

# Mapping IDL Data Types to WSDL

In the table below, the following metasymbols and informal terms are used for the IDL.

- The metasymbols "[" and "]" surround optional lexical entities.
- The informal term *number* (or in some cases *number1*. *number2*) is a sequence of numeric characters, for example 123.

IDL Data Type	Description	XMM	WSDL
<i>A</i> number	Alphanumeric	string	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:string"&gt;       &lt;xsd:maxLength value="number"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre>
AV	Alphanumeric variable length	string	<code>&lt;xsd:element name="name" type="xsd:string"/&gt;</code>
AV[ <i>number</i> ]	Alphanumeric variable length with maximum length	string	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:string"&gt;       &lt;xsd:maxLength value="number"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre>
<i>B</i> number	Binary	binary	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:base64Binary"&gt;       &lt;xsd:length value="base64Length"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre> <p><b>Note:</b> <math>base64Length = 4 * \text{rounded up}(number / 3)</math></p>
BV	Binary variable length	binary	<code>&lt;xsd:element name="name" type="xsd:base64Binary"/&gt;</code>
BV[ <i>number</i> ]	Binary variable length with maximum length	binary	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:base64Binary"&gt;       &lt;xsd:maxLength value="base64Length"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre> <p><b>Note:</b> <math>base64Length = 4 * \text{rounded up}(number / 3)</math></p>
D	Date	date:yyyy-MM-dd	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:date"&gt;       &lt;xsd:pattern value="[0-9]{4}-([01-9] ([1012]) ([01-9]) ([12][0-9]) ([3011]))"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre>
F4	Floating point (small)	float	<code>&lt;xsd:element name="name" type="xsd:float"/&gt;</code>
F8	Floating point (large)	float	<code>&lt;xsd:element name="name" type="xsd:double"/&gt;</code>
I1	Integer (small)	integer	<code>&lt;xsd:element name="name" type="xsd:byte"/&gt;</code>
I2	Integer (medium)	integer	<code>&lt;xsd:element name="name" type="xsd:short"/&gt;</code>
I4	Integer (large)	integer	<code>&lt;xsd:element name="name" type="xsd:int"/&gt;</code>
<i>K</i> number	Kanji	string	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:string"&gt;       &lt;xsd:maxLength value="number"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre>
KV	Kanji variable length	string	<code>&lt;xsd:element name="name" type="xsd:string"/&gt;</code>
KV[ <i>number</i> ]	Kanji variable length with maximum length	string	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:string"&gt;       &lt;xsd:maxLength value="number"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre>
L	Logical	boolean	<code>&lt;xsd:element name="name" type="xsd:boolean"/&gt;</code>
<i>N</i> number1[. <i>number2</i> ]	Unpacked decimal	numeric	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:decimal"&gt;       &lt;xsd:totalDigits value="number1 + number2"/&gt;       &lt;xsd:fractionDigits value="number2"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre> <p><b>Note:</b> default of <i>number2</i> is 0.</p>

IDL Data Type	Description	XMM	WSDL
<code>NUnumber1[.number2]</code>	Unpacked decimal unsigned	numeric	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:decimal"&gt;       &lt;xsd:totalDigits value="number1 + number2"/&gt;       &lt;xsd:fractionDigits value="number2"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre> <p><b>Note:</b> default of <code>number2</code> is 0.</p>
<code>Pnumber1[.number2]</code>	Packed decimal	numeric	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:decimal"&gt;       &lt;xsd:totalDigits value="number1 + number2"/&gt;       &lt;xsd:fractionDigits value="number2"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre> <p><b>Note:</b> default of <code>number2</code> is 0.</p>
<code>PUnumber1[.number2]</code>	Packed decimal unsigned	numeric	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:decimal"&gt;       &lt;xsd:totalDigits value="number1 + number2"/&gt;       &lt;xsd:fractionDigits value="number2"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre> <p><b>Note:</b> default of <code>number2</code> is 0.</p>
<code>T</code>	Time	<code>dateTime:yyyy-MM-dd'TH:mm:ss</code>	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:dateTime"&gt;       &lt;xsd:pattern value="[0-9]{4}-((01 91) (11012))-(01 91) (12)[0-9] (3011)T((01)[0-9] (20-31)):(10-5)[0-9]{2}"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre>
<code>Uznumber</code>	Unicode	unicode	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:string"&gt;       &lt;xsd:maxLength value="number"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre>
<code>UV</code>	Unicode variable length	unicode	<pre>&lt;xsd:element name="name" type="xsd:string"/&gt;</pre>
<code>UVnumber</code>	Unicode variable length with maximum length	unicode	<pre>&lt;xsd:element name="name"&gt;   &lt;xsd:simpleType&gt;     &lt;xsd:restriction base="xsd:string"&gt;       &lt;xsd:maxLength value="number"/&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt;</pre>