

Mapping IDL Data Types to WSDL

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

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

IDL Data Type	Description	XMM	WSDL
<code>NUnumber1[.number2]</code>	Unpacked decimal unsigned	numeric	<pre><xsd:element name="name"> <xsd:simpleType> <xsd:restriction base="xsd:decimal"> <xsd:totalDigits value="number1 + number2"/> <xsd:fractionDigits value="number2"/> </xsd:restriction> </xsd:simpleType> </xsd:element></pre> <p>Note: default of <code>number2</code> is 0.</p>
<code>Pnumber1[.number2]</code>	Packed decimal	numeric	<pre><xsd:element name="name"> <xsd:simpleType> <xsd:restriction base="xsd:decimal"> <xsd:totalDigits value="number1 + number2"/> <xsd:fractionDigits value="number2"/> </xsd:restriction> </xsd:simpleType> </xsd:element></pre> <p>Note: default of <code>number2</code> is 0.</p>
<code>PUnumber1[.number2]</code>	Packed decimal unsigned	numeric	<pre><xsd:element name="name"> <xsd:simpleType> <xsd:restriction base="xsd:decimal"> <xsd:totalDigits value="number1 + number2"/> <xsd:fractionDigits value="number2"/> </xsd:restriction> </xsd:simpleType> </xsd:element></pre> <p>Note: default of <code>number2</code> is 0.</p>
<code>T</code>	Time	<code>dateTime:yyyy-MM-dd'T'H:mm:ss</code>	<pre><xsd:element name="name"> <xsd:simpleType> <xsd:restriction base="xsd:dateTime"> <xsd:pattern value="[0-9]{4}-((0[1-9]) (1[012]))-((0[1-9]) (12 [0-9]))((3[01])T ((0[1][0-9]) (2[0-3]))):([0-5][0-9]){2}"/> </xsd:restriction> </xsd:simpleType> </xsd:element></pre>
<code>Uznumber</code>	Unicode	unicode	<pre><xsd:element name="name"> <xsd:simpleType> <xsd:restriction base="xsd:string"> <xsd:maxLength value="number"/> </xsd:restriction> </xsd:simpleType> </xsd:element></pre>
<code>UV</code>	Unicode variable length	unicode	<pre><xsd:element name="name" type="xsd:string"/></pre>
<code>UVnumber</code>	Unicode variable length with maximum length	unicode	<pre><xsd:element name="name"> <xsd:simpleType> <xsd:restriction base="xsd:string"> <xsd:maxLength value="number"/> </xsd:restriction> </xsd:simpleType> </xsd:element></pre>