Support for multiple results is OPTIONAL.

To:]

The <Response> element encapsulates the **authorization decision** produced by the **PDP**. It includes a sequence of one or more results, with one <Result> element per requested **resource**. Multiple results MAY be returned by some implementations, in particular those that support the XACML Profile for Requests for Multiple Resources [MULT]. Support for multiple results is OPTIONAL.

7.12 Hierarchical Resources

[Replace entire section with:]

It is often the case that a **resource** is organized as a hierarchy (e.g. file system, XML document). XACML provides several optional mechanisms for supporting hierarchical resources. These are described in the XACML Profile for Hierarchical Resources [HIER] and in the XACML Profile for Requests for Multiple Resources [MULT]

11.0 References

[add]

[MULT] A. Anderson, ed., *XACML Profile for Requests for Multiple Resources*, OASIS XACML TC, Working Draft 02, 4 June 2004, <http://www.oasis-open.org/committees/xacml>.

[HIER] A. Anderson, ed., *XACML Profile for Hierarchical Resources*, OASIS XACML TC, Working Draft 04, 3 June 2004, <http://www.oasis-open.org/committees/xacml>.

B.6 Resource attributes

[Remove ?:]

This identifier indicates that the **resource** is specified by an XPath expression.

`urn:oasis:names:tc:xacml:1.0:resource:xpath`

[Remove ?:]

This identifier indicates the scope of the **resource**, as described in Section 7.12.

`urn:oasis:names:tc:xacml:1.0:resource:scope`

The allowed value for this attribute is of data-type

“`http://www.w3.org/2001/XMLSchema#string`”, and is either "Immediate", "Children" or "Descendants".