| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/MetaMessage.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**](http://docs.google.com/javax/sound/midi/MetaEventListener.html)   [**NEXT CLASS**](http://docs.google.com/javax/sound/midi/MidiChannel.html) | [**FRAMES**](http://docs.google.com/index.html?javax/sound/midi/MetaMessage.html)    [**NO FRAMES**](http://docs.google.com/MetaMessage.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#2s8eyo1) | [CONSTR](#3rdcrjn) | [METHOD](#35nkun2) |

## **javax.sound.midi**

Class MetaMessage

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [javax.sound.midi.MidiMessage](http://docs.google.com/javax/sound/midi/MidiMessage.html)  
 **javax.sound.midi.MetaMessage**

**All Implemented Interfaces:** [Cloneable](http://docs.google.com/java/lang/Cloneable.html)

public class **MetaMessage**extends [MidiMessage](http://docs.google.com/javax/sound/midi/MidiMessage.html)

A MetaMessage is a [MidiMessage](http://docs.google.com/javax/sound/midi/MidiMessage.html) that is not meaningful to synthesizers, but that can be stored in a MIDI file and interpreted by a sequencer program. (See the discussion in the MidiMessage class description.) The Standard MIDI Files specification defines various types of meta-events, such as sequence number, lyric, cue point, and set tempo. There are also meta-events for such information as lyrics, copyrights, tempo indications, time and key signatures, markers, etc. For more information, see the Standard MIDI Files 1.0 specification, which is part of the Complete MIDI 1.0 Detailed Specification published by the MIDI Manufacturer's Association (<http://www.midi.org>).

When data is being transported using MIDI wire protocol, a [ShortMessage](http://docs.google.com/javax/sound/midi/ShortMessage.html) with the status value 0xFF represents a system reset message. In MIDI files, this same status value denotes a MetaMessage. The types of meta-message are distinguished from each other by the first byte that follows the status byte 0xFF. The subsequent bytes are data bytes. As with system exclusive messages, there are an arbitrary number of data bytes, depending on the type of MetaMessage.

**See Also:**[MetaEventListener](http://docs.google.com/javax/sound/midi/MetaEventListener.html)

| **Field Summary** | |
| --- | --- |
| static int | [**META**](http://docs.google.com/javax/sound/midi/MetaMessage.html#META)            Status byte for MetaMessage (0xFF, or 255), which is used in MIDI files. |

| **Fields inherited from class javax.sound.midi.**[**MidiMessage**](http://docs.google.com/javax/sound/midi/MidiMessage.html) |
| --- |
| [data](http://docs.google.com/javax/sound/midi/MidiMessage.html#data), [length](http://docs.google.com/javax/sound/midi/MidiMessage.html#length) |

| **Constructor Summary** | |
| --- | --- |
|  | [**MetaMessage**](http://docs.google.com/javax/sound/midi/MetaMessage.html#MetaMessage())()            Constructs a new MetaMessage. |
| protected | [**MetaMessage**](http://docs.google.com/javax/sound/midi/MetaMessage.html#MetaMessage(byte%5B%5D))(byte[] data)            Constructs a new MetaMessage. |

| **Method Summary** | |
| --- | --- |
| [Object](http://docs.google.com/java/lang/Object.html) | [**clone**](http://docs.google.com/javax/sound/midi/MetaMessage.html#clone())()            Creates a new object of the same class and with the same contents as this object. |
| byte[] | [**getData**](http://docs.google.com/javax/sound/midi/MetaMessage.html#getData())()            Obtains a copy of the data for the meta message. |
| int | [**getType**](http://docs.google.com/javax/sound/midi/MetaMessage.html#getType())()            Obtains the type of the MetaMessage. |
| void | [**setMessage**](http://docs.google.com/javax/sound/midi/MetaMessage.html#setMessage(int,%20byte%5B%5D,%20int))(int type, byte[] data, int length)            Sets the message parameters for a MetaMessage. |

| **Methods inherited from class javax.sound.midi.**[**MidiMessage**](http://docs.google.com/javax/sound/midi/MidiMessage.html) |
| --- |
| [getLength](http://docs.google.com/javax/sound/midi/MidiMessage.html#getLength()), [getMessage](http://docs.google.com/javax/sound/midi/MidiMessage.html#getMessage()), [getStatus](http://docs.google.com/javax/sound/midi/MidiMessage.html#getStatus()), [setMessage](http://docs.google.com/javax/sound/midi/MidiMessage.html#setMessage(byte%5B%5D,%20int)) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [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)) |

| **Field Detail** |
| --- |

### META

public static final int **META**

Status byte for MetaMessage (0xFF, or 255), which is used in MIDI files. It has the same value as SYSTEM\_RESET, which is used in the real-time "MIDI wire" protocol.

**See Also:**[MidiMessage.getStatus()](http://docs.google.com/javax/sound/midi/MidiMessage.html#getStatus()), [Constant Field Values](http://docs.google.com/constant-values.html#javax.sound.midi.MetaMessage.META)

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

### MetaMessage

public **MetaMessage**()

Constructs a new MetaMessage. The contents of the message are not set here; use [setMessage](http://docs.google.com/javax/sound/midi/MetaMessage.html#setMessage(int,%20byte%5B%5D,%20int)) to set them subsequently.

### MetaMessage

protected **MetaMessage**(byte[] data)

Constructs a new MetaMessage.

**Parameters:**data - an array of bytes containing the complete message. The message data may be changed using the setMessage method.**See Also:**[setMessage(int, byte[], int)](http://docs.google.com/javax/sound/midi/MetaMessage.html#setMessage(int,%20byte%5B%5D,%20int))

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

### setMessage

public void **setMessage**(int type,  
 byte[] data,  
 int length)  
 throws [InvalidMidiDataException](http://docs.google.com/javax/sound/midi/InvalidMidiDataException.html)

Sets the message parameters for a MetaMessage. Since only one status byte value, 0xFF, is allowed for meta-messages, it does not need to be specified here. Calls to [getStatus](http://docs.google.com/javax/sound/midi/MidiMessage.html#getStatus()) return 0xFF for all meta-messages.

The type argument should be a valid value for the byte that follows the status byte in the MetaMessage. The data argument should contain all the subsequent bytes of the MetaMessage. In other words, the byte that specifies the type of MetaMessage is not considered a data byte.

**Parameters:**type - meta-message type (must be less than 128)data - the data bytes in the MIDI messagelength - the number of bytes in the data byte array **Throws:** InvalidMidiDataException - if the parameter values do not specify a valid MIDI meta message [InvalidMidiDataException](http://docs.google.com/javax/sound/midi/InvalidMidiDataException.html)

### getType

public int **getType**()

Obtains the type of the MetaMessage.

**Returns:**an integer representing the MetaMessage type

### getData

public byte[] **getData**()

Obtains a copy of the data for the meta message. The returned array of bytes does not include the status byte or the message length data. The length of the data for the meta message is the length of the array. Note that the length of the entire message includes the status byte and the meta message type byte, and therefore may be longer than the returned array.

**Returns:**array containing the meta message data.**See Also:**[MidiMessage.getLength()](http://docs.google.com/javax/sound/midi/MidiMessage.html#getLength())

### clone

public [Object](http://docs.google.com/java/lang/Object.html) **clone**()

Creates a new object of the same class and with the same contents as this object.

**Specified by:**[clone](http://docs.google.com/javax/sound/midi/MidiMessage.html#clone()) in class [MidiMessage](http://docs.google.com/javax/sound/midi/MidiMessage.html) **Returns:**a clone of this instance**See Also:**[Cloneable](http://docs.google.com/java/lang/Cloneable.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/MetaMessage.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*** |
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[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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