| | [**Overview**](http://docs.google.com/overview-summary.html) | **Package** | Class | [**Use**](http://docs.google.com/package-use.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV PACKAGE**](http://docs.google.com/javax/xml/bind/package-summary.html)   [**NEXT PACKAGE**](http://docs.google.com/javax/xml/bind/annotation/adapters/package-summary.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/bind/annotation/package-summary.html)    [**NO FRAMES**](http://docs.google.com/package-summary.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

## Package javax.xml.bind.annotation

Defines annotations for customizing Java program elements to XML Schema mapping.

**See:**

[**Description**](#3znysh7)

| **Interface Summary** | |
| --- | --- |
| [**DomHandler<ElementT,ResultT extends Result>**](http://docs.google.com/javax/xml/bind/annotation/DomHandler.html) | Converts an element (and its descendants) from/to DOM (or similar) representation. |

| **Class Summary** | |
| --- | --- |
| [**W3CDomHandler**](http://docs.google.com/javax/xml/bind/annotation/W3CDomHandler.html) | [DomHandler](http://docs.google.com/javax/xml/bind/annotation/DomHandler.html) implementation for W3C DOM (org.w3c.dom package.) |
| [**XmlElement.DEFAULT**](http://docs.google.com/javax/xml/bind/annotation/XmlElement.DEFAULT.html) | Used in [XmlElement.type()](http://docs.google.com/javax/xml/bind/annotation/XmlElement.html#type()) to signal that the type be inferred from the signature of the property. |
| [**XmlElementDecl.GLOBAL**](http://docs.google.com/javax/xml/bind/annotation/XmlElementDecl.GLOBAL.html) | Used in [XmlElementDecl.scope()](http://docs.google.com/javax/xml/bind/annotation/XmlElementDecl.html#scope()) to signal that the declaration is in the global scope. |
| [**XmlElementRef.DEFAULT**](http://docs.google.com/javax/xml/bind/annotation/XmlElementRef.DEFAULT.html) | Used in [XmlElementRef.type()](http://docs.google.com/javax/xml/bind/annotation/XmlElementRef.html#type()) to signal that the type be inferred from the signature of the property. |
| [**XmlSchemaType.DEFAULT**](http://docs.google.com/javax/xml/bind/annotation/XmlSchemaType.DEFAULT.html) | Used in [XmlSchemaType.type()](http://docs.google.com/javax/xml/bind/annotation/XmlSchemaType.html#type()) to signal that the type be inferred from the signature of the property. |
| [**XmlType.DEFAULT**](http://docs.google.com/javax/xml/bind/annotation/XmlType.DEFAULT.html) | Used in [XmlType.factoryClass()](http://docs.google.com/javax/xml/bind/annotation/XmlType.html#factoryClass()) to signal that either factory mehod is not used or that it's in the class with this [XmlType](http://docs.google.com/javax/xml/bind/annotation/XmlType.html) itself. |

| **Enum Summary** | |
| --- | --- |
| [**XmlAccessOrder**](http://docs.google.com/javax/xml/bind/annotation/XmlAccessOrder.html) | Used by XmlAccessorOrder to control the ordering of properties and fields in a JAXB bound class. |
| [**XmlAccessType**](http://docs.google.com/javax/xml/bind/annotation/XmlAccessType.html) | Used by XmlAccessorType to control serialization of fields or properties. |
| [**XmlNsForm**](http://docs.google.com/javax/xml/bind/annotation/XmlNsForm.html) | Enumeration of XML Schema namespace qualifications. |

| **Annotation Types Summary** | |
| --- | --- |
| [**XmlAccessorOrder**](http://docs.google.com/javax/xml/bind/annotation/XmlAccessorOrder.html) | Controls the ordering of fields and properties in a class. |
| [**XmlAccessorType**](http://docs.google.com/javax/xml/bind/annotation/XmlAccessorType.html) | Controls whether fields or Javabean properties are serialized by default. |
| [**XmlAnyAttribute**](http://docs.google.com/javax/xml/bind/annotation/XmlAnyAttribute.html) | Maps a JavaBean property to a map of wildcard attributes. |
| [**XmlAnyElement**](http://docs.google.com/javax/xml/bind/annotation/XmlAnyElement.html) | Maps a JavaBean property to XML infoset representation and/or JAXB element. |
| [**XmlAttachmentRef**](http://docs.google.com/javax/xml/bind/annotation/XmlAttachmentRef.html) | Marks a field/property that its XML form is a uri reference to mime content. |
| [**XmlAttribute**](http://docs.google.com/javax/xml/bind/annotation/XmlAttribute.html) | Maps a JavaBean property to a XML attribute. |
| [**XmlElement**](http://docs.google.com/javax/xml/bind/annotation/XmlElement.html) | Maps a JavaBean property to a XML element derived from property name. |
| [**XmlElementDecl**](http://docs.google.com/javax/xml/bind/annotation/XmlElementDecl.html) | Maps a factory method to a XML element. |
| [**XmlElementRef**](http://docs.google.com/javax/xml/bind/annotation/XmlElementRef.html) | Maps a JavaBean property to a XML element derived from property's type. |
| [**XmlElementRefs**](http://docs.google.com/javax/xml/bind/annotation/XmlElementRefs.html) | Marks a property that refers to classes with [XmlElement](http://docs.google.com/javax/xml/bind/annotation/XmlElement.html) or JAXBElement. |
| [**XmlElements**](http://docs.google.com/javax/xml/bind/annotation/XmlElements.html) | A container for multiple @[XmlElement](http://docs.google.com/javax/xml/bind/annotation/XmlElement.html) annotations. |
| [**XmlElementWrapper**](http://docs.google.com/javax/xml/bind/annotation/XmlElementWrapper.html) | Generates a wrapper element around XML representation. |
| [**XmlEnum**](http://docs.google.com/javax/xml/bind/annotation/XmlEnum.html) | Maps an enum type [Enum](http://docs.google.com/java/lang/Enum.html) to XML representation. |
| [**XmlEnumValue**](http://docs.google.com/javax/xml/bind/annotation/XmlEnumValue.html) | Maps an enum constant in [Enum](http://docs.google.com/java/lang/Enum.html) type to XML representation. |
| [**XmlID**](http://docs.google.com/javax/xml/bind/annotation/XmlID.html) | Maps a JavaBean property to XML ID. |
| [**XmlIDREF**](http://docs.google.com/javax/xml/bind/annotation/XmlIDREF.html) | Maps a JavaBean property to XML IDREF. |
| [**XmlInlineBinaryData**](http://docs.google.com/javax/xml/bind/annotation/XmlInlineBinaryData.html) | Disable consideration of XOP encoding for datatypes that are bound to base64-encoded binary data in XML. |
| [**XmlList**](http://docs.google.com/javax/xml/bind/annotation/XmlList.html) | Used to map a property to a list simple type. |
| [**XmlMimeType**](http://docs.google.com/javax/xml/bind/annotation/XmlMimeType.html) | Associates the MIME type that controls the XML representation of the property. |
| [**XmlMixed**](http://docs.google.com/javax/xml/bind/annotation/XmlMixed.html) | Annotate a JavaBean multi-valued property to support mixed content. |
| [**XmlNs**](http://docs.google.com/javax/xml/bind/annotation/XmlNs.html) | Associates a namespace prefix with a XML namespace URI. |
| [**XmlRegistry**](http://docs.google.com/javax/xml/bind/annotation/XmlRegistry.html) | Marks a class that has [XmlElementDecl](http://docs.google.com/javax/xml/bind/annotation/XmlElementDecl.html)s. |
| [**XmlRootElement**](http://docs.google.com/javax/xml/bind/annotation/XmlRootElement.html) | Maps a class or an enum type to an XML element. |
| [**XmlSchema**](http://docs.google.com/javax/xml/bind/annotation/XmlSchema.html) | Maps a package name to a XML namespace. |
| [**XmlSchemaType**](http://docs.google.com/javax/xml/bind/annotation/XmlSchemaType.html) | Maps a Java type to a simple schema built-in type. |
| [**XmlSchemaTypes**](http://docs.google.com/javax/xml/bind/annotation/XmlSchemaTypes.html) | A container for multiple @[XmlSchemaType](http://docs.google.com/javax/xml/bind/annotation/XmlSchemaType.html) annotations. |
| [**XmlTransient**](http://docs.google.com/javax/xml/bind/annotation/XmlTransient.html) | Prevents the mapping of a JavaBean property to XML representation. |
| [**XmlType**](http://docs.google.com/javax/xml/bind/annotation/XmlType.html) | Maps a class or an enum type to a XML Schema type. |
| [**XmlValue**](http://docs.google.com/javax/xml/bind/annotation/XmlValue.html) | Enables mapping a class to a XML Schema complex type with a simpleContent or a XML Schema simple type. |

## Package javax.xml.bind.annotation Description

Defines annotations for customizing Java program elements to XML Schema mapping.

## Package Specification

The following table shows the JAXB mapping annotations that can be associated with each program element.

| **Program Element** | **JAXB annotation** |
| --- | --- |
| **Package** | | [**XmlAccessorOrder**](http://docs.google.com/javax/xml/bind/annotation/XmlAccessorOrder.html) | | --- | | [**XmlAccessorType**](http://docs.google.com/javax/xml/bind/annotation/XmlAccessorType.html) | | [**XmlSchema**](http://docs.google.com/javax/xml/bind/annotation/XmlSchema.html) | | [**XmlSchemaType**](http://docs.google.com/javax/xml/bind/annotation/XmlSchemaType.html) | | [**XmlSchemaTypes**](http://docs.google.com/javax/xml/bind/annotation/XmlSchemaTypes.html) | | [**XmlJavaTypeAdapter**](http://docs.google.com/javax/xml/bind/annotation/adapters/XmlJavaTypeAdapter.html) | | [**XmlJavaTypeAdapters**](http://docs.google.com/javax/xml/bind/annotation/adapters/XmlJavaTypeAdapters.html) | |
| **Class** | | [**XmlAccessorOrder**](http://docs.google.com/javax/xml/bind/annotation/XmlAccessorOrder.html) | | --- | | [**XmlAccessorType**](http://docs.google.com/javax/xml/bind/annotation/XmlAccessorType.html) | | [**XmlInlineBinaryData**](http://docs.google.com/javax/xml/bind/annotation/XmlInlineBinaryData.html) | | [**XmlRootElement**](http://docs.google.com/javax/xml/bind/annotation/XmlRootElement.html) | | [**XmlType**](http://docs.google.com/javax/xml/bind/annotation/XmlType.html) | | [**XmlJavaTypeAdapter**](http://docs.google.com/javax/xml/bind/annotation/adapters/XmlJavaTypeAdapter.html) | |
| **Enum type** | | [**XmlEnum**](http://docs.google.com/javax/xml/bind/annotation/XmlEnum.html) | | --- | | [**XmlEnumValue (enum constant only)**](http://docs.google.com/javax/xml/bind/annotation/XmlEnumValue.html) | | [**XmlRootElement**](http://docs.google.com/javax/xml/bind/annotation/XmlRootElement.html) | | [**XmlType**](http://docs.google.com/javax/xml/bind/annotation/XmlType.html) | | [**XmlJavaTypeAdapter**](http://docs.google.com/javax/xml/bind/annotation/adapters/XmlJavaTypeAdapter.html) | |
| **JavaBean Property/field** | | [**XmlElement**](http://docs.google.com/javax/xml/bind/annotation/XmlElement.html) | | --- | | [**XmlElements**](http://docs.google.com/javax/xml/bind/annotation/XmlElements.html) | | [**XmlElementRef**](http://docs.google.com/javax/xml/bind/annotation/XmlElementRef.html) | | [**XmlElementRefs**](http://docs.google.com/javax/xml/bind/annotation/XmlElementRefs.html) | | [**XmlElementWrapper**](http://docs.google.com/javax/xml/bind/annotation/XmlElementWrapper.html) | | [**XmlAnyElement**](http://docs.google.com/javax/xml/bind/annotation/XmlAnyElement.html) | | [**XmlAttribute**](http://docs.google.com/javax/xml/bind/annotation/XmlAttribute.html) | | [**XmlAnyAttribute**](http://docs.google.com/javax/xml/bind/annotation/XmlAnyAttribute.html) | | [**XmlTransient**](http://docs.google.com/javax/xml/bind/annotation/XmlTransient.html) | | [**XmlValue**](http://docs.google.com/javax/xml/bind/annotation/XmlValue.html) | | [**XmlID**](http://docs.google.com/javax/xml/bind/annotation/XmlID.html) | | [**XmlIDREF**](http://docs.google.com/javax/xml/bind/annotation/XmlIDREF.html) | | [**XmlList**](http://docs.google.com/javax/xml/bind/annotation/XmlList.html) | | [**XmlMixed**](http://docs.google.com/javax/xml/bind/annotation/XmlMixed.html) | | [**XmlMimeType**](http://docs.google.com/javax/xml/bind/annotation/XmlMimeType.html) | | [**XmlAttachmentRef**](http://docs.google.com/javax/xml/bind/annotation/XmlAttachmentRef.html) | | [**XmlInlineBinaryData**](http://docs.google.com/javax/xml/bind/annotation/XmlInlineBinaryData.html) | | [**XmlElementDecl (only on method)**](http://docs.google.com/javax/xml/bind/annotation/XmlElementDecl.html) | | [**XmlJavaTypeAdapter**](http://docs.google.com/javax/xml/bind/annotation/adapters/XmlJavaTypeAdapter.html) | |
| **Parameter** | | [**XmlList**](http://docs.google.com/javax/xml/bind/annotation/XmlList.html) | | --- | | [**XmlAttachmentRef**](http://docs.google.com/javax/xml/bind/annotation/XmlAttachmentRef.html) | | [**XmlMimeType**](http://docs.google.com/javax/xml/bind/annotation/XmlMimeType.html) | | [**XmlJavaTypeAdapter**](http://docs.google.com/javax/xml/bind/annotation/adapters/XmlJavaTypeAdapter.html) | |

### Terminology

**JavaBean property and field:** For the purposes of mapping, there is no semantic difference between a field and a JavaBean property. Thus, an annotation that can be applied to a JavaBean property can always be applied to a field. Hence in the Javadoc documentation, for brevity, the term JavaBean property or property is used to mean either JavaBean property or a field. Where required, both are explicitly mentioned.

**top level class:** For the purpose of mapping, there is no semantic difference between a top level class and a static nested class. Thus, an annotation that can be applied to a top level class, can always be applied to a nested static class. Hence in the Javadoc documentation, for brevity, the term "top level class" or just class is used to mean either a top level class or a nested static class.

**mapping annotation:**A JAXB 2.0 defined program annotation based on the JSR 175 programming annotation facility.

### Common Usage Constraints

The following usage constraints are defined here since they apply to more than annotation:

* For a property, a given annotation can be applied to either read or write property but not both.
* A property name must be different from any other property name in any of the super classes of the class being mapped.
* A mapped field name or the decapitalized name of a mapped property must be unique within a class.

### Notations

**Namespace prefixes**

The following namespace prefixes are used in the XML Schema fragments in this package.

| **Prefix** | **Namespace** | **Notes** |
| --- | --- | --- |
| xs | http://www.w3.org/2001/XMLSchema | Namespace of XML Schema namespace |
| ref | http://ws-i.org/profiles/basic/1.1/xsd | Namespace for swaref schema component |
| xsi | http://www.w3.org/2001/XMLSchema-instance | XML Schema namespace for instances |

**Since:** JAXB 2.0

| | [**Overview**](http://docs.google.com/overview-summary.html) | **Package** | Class | [**Use**](http://docs.google.com/package-use.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV PACKAGE**](http://docs.google.com/javax/xml/bind/package-summary.html)   [**NEXT PACKAGE**](http://docs.google.com/javax/xml/bind/annotation/adapters/package-summary.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/bind/annotation/package-summary.html)    [**NO FRAMES**](http://docs.google.com/package-summary.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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