



CHANGE REQUEST

Title: Modifications for Forward Compatibility for OMA DRM 2.1 REL Public OMA Confidential
To: OMA BAC DLDRM
Doc to Change: OMA_DD2_1.xsd
Submission Date: <13 Dec 2006>
Classification: 0: New Functionality
 1: Major Change
 2: Bug Fix
 3: Clerical
Source: Koen Vrielink, Philips, koen.vrielink@philips.com
Replaces: n/a



1 Reason for Change

For background information also see:
http://www.openmobilealliance.org/ftp/Public_documents/BAC/DLDRM/2006/OMA-DLDRM-2006-0345R02-INP_ROAP_Schema_Versioning__Continued.zip

New versions of OMA DRM are currently being defined. These new versions will typically add functionality to OMA DRM 2.1 also by extending ROAP, the ProtectRO and the REL.

Devices that implement OMA DRM 2.1 may encounter some of these extensions, because:

1. a (domain) protectedRO is received (out-of-band) from a Device of a newer OMA DRM version.
2. An RI chooses a newer protocol, assuming the Device will disregard the newer extensions.

The OMA DRM 2.0 REL is based on ODRL, extends it with some new OMA specific elements and then defines a subset of the elements actually used. OMA DRM 2.1 does not define additional OMA specific element but does extend the ODRL subset that it used. Consequently the REL of OMA DRM 2.1 RO's will validate against the 2.0 schema and the 2.0 specification adequately specifies how to handle unknown or unsupported element.

However other work-items are defining new OMA specific elements that will not validate against the 2.0 or 2.1 schema without additional measures. This CR proposes additions to the OMA DRM REL schema that enable future additions that will validate against the 2.1 schema.

USE OF THIS DOCUMENT BY NON-OMA MEMBERS IS SUBJECT TO ALL OF THE TERMS AND CONDITIONS OF THE USE AGREEMENT (located at <http://www.openmobilealliance.org/UseAgreement.html>) AND IF YOU HAVE NOT AGREED TO THE TERMS OF THE USE AGREEMENT, YOU DO NOT HAVE THE RIGHT TO USE, COPY OR DISTRIBUTE THIS DOCUMENT.
THIS DOCUMENT IS PROVIDED ON AN "AS IS" "AS AVAILABLE" AND "WITH ALL FAULTS" BASIS.

2 Impact on Backward Compatibility

This proposal has been carefully tuned to be maximally compatible with OMA DRM 2.0; However, OMA DRM 2.0 itself is not fully clear on its forward compatibility; This has been clarified with an appendix on forward compatibility in version 2.0.1 per CR 2006-0406R01

3 Impact on Other Specifications

None

4 Intellectual Property Rights

Members and their Affiliates (collectively, "Members") agree to use their reasonable endeavours to inform timely the Open Mobile Alliance of Essential IPR as they become aware that the Essential IPR is related to the prepared or published Specification. This obligation does not imply an obligation on Members to conduct IPR searches. This duty is contained in the Open Mobile Alliance application form to which each Member's attention is drawn. Members shall submit to the General Manager of Operations of OMA the IPR Statement and the IPR Licensing Declaration. These forms are available from OMA or online at the OMA website at www.openmobilealliance.org.

5 Recommendation

Accept the proposed changes.

6 Detailed Change Proposal

```
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:ds="http://www.w3.org/2000/09/xmldsig#" xmlns:o-ex="http://odrl.net/1.1/ODRL-EX" xmlns:o-
  dd="http://odrl.net/1.1/ODRL-DD" xmlns:oma-dd="http://www.openmobilealliance.com/oma-dd"
  targetNamespace="http://www.openmobilealliance.com/oma-dd" elementFormDefault="qualified"
  attributeFormDefault="qualified">
  <xsd:import namespace="http://odrl.net/1.1/ODRL-EX" schemaLocation="http://odrl.net/1.1/ODRL-EX-
  11.xsd"/>
  <xsd:element name="export" substitutionGroup="o-ex:permissionElement">
    <xsd:complexType>
      <xsd:complexContent>
        <xsd:extension base="o-ex:permissionType">
          <xsd:attribute name="mode" use="required">
            <xsd:simpleType>
              <xsd:restriction base="xsd:NMTOKEN">
                <xsd:enumeration value="move"/>
                <xsd:enumeration value="copy"/>
              </xsd:restriction>
            </xsd:simpleType>
          </xsd:attribute>
        </xsd:extension>
      </xsd:complexContent>
    </xsd:complexType>
  </xsd:element>
```

```
<xsd:element name="system" type="o-ex:constraintType" substitutionGroup="o-ex:constraintElement"/>
<xsd:element name="timed-count" substitutionGroup="o-ex:constraintElement">
<xsd:complexType>
<xsd:simpleContent>
<xsd:extension base="xsd:positiveInteger">
<xsd:attribute name="timer" type="xsd:positiveInteger" use="required"/>
</xsd:extension>
</xsd:simpleContent>
</xsd:complexType>
</xsd:element>

<xsd:element name="omaPermission" substitutionGroup="o-ex:permissionElement">
<xsd:complexType>
<xsd:complexContent>
<xsd:extension base="o-ex:permissionType">
<xsd:choice minOccurs="0" maxOccurs="unbounded">
<xsd:element name="extension" type="oma-dd:RELExtension" minOccurs="0"
maxOccurs="unbounded"/>
</xsd:choice>
<xsd:attribute name="type" use="required" type="xsd:string"/>
</xsd:extension>
</xsd:complexContent>
</xsd:complexType>
</xsd:element>

<xsd:element name="omaConstraint" substitutionGroup="o-ex:constraintElement">
<xsd:complexType>
<xsd:complexContent>
<xsd:extension base="o-ex:constraintType">
<xsd:choice minOccurs="0" maxOccurs="unbounded">
<xsd:element name="extension" type="oma-dd:RELExtension" minOccurs="0"
maxOccurs="unbounded"/>
</xsd:choice>
<xsd:attribute name="type" use="required" type="xsd:string"/>
</xsd:extension>
</xsd:complexContent>
</xsd:complexType>
</xsd:element>

<xsd:element name="omaRequirement" substitutionGroup="o-ex:requirementElement">
<xsd:complexType>
<xsd:complexContent>
<xsd:extension base="o-ex:requirementType">
<xsd:choice minOccurs="0" maxOccurs="unbounded">
<xsd:element name="extension" type="oma-dd:RELExtension" minOccurs="0"
maxOccurs="unbounded"/>
</xsd:choice>
<xsd:attribute name="type" use="required" type="xsd:string"/>
</xsd:extension>
</xsd:complexContent>
</xsd:complexType>
</xsd:element>

<xsd:complexType name="RELExtension">
<xsd:sequence>
<xsd:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
```

```
</xsd:sequence>
<xsd:attribute name="type" use="required" type="xsd:string"/>
</xsd:complexType>

</xsd:schema>
```