| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AttachmentMarshaller.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 CLASS   [**NEXT CLASS**](http://docs.google.com/javax/xml/bind/attachment/AttachmentUnmarshaller.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/bind/attachment/AttachmentMarshaller.html)    [**NO FRAMES**](http://docs.google.com/AttachmentMarshaller.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **javax.xml.bind.attachment**

Class AttachmentMarshaller

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.xml.bind.attachment.AttachmentMarshaller**

public abstract class **AttachmentMarshaller**extends [Object](http://docs.google.com/java/lang/Object.html)

Enable JAXB marshalling to optimize storage of binary data.

This API enables an efficient cooperative creation of optimized binary data formats between a JAXB marshalling process and a MIME-based package processor. A JAXB implementation marshals the root body of a MIME-based package, delegating the creation of referenceable MIME parts to the MIME-based package processor that implements this abstraction.

XOP processing is enabled when [isXOPPackage()](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#isXOPPackage()) is true. See [addMtomAttachment(DataHandler, String, String)](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#addMtomAttachment(javax.activation.DataHandler,%20java.lang.String,%20java.lang.String)) for details.

WS-I Attachment Profile 1.0 is supported by [addSwaRefAttachment(DataHandler)](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#addSwaRefAttachment(javax.activation.DataHandler)) being called by the marshaller for each JAXB property related to {http://ws-i.org/profiles/basic/1.1/xsd}swaRef.

**Since:** JAXB 2.0 **See Also:**[Marshaller.setAttachmentMarshaller(AttachmentMarshaller)](http://docs.google.com/javax/xml/bind/Marshaller.html#setAttachmentMarshaller(javax.xml.bind.attachment.AttachmentMarshaller)), [XML-binary Optimized Packaging](http://www.w3.org/TR/2005/REC-xop10-20050125/), [WS-I Attachments Profile Version 1.0.](http://www.ws-i.org/Profiles/AttachmentsProfile-1.0-2004-08-24.html)

| **Constructor Summary** | |
| --- | --- |
| [**AttachmentMarshaller**](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#AttachmentMarshaller())() |

| **Method Summary** | |
| --- | --- |
| abstract  [String](http://docs.google.com/java/lang/String.html) | [**addMtomAttachment**](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#addMtomAttachment(byte%5B%5D,%20int,%20int,%20java.lang.String,%20java.lang.String,%20java.lang.String))(byte[] data, int offset, int length, [String](http://docs.google.com/java/lang/String.html) mimeType, [String](http://docs.google.com/java/lang/String.html) elementNamespace, [String](http://docs.google.com/java/lang/String.html) elementLocalName)            Consider binary data for optimized binary storage as an attachment. |
| abstract  [String](http://docs.google.com/java/lang/String.html) | [**addMtomAttachment**](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#addMtomAttachment(javax.activation.DataHandler,%20java.lang.String,%20java.lang.String))([DataHandler](http://docs.google.com/javax/activation/DataHandler.html) data, [String](http://docs.google.com/java/lang/String.html) elementNamespace, [String](http://docs.google.com/java/lang/String.html) elementLocalName)            Consider MIME content data for optimized binary storage as an attachment. |
| abstract  [String](http://docs.google.com/java/lang/String.html) | [**addSwaRefAttachment**](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#addSwaRefAttachment(javax.activation.DataHandler))([DataHandler](http://docs.google.com/javax/activation/DataHandler.html) data)            Add MIME data as an attachment and return attachment's content-id, cid. |
| boolean | [**isXOPPackage**](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#isXOPPackage())()            Read-only property that returns true if JAXB marshaller should enable XOP creation. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### AttachmentMarshaller

public **AttachmentMarshaller**()

| **Method Detail** |
| --- |

### addMtomAttachment

public abstract [String](http://docs.google.com/java/lang/String.html) **addMtomAttachment**([DataHandler](http://docs.google.com/javax/activation/DataHandler.html) data,  
 [String](http://docs.google.com/java/lang/String.html) elementNamespace,  
 [String](http://docs.google.com/java/lang/String.html) elementLocalName)

Consider MIME content data for optimized binary storage as an attachment.

This method is called by JAXB marshal process when [isXOPPackage()](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#isXOPPackage()) is true, for each element whose datatype is "base64Binary", as described in Step 3 in [Creating XOP Packages](http://www.w3.org/TR/2005/REC-xop10-20050125/#creating_xop_packages).

The method implementor determines whether data shall be attached separately or inlined as base64Binary data. If the implementation chooses to optimize the storage of the binary data as a MIME part, it is responsible for attaching data to the MIME-based package, and then assigning an unique content-id, cid, that identifies the MIME part within the MIME message. This method returns the cid, which enables the JAXB marshaller to marshal a XOP element that refers to that cid in place of marshalling the binary data. When the method returns null, the JAXB marshaller inlines data as base64binary data.

The caller of this method is required to meet the following constraint. If the element infoset item containing data has the attribute xmime:contentType or if the JAXB property/field representing datais annotated with a known MIME type, data.getContentType() should be set to that MIME type.

The elementNamespace and elementLocalName parameters provide the context that contains the binary data. This information could be used by the MIME-based package processor to determine if the binary data should be inlined or optimized as an attachment.

**Parameters:**data - represents the data to be attached. Must be non-null.elementNamespace - the namespace URI of the element that encloses the base64Binary data. Can be empty but never null.elementLocalName - The local name of the element. Always a non-null valid string. **Returns:**a valid content-id URI (see [RFC 2387](http://www.w3.org/TR/xop10/#RFC2387)) that identifies the attachment containing data. Otherwise, null if the attachment was not added and should instead be inlined in the message.**See Also:**[XML-binary Optimized Packaging](http://www.w3.org/TR/2005/REC-xop10-20050125/), [Describing Media Content of Binary Data in XML](http://www.w3.org/TR/xml-media-types/)

### addMtomAttachment

public abstract [String](http://docs.google.com/java/lang/String.html) **addMtomAttachment**(byte[] data,  
 int offset,  
 int length,  
 [String](http://docs.google.com/java/lang/String.html) mimeType,  
 [String](http://docs.google.com/java/lang/String.html) elementNamespace,  
 [String](http://docs.google.com/java/lang/String.html) elementLocalName)

Consider binary data for optimized binary storage as an attachment.

Since content type is not known, the attachment's MIME content type must be set to "application/octet-stream".

The elementNamespace and elementLocalName parameters provide the context that contains the binary data. This information could be used by the MIME-based package processor to determine if the binary data should be inlined or optimized as an attachment.

**Parameters:**data - represents the data to be attached. Must be non-null. The actual data region is specified by (data,offset,length) tuple.offset - The offset within the array of the first byte to be read; must be non-negative and no larger than array.lengthlength - The number of bytes to be read from the given array; must be non-negative and no larger than array.lengthmimeType - If the data has an associated MIME type known to JAXB, that is passed as this parameter. If none is known, "application/octet-stream". This parameter may never be null.elementNamespace - the namespace URI of the element that encloses the base64Binary data. Can be empty but never null.elementLocalName - The local name of the element. Always a non-null valid string. **Returns:**content-id URI, cid, to the attachment containing data or null if data should be inlined.**See Also:**[addMtomAttachment(DataHandler, String, String)](http://docs.google.com/javax/xml/bind/attachment/AttachmentMarshaller.html#addMtomAttachment(javax.activation.DataHandler,%20java.lang.String,%20java.lang.String))

### isXOPPackage

public boolean **isXOPPackage**()

Read-only property that returns true if JAXB marshaller should enable XOP creation.

This value must not change during the marshalling process. When this value is true, the addMtomAttachment(...) method is invoked when the appropriate binary datatypes are encountered by the marshal process.

Marshaller.marshal() must throw IllegalStateException if this value is true and the XML content to be marshalled violates Step 1 in Creating XOP Pacakges http://www.w3.org/TR/2005/REC-xop10-20050125/#creating\_xop\_packages. *"Ensure the Original XML Infoset contains no element information item with a [namespace name] of "http://www.w3.org/2004/08/xop/include" and a [local name] of Include"*

When this method returns true and during the marshal process at least one call to addMtomAttachment(...) returns a content-id, the MIME-based package processor must label the root part with the application/xop+xml media type as described in Step 5 of Creating XOP Pacakges.

**Returns:**true when MIME context is a XOP Package.

### addSwaRefAttachment

public abstract [String](http://docs.google.com/java/lang/String.html) **addSwaRefAttachment**([DataHandler](http://docs.google.com/javax/activation/DataHandler.html) data)

Add MIME data as an attachment and return attachment's content-id, cid.

This method is called by JAXB marshal process for each element/attribute typed as {http://ws-i.org/profiles/basic/1.1/xsd}swaRef. The MIME-based package processor implementing this method is responsible for attaching the specified data to a MIME attachment, and generating a content-id, cid, that uniquely identifies the attachment within the MIME-based package.

Caller inserts the returned content-id, cid, into the XML content being marshalled.

**Parameters:**data - represents the data to be attached. Must be non-null. **Returns:**must be a valid URI used as cid. Must satisfy Conformance Requirement R2928 from [WS-I Attachments Profile Version 1.0.](http://www.ws-i.org/Profiles/AttachmentsProfile-1.0-2004-08-24.html#Referencing_Attachments_from_the_SOAP_Envelope)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AttachmentMarshaller.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 CLASS   [**NEXT CLASS**](http://docs.google.com/javax/xml/bind/attachment/AttachmentUnmarshaller.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/bind/attachment/AttachmentMarshaller.html)    [**NO FRAMES**](http://docs.google.com/AttachmentMarshaller.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

[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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