



# XACML 3.0 Export Compliance-US (EC-US) Profile Version 1.0

## OASIS Standard

19 January 2015

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### Related work:

This specification is related to:

- *eXtensible Access Control Markup Language (XACML) Version 3.0*. Edited by Erik Rissanen. Latest version. <http://docs.oasis-open.org/xacml/3.0/xacml-3.0-core-spec-en.html>.

### Abstract:

This specification defines a profile for the use of XACML in expressing policies for complying with USA government regulations for export compliance (EC). It defines standard attribute identifiers useful in such policies, and recommends attribute value ranges for certain attributes.

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# 1 Introduction

## {non-normative}

This specification defines a profile for the use of the OASIS eXtensible Access Control Markup Language (XACML) [XACML] to write policies that reflect the intent of United States government, particularly the Department of Commerce export compliance (EC) laws and regulations. Use of this profile requires no changes or extensions to the [XACML] standard.

This specification begins with a non-normative discussion of the topics of interest in this profile. The normative section of the specification describes the attributes defined by this profile and provides recommended usage patterns for attribute values.

This specification assumes the reader is somewhat familiar with XACML. A brief overview sufficient to understand these examples is available in [XACMLIntro]. Information about USA government export laws and regulations can be found at [BIS] and [DDTC].

Any U.S. organization that ships goods, materials, software, and/or technical information may be subject to U.S. export control laws. Non-military products may be classified according to the U.S. Department of Commerce "Commerce Control List". Military products are controlled according to the United States Munitions List. Destination countries are also classified by a variety of criteria. Even specific entities and individuals may have restrictions. The recipient's U.S. person status, location, and organization must also be taken into account in these export control authorization decisions.

This EC-US profile provides a standard framework for the subject and resource attributes that must be considered for U.S. export control decisions.

## 1.1 Glossary

### Authority-to-export

A legal agreement authorizing exports. An export license is an example of an authorization document between the authoritative agency and an organization which has requested an exception to allow exports to otherwise prohibited locations. "NLR" (No License Required) indicates that no export license is required for the export of the item in question.

### CCL, Commerce Control List

Regulations that define the geopolitical restrictions on goods and services covered by *EAR*.

### Country

A national political administrative unit recognized, for diplomatic and trade purposes, by the US government.

### Current nationality

For any person, the *current nationality* is the *country* that most recently granted citizenship to that person.

### EAR

Export Administration Regulations, US laws and regulations administered by the Department of Commerce.

### ECCN

Export Control Classification Number, a classification system for data and products covered by *EAR*.

### Effective date

The date on which an authorization document or export license takes effect, thereby implying access for authorized purposes.

### Expiration date

45 The date on which an authorization document or export license expires, thereby terminating  
46 access.

#### 47 **ITAR**

48 International Traffic in Arms Regulations; USA laws and regulations administered by the  
49 Department of State.

#### 50 **Jurisdiction**

51 The US department which governs the applicable export regulations: either Department of  
52 Commerce for EAR or Department of State for ITAR.

#### 53 **Location**

54 The **country** in which a person is currently located.

#### 55 **Nationality**

56 A country of which a person is a citizen.

#### 57 **Organization**

58 A company or other legal entity of which a person can be an employee or agent.

#### 59 **USML**

60 United States Munitions List, a classification system for data and products covered by **ITAR**.

#### 61 **US Person**

62 A designation that a person meets the requirements to be considered exempt from most US  
63 government export regulations.

#### 64 **Work effort**

65 This attribute can be used to indicate the specific work effort, statement of work, project, or  
66 program which is associated with the export-controlled resource. This attribute provides  
67 additional granularity to limit access to users within organizations to those with a specific need to  
68 know for a given work effort.

## 69 **1.2 Terminology**

70 The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD  
71 NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this document are to be interpreted as described  
72 in [RFC2119].

## 73 **1.3 Normative References**

- 74 **[RFC2119]** S. Bradner, *Key words for use in RFCs to Indicate Requirement Levels*,  
75 <http://www.ietf.org/rfc/rfc2119.txt>, IETF RFC 2119, March 1997.
- 76 **[XACML]** OASIS, Committee Draft 02, 21 January 2010, *eXtensible Access Control*  
77 *Markup Language (XACML) Version 3.0*, [http://docs.oasis-](http://docs.oasis-open.org/xacml/3.0/xacml-3.0-core-spec-cd-04-en.doc)  
78 [open.org/xacml/3.0/xacml-3.0-core-spec-cd-04-en.doc](http://docs.oasis-open.org/xacml/3.0/xacml-3.0-core-spec-cd-04-en.doc).

## 79 **1.4 Non-Normative References**

- 80 **[BIS]** US Department of Commerce Bureau of Industry and Security,  
81 <http://www.bis.doc.gov/>.
- 82 **[DDTC]** US Department of State Directorate of Defense Trade Controls,  
83 <http://www.pmdtc.state.gov/>.
- 84 **[ISO3166]** ISO 3166 Maintenance agency (ISO 3166/MA),  
85 [http://www.iso.org/iso/country\\_codes.htm](http://www.iso.org/iso/country_codes.htm).

86        **[XACMLIntro]**        OASIS XACML TC, *A Brief Introduction to XACML*, 14 March 2003,  
87        [http://www.oasis-](http://www.oasis-open.org/committees/download.php/2713/Brief_Introduction_to_XACML.html)  
88        [open.org/committees/download.php/2713/Brief\\_Introduction\\_to\\_XACML.html](http://www.oasis-open.org/committees/download.php/2713/Brief_Introduction_to_XACML.html).

## 89    **1.5 Scope**

90    Many export compliance decisions can be made on the basis of the subject's **location, organization**, and  
91    **nationalities** (including country of birth) or **current nationality**, and the resource's **ECCN** or **USML**  
92    classification. This profile defines standard XACML attributes for these properties, and recommends the  
93    use of standardized attribute values.

94    In practice, an organization's export compliance policies will be a mixture of rules derived from US  
95    government laws and regulations, along with enterprise-specific rules derived from government-approved  
96    bilateral or multilateral agreements with foreign organizations.

## 97    **1.6 Disclaimer**

98    NOTHING IN THIS PROFILE IS INTENDED TO BE A LEGALLY CORRECT INTERPRETATION OR  
99    APPLICATION OF US GOVERNMENT EXPORT LAWS OR REGULATIONS. USE OF THIS PROFILE IN  
100    AN ACCESS CONTROL SYSTEM DOES NOT CONSTITUTE COMPLIANCE WITH US EXPORT  
101    RESTRICTIONS. THIS PROFILE HAS NOT BEEN REVIEWED OR ENDORSED BY THE US  
102    GOVERNMENT AGENCIES RESPONSIBLE FOR ENFORCING USA EXPORT LAWS, NOR BY ANY  
103    LEGAL EXPERT IN THIS FIELD.

104    Organizations that use this profile should ensure their export compliance by consulting the resources at  
105    **[BIS]** and **[DDTC]**, and by engaging qualified professional legal services.

---

## 106 2 Profile

### 107 2.1 Resource Attributes

#### 108 2.1.1 Jurisdiction

109 To identify whether a resource is controlled under **[ITAR]** or **[EAR]**, the following attribute identifier shall  
110 be used:

111 `urn:oasis:names:tc:xacml:3.0:ec-us:resource:jurisdiction`

112 The `Data Type` of this attribute is `http://www.w3.org/2001/XMLSchema#string`. The value of the  
113 attribute SHALL be “ITAR” or “EAR”.

#### 114 2.1.2 ECCN

115 ECCN classification values shall be designated with the following attribute identifier:

116 `urn:oasis:names:tc:xacml:3.0:ec-us:resource:eccn`

117 The `Data Type` of this attribute is `http://www.w3.org/2001/XMLSchema#string`.

118 The attribute value (or pattern) used in equality or matching comparisons (in **policies**), and the attribute  
119 values used in the **decision context** SHALL conform to the following requirements:

- 120 • The base ECCN classification shall be 5 characters with upper-case letters.

121 `9A120`

- 122 • Subclassification levels may be used, corresponding to the subparagraph labels in the **CCL**. The  
123 subclassification designators shall be delimited with dots (“.”).

124 `3A001.b.1.a.4.c`

- 125 • Items without an ECCN may be identified as “EAR99”.
- 126 • All comparisons shall be case-sensitive.

#### 127 2.1.3 USML

128 USML classification values shall be designated with the following attribute identifier:

129 `urn:oasis:names:tc:xacml:3.0:ec-us:resource:usml`

130 The `Data Type` of this attribute is `http://www.w3.org/2001/XMLSchema#string`.

131 The attribute value (or pattern) used in equality or matching comparisons (in **policies**), and the attribute  
132 values used in the **decision context** SHALL conform to the following requirements:

- 133 • The minimal value (or pattern) shall consist of an upper-case roman numeral (in the range specified  
134 by the **USML**), followed by a balanced set of parentheses containing a single lower-case letter.

135 `VIII (i)`

- 136 • Additional balanced parentheses may be appended to the minimal value (or pattern), corresponding  
137 to subparagraph designations in the **USML**.

138 `V (b) (7) (c) (2)`

- 139 • All comparisons shall be case-sensitive.

#### 140 2.1.4 Authority-to-export

141 Authorization-document values shall be designated with the following attribute identifier:

142 `urn:oasis:names:tc:xacml:3.0:ec-us:resource:authority-to-export`

143 The `Data Type` of this attribute is `http://www.w3.org/2001/XMLSchema#string`.



144 Authority-to-export values may include “EAR99”, “NLR” (No License Required), or the type of license as  
145 well as license numbers for tracking. Examples of license types include TAA (Technical Assistance  
146 Agreement, a type of ITAR license), MLA (Manufacturing License Agreement, a type of ITAR license), or  
147 EAR. Examples of attribute values could be TA1234-56 or AG1234-56.

## 148 2.1.5 Effective-Date

149 Effective-date values shall be designated with the following attribute identifier:

150 `urn:oasis:names:tc:xacml:3.0:ec-us:resource:effective-date`

151 The `DataType` of this attribute is <http://www.w3.org/2001/XMLSchema#date>.

152 This attribute can be used to indicate the date on which an export license takes effect, thereby implying  
153 access for authorized purposes.

## 154 2.1.6 Expiration-Date

155 Expiration-date values shall be designated with the following attribute identifier:

156 `urn:oasis:names:tc:xacml:3.0:ec-us:resource:expiration-date`

157 The `DataType` of this attribute is <http://www.w3.org/2001/XMLSchema#date>.

158 The date on which an export license expires, thereby terminating access.

## 159 2.1.7 Work-effort

160 Work-effort values shall be designated with the following attribute identifier:

161 `urn:oasis:names:tc:xacml:3.0:ec-us:resource:work-effort`

162 The `DataType` of this attribute is <http://www.w3.org/2001/XMLSchema#string>.

163 This attribute can be used to indicate the specific work effort, statement of work, project, or program  
164 which is associated with the export-controlled resource. This attribute provides additional granularity to  
165 limit access to users within organizations to those with a specific need to know for a given work effort.

## 166 2.2 Subject Attributes

### 167 2.2.1 Nationality

168 Nationality values applicable to a subject SHALL be designated with the following attribute identifier:

169 `urn:oasis:names:tc:xacml:3.0:ec-us:subject:nationality`

170 The `DataType` of this attribute is <http://www.w3.org/2001/XMLSchema#string>. The value of this  
171 attribute MUST be in the range of 2-letter country codes defined by **[ISO3166]**.

172 A request context may have several instances of this attribute to reflect multiple citizenships held by a  
173 subject. Nationality must include country of birth if different from other nationalities held by the subject.

### 174 2.2.2 Current nationality

175 The most recent nationality value applicable to a subject SHALL be designated with the following attribute  
176 identifier:

177 `urn:oasis:names:tc:xacml:3.0:ec-us:subject:current-nationality`

178 The `DataType` of this attribute is <http://www.w3.org/2001/XMLSchema#string>. The value of this  
179 attribute MUST be in the range of 2-letter country codes defined by **[ISO3166]**.

### 180 2.2.3 Location

181 The current geographical location of a subject SHALL be designated with the following attribute identifier:

182 `urn:oasis:names:tc:xacml:3.0:ec-us:subject:location`

183 The `DataType` of this attribute is `http://www.w3.org/2001/XMLSchema#string`. The value of this  
184 attribute **MUST** be in the range of 2-letter country codes defined by **[ISO3166]**.

## 185 **2.2.4 Organization**

186 The organization of which the subject is an employee or agent **SHALL** be designated with the following  
187 attribute identifier:

188 `urn:oasis:names:tc:xacml:3.0:ec-us:subject:organization`

189 The `DataType` of this attribute is `http://www.w3.org/2001/XMLSchema#string`.

190

191 Organization shall denote the organization to which the subject in the request belongs. A common  
192 scheme such as DUNS **SHOULD** be used to promote interoperability.

## 193 **2.2.5 US Person**

194 The following attribute identifier **SHALL** be used to designate a subject's status as a **US person**:

195 `urn:oasis:names:tc:xacml:3.0:ec-us:subject:us-person`

196 The `DataType` of this attribute is `http://www.w3.org/2001/XMLSchema#boolean`.

---

## 197 **3 Identifiers**

198 This profile defines the following URN identifiers.

### 199 **3.1 Profile Identifier**

200 The following identifier SHALL be used as the identifier for this profile when an identifier in the form of a  
201 URI is required.

202 `urn:oasis:names:tc:xacml:3.0:profiles:ec-us`

203

---

## 204 4 Examples (non-normative)

205 This section contains two examples illustrating the use of the attribute IDs defined by this profile.

206 The following entity definitions are used in these examples

```
207 <!ENTITY ec-us-subj "urn:oasis:names:tc:xacml:3.0:ec-us:subject:">
208 <!ENTITY ec-us-res "urn:oasis:names:tc:xacml:3.0:ec-us:resource:">
209 <!ENTITY func10 "urn:oasis:names:tc:xacml:1.0:function:">
210 <!ENTITY resource_category
211 "urn:oasis:names:tc:xacml:3.0:attribute-category:resource">
212 <!ENTITY subject_category
213 "urn:oasis:names:tc:xacml:1.0:subject-category:access-subject">
214 <!ENTITY xacml-res "urn:oasis:names:tc:xacml:1.0:resource:">
215 <!ENTITY xs "http://www.w3.org/2001/XMLSchema#">
216 <!ENTITY rca "urn:oasis:names:tc:xacml:1.0:rule-combining-algorithm:">
```

217 Some required attributes, not essential for understanding, are omitted from the examples.

### 218 4.1 Commerce Control List rule

219 This illustrates one way to implement a rule for an **ECCN** as defined in the **CCL**. In English

220 *Deny access to persons and locations in the anti-terrorism (AT1) and non-proliferation (NP1) country lists*  
221 *if the resource has **ECCN** starting with "3A980".*

```
222 [a1] <Policy
223 [a2]   xmlns="urn:oasis:names:tc:xacml:3.0:core:schema:wd-17"
224 [a3]   PolicyId="urn:oasis:names:tc:xacml:3.0:ec-us:example:CCL"
225 [a4]   RuleCombiningAlgId="&rca;first-applicable"
226 [a5]   Version="1.0">
227 [a6]   <Description>Simple rule for one ECCN.</Description>
228 [a7]   <Target/>
229 [a8]   <VariableDefinition VariableId="AT1">
230 [a9]     <Apply FunctionId="&func10;any-of-any">
231 [a10]       <Function FunctionId="&func10;string-equal"/>
232 [a11]       <Apply FunctionId="&func10;string-union">
233 [a12]         <AttributeDesignator
234 [a13]           AttributeId="&ec-us-subj;current-nationality"
235 [a14]           Category="&subject_category;"
236 [a15]           DataType="&xs:string"
237 [a16]           MustBePresent="false"/>
238 [a17]         <AttributeDesignator
239 [a18]           AttributeId="&ec-us-subj;location"
240 [a19]           Category="&subject_category;"
241 [a20]           DataType="&xs:string"
242 [a21]           MustBePresent="false"/>
243 [a22]       </Apply>
244 [a23]     <Apply FunctionId="&func10;string-bag">
245 [a24]       <AttributeValue DataType="&xs:string">SD</AttributeValue>
246 [a25]       <AttributeValue DataType="&xs:string">SY</AttributeValue>
247 [a26]     </Apply>
248 [a27]   </VariableDefinition>
249 [a28]   <VariableDefinition VariableId="NP1">
250 [a29]     <Apply FunctionId="&func10;any-of-any">
251 [a30]       <Function FunctionId="&func10;string-equal"/>
252 [a31]       <Apply FunctionId="&func10;string-union">
253 [a32]         <AttributeDesignator
254 [a33]           AttributeId="&ec-us-subj;current-nationality"
255 [a34]           Category="&subject_category;"
256 [a35]           DataType="&xs:string"
257 [a36]           MustBePresent="false"/>
258 [a37]       </Apply>
```

```

259 [a38]         <AttributeDesignator
260 [a39]             AttributeId="&ec-us-subj;location"
261 [a40]             Category="&subject_category;"
262 [a41]             DataType="&xs:string"
263 [a42]             MustBePresent="false"/>
264 [a43]         </Apply>
265 [a44]         <Apply FunctionId="&func10;string-bag">
266 [a45]             <AttributeValue DataType="&xs:string">IR</AttributeValue>
267 [a46]             <AttributeValue DataType="&xs:string">PK</AttributeValue>
268 [a47]         </Apply>
269 [a48]     </Apply>
270 [a49] </VariableDefinition>
271 [a50] <Rule Effect="Deny" RuleId="3A980">
272 [a51]     <Description>
273 [a52]         Voice print identification and analysis equipment and parts"
274 [a53]     </Description>
275 [a54]     <Target>
276 [a55]         <AnyOf>
277 [a56]             <AllOf>
278 [a57]                 <Match MatchId="&func10;string-regexp-match">
279 [a58]                     <AttributeValue DataType="&xs:string">^3A980.*</AttributeValue>
280 [a59]                     <AttributeDesignator
281 [a60]                         AttributeId="&ec-us-res;eccn"
282 [a61]                         Category="&resource_category;"
283 [a62]                         DataType="&xs:string"
284 [a63]                         MustBePresent="false"/>
285 [a64]                     </Match>
286 [a65]                 </AllOf>
287 [a66]             </AnyOf>
288 [a67]     </Target>
289 [a68]     <Condition>
290 [a69]         <Apply FunctionId="&func10;or">
291 [a70]             <VariableReference VariableId="AT1"/>
292 [a71]             <VariableReference VariableId="NP1"/>
293 [a72]         </Apply>
294 [a73]     </Condition>
295 [a74] </Rule>
296 [a75] </Policy>

```

297 [a8-a28] Define a variable that returns true if the subject's `current-nationality` or `location` is "SD"  
298 or "SY". These are the countries listed under the anti-terrorism reason for control in the **CCL**.

299 [a29-a49] Define another variable to check if `current-nationality` or `location` is in the group of  
300 countries controlled for nuclear non-proliferation.

301 NOTE: In a real policy, it would be convenient to define variables corresponding to each  
302 "reason for control" in the CCL. This example only refers to 2 such variables.

303 [a50] Define a rule that applies to resources with an **ECCN** classification (`eccn`) of "3A980".

304 [a68-a73] Test if subject has a `current-nationality` or `location` that is controlled for this  
305 classification.

306 NOTE: A real policy could have rules for every **ECCN** classification used in the enterprise  
307 (or defined by **[BIS]**).

## 308 4.2 State Department agreement

309 This illustrates one way to write a XACML policy to implement an export authorization. In English:

310 *Employees of BrazilEnterprise and employees of CanadianEnterprise who have no other nationality*  
311 *attributes than "CA" or BR" are permitted to view resources identified with an "EXP" suffix that are*  
312 *classified as "ITAR" and have USML code "VIII(h)".*

313 The (fictional) authorizing document is a Technical Assistance Agreement (TAA) identified as "TA-XYZ-  
314 00".

```

315 [b1] <Policy
316 [b2]   xmlns="urn:oasis:names:tc:xacml:3.0:core:schema:wd-17"
317 [b3]   PolicyId="TA-XYZ-00"
318 [b4]   RuleCombiningAlgId="&rca;first-applicable"
319 [b5]   Version="1.0">
320 [b6]   <Description>
321 [b7]     Permit exports to Canadian and Brazilian partners.
322 [b8]   </Description>
323 [b9]   <Target>
324 [b10]     <AnyOf>
325 [b11]       <AllOf>
326 [b12]         <Match MatchId="&func10;string-regexp-match">
327 [b13]           <AttributeValue DataType="&xs:string">EXP$</AttributeValue>
328 [b14]           <AttributeDesignator
329 [b15]             AttributeId="&xacml-res;resource-id"
330 [b16]             Category="&resource_category;"
331 [b17]             DataType="&xs:string"
332 [b18]             MustBePresent="false"/>
333 [b19]         </Match>
334 [b20]         <Match MatchId="&func10;string-equal">
335 [b21]           <AttributeValue DataType="&xs:string">ITAR</AttributeValue>
336 [b22]           <AttributeDesignator
337 [b23]             AttributeId="&ec-us-res;jurisdiction"
338 [b24]             Category="&resource_category;"
339 [b25]             DataType="&xs:string"
340 [b26]             MustBePresent="false"/>
341 [b27]         </Match>
342 [b28]       </AllOf>
343 [b29]     </AnyOf>
344 [b30]     <AnyOf>
345 [b31]       <AllOf>
346 [b32]         <Match MatchId="&func10;string-equal">
347 [b33]           <AttributeValue DataType="&xs:string"
348 [b34]             >BrazilEnterprise</AttributeValue>
349 [b35]           <AttributeDesignator
350 [b36]             AttributeId="&ec-us-subj;organization"
351 [b37]             Category="&subject_category;"
352 [b38]             DataType="&xs:string"
353 [b39]             MustBePresent="false"/>
354 [b40]         </Match>
355 [b41]       </AllOf>
356 [b42]     <AllOf>
357 [b43]       <Match MatchId="&func10;string-equal">
358 [b44]         <AttributeValue DataType="&xs:string"
359 [b45]           >CanadianEnterprise</AttributeValue>
360 [b46]         <AttributeDesignator
361 [b47]           AttributeId="&ec-us-subj;organization"
362 [b48]           Category="&subject_category;"
363 [b49]           DataType="&xs:string"
364 [b50]           MustBePresent="false"/>
365 [b51]       </Match>
366 [b52]     </AllOf>
367 [b53]   </AnyOf>
368 [b54] </Target>
369 [b55] <VariableDefinition VariableId="TA-XYZ-00-nationalities">
370 [b56]   <Apply FunctionId="&func10;string-subset">
371 [b57]     <AttributeDesignator
372 [b58]       AttributeId="&ec-us-subj;nationality"
373 [b59]       Category="&subject_category;"
374 [b60]       DataType="&xs:string"
375 [b61]       MustBePresent="false"/>
376 [b62]   <Apply FunctionId="&func10;string-bag">
377 [b63]     <AttributeValue DataType="&xs:string">BR</AttributeValue>
378 [b64]     <AttributeValue DataType="&xs:string">CA</AttributeValue>

```

```

379 [b65]         </Apply>
380 [b66]         </Apply>
381 [b67]         </VariableDefinition>
382 [b68]         <Rule Effect="Permit" RuleId="permit-TA-XYZ-00">
383 [b69]           <Target>
384 [b70]             <AnyOf>
385 [b71]               <AllOf>
386 [b72]                 <Match MatchId="&func10;string-equal">
387 [b73]                   <AttributeValue DataType="&xs:string"
388 [b74]                     >VIII(h)</AttributeValue>
389 [b75]                   <AttributeDesignator
390 [b76]                     AttributeId="&ec-us-res;usml"
391 [b77]                     Category="&resource_category;"
392 [b78]                     DataType="&xs:string"
393 [b79]                     MustBePresent="false"/>
394 [b80]                 </Match>
395 [b81]               </AllOf>
396 [b82]             </AnyOf>
397 [b83]           </Target>
398 [b84]           <Condition>
399 [b85]             <VariableReference VariableId="TA-XYZ-00-nationalities"/>
400 [b86]           </Condition>
401 [b87]         </Rule>
402 [b88]       </Policy>

```

403 [b10-b29] This policy applies to resources with `resource-id` ending in “EXP” that have jurisdiction  
404 equal to “ITAR”.

405 [b30-b53] This policy applies to subjects who work for (have `organization` attribute) of  
406 “BrazilianEnterprise” or “CanadianEnterprise”.

407 [b55-b67] Define a variable to test that all `nationality` values are in the set (“BR”, “CA”).

408 [b68-b87] Define a rule that permits access if the `usml` is “VIII(h)” and the subject’s `nationality` values  
409 are all in the specified set.

410 NOTE: For correct evaluation, the request context must contain the complete set of  
411 nationality values (including country of birth) for the subject.

---

## 412 5 Conformance

413 Conformance to this profile is defined for *policies* and *requests* generated and transmitted within and  
414 between XACML systems.

### 415 5.1 Attribute Identifiers

416 Conformant XACML *policies* and *requests* SHALL use the attribute identifiers defined in Section 2 for  
417 their specified purpose, and SHALL NOT use any other identifiers for the purposes defined by attributes  
418 in this profile. The following table lists the attributes that must be supported.

419 Note: “M” is mandatory “O” is optional.

420

Identifiers	
urn:oasis:names:tc:xacml:3.0:ec-us:resource:jurisdiction	M
urn:oasis:names:tc:xacml:3.0:ec-us:resource:eccn	M
urn:oasis:names:tc:xacml:3.0:ec-us:resource:usml	M
urn:oasis:names:tc:xacml:3.0:ec-us:resource:authority-to-export	M
urn:oasis:names:tc:xacml:3.0:ec-us:resource:effective-date	M
urn:oasis:names:tc:xacml:3.0:ec-us:resource:expiration-date	M
urn:oasis:names:tc:xacml:3.0:ec-us:resource:work-effort	M
urn:oasis:names:tc:xacml:3.0:ec-us:subject:nationality	M
urn:oasis:names:tc:xacml:3.0:ec-us:subject:current-nationality	M
urn:oasis:names:tc:xacml:3.0:ec-us:subject:organization	M
urn:oasis:names:tc:xacml:3.0:ec-us:subject:us-person	M
urn:oasis:names:tc:xacml:3.0:ec-us:subject:location	M

421

### 422 5.2 Attribute Values

423 Conformant XACML *policies* and *requests* SHALL use attribute values in the specified range or patterns  
424 as defined for each attribute in Section 2 (when a range or pattern is specified).



425 NOTE: In order to process conformant XACML *policies* and *requests* correctly, *PIP* and  
426 *PEP* modules may have to translate native data values into the datatypes and formats  
427 specified in this profile.

428

## Appendix A. Acknowledgements

429 The following individuals have participated in the creation of this specification and are gratefully  
430 acknowledged:

431 **Participants:**

432 John Tolbert, The Boeing Company

433 Paul Tyson, Bell Helicopter Textron

434 Richard Hill, The Boeing Company

435

436 **Committee members during profile development:**

---

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437

## Appendix B. Revision History

438

Revision	Date	Editor	Changes Made
WD 1	4/17/2009	John Tolbert	Initial draft
WD 2	6/2/2009	John Tolbert	Added descriptions and conformance section
CD 1	7/2/2009	John Tolbert/Paul Tyson	Annotated examples
CD 2	9/2/2009	Paul Tyson	Add conformance table
CD3	2/11/2010	Paul Tyson	Updated table of contents
WD3	11/28/2012	John Tolbert	Changed "Classification" to "Jurisdiction", added "License" as a resource attribute, and updated membership list.
WD4	6/4/2012	John Tolbert/Paul Tyson/Richard Hill	Changed "License" to "Authorization-document", and added "Effective-date" and "Expiration-date". Added DataType to ECCN, USML, and Organization attributes. Updated examples.
CSD5	12/13/2012	John Tolbert/Richard Hill	Changed "Authorization-document" to "Authority-to-export", added "Work-effort" as resource attribute.

439