| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Soundbank.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/ShortMessage.html)   [**NEXT CLASS**](http://docs.google.com/javax/sound/midi/SoundbankResource.html) | [**FRAMES**](http://docs.google.com/index.html?javax/sound/midi/Soundbank.html)    [**NO FRAMES**](http://docs.google.com/Soundbank.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#2et92p0) |

## **javax.sound.midi**

Interface Soundbank

public interface **Soundbank**

A Soundbank contains a set of Instruments that can be loaded into a Synthesizer. Note that a Java Sound Soundbank is different from a MIDI bank. MIDI permits up to 16383 banks, each containing up to 128 instruments (also sometimes called programs, patches, or timbres). However, a Soundbank can contain 16383 times 128 instruments, because the instruments within a Soundbank are indexed by both a MIDI program number and a MIDI bank number (via a Patch object). Thus, a Soundbank can be thought of as a collection of MIDI banks.

Soundbank includes methods that return String objects containing the sound bank's name, manufacturer, version number, and description. The precise content and format of these strings is left to the implementor.

Different synthesizers use a variety of synthesis techniques. A common one is wavetable synthesis, in which a segment of recorded sound is played back, often with looping and pitch change. The Downloadable Sound (DLS) format uses segments of recorded sound, as does the Headspace Engine. Soundbanks and Instruments that are based on wavetable synthesis (or other uses of stored sound recordings) should typically implement the getResources() method to provide access to these recorded segments. This is optional, however; the method can return an zero-length array if the synthesis technique doesn't use sampled sound (FM synthesis and physical modeling are examples of such techniques), or if it does but the implementor chooses not to make the samples accessible.

**See Also:**[Synthesizer.getDefaultSoundbank()](http://docs.google.com/javax/sound/midi/Synthesizer.html#getDefaultSoundbank()), [Synthesizer.isSoundbankSupported(javax.sound.midi.Soundbank)](http://docs.google.com/javax/sound/midi/Synthesizer.html#isSoundbankSupported(javax.sound.midi.Soundbank)), [Synthesizer.loadInstruments(Soundbank, Patch[])](http://docs.google.com/javax/sound/midi/Synthesizer.html#loadInstruments(javax.sound.midi.Soundbank,%20javax.sound.midi.Patch%5B%5D)), [Patch](http://docs.google.com/javax/sound/midi/Patch.html), [Instrument](http://docs.google.com/javax/sound/midi/Instrument.html), [SoundbankResource](http://docs.google.com/javax/sound/midi/SoundbankResource.html)

| **Method Summary** | |
| --- | --- |
| [String](http://docs.google.com/java/lang/String.html) | [**getDescription**](http://docs.google.com/javax/sound/midi/Soundbank.html#getDescription())()            Obtains a textual description of the sound bank, suitable for display. |
| [Instrument](http://docs.google.com/javax/sound/midi/Instrument.html) | [**getInstrument**](http://docs.google.com/javax/sound/midi/Soundbank.html#getInstrument(javax.sound.midi.Patch))([Patch](http://docs.google.com/javax/sound/midi/Patch.html) patch)            Obtains an Instrument from the given Patch. |
| [Instrument](http://docs.google.com/javax/sound/midi/Instrument.html)[] | [**getInstruments**](http://docs.google.com/javax/sound/midi/Soundbank.html#getInstruments())()            Obtains a list of instruments contained in this sound bank. |
| [String](http://docs.google.com/java/lang/String.html) | [**getName**](http://docs.google.com/javax/sound/midi/Soundbank.html#getName())()            Obtains the name of the sound bank. |
| [SoundbankResource](http://docs.google.com/javax/sound/midi/SoundbankResource.html)[] | [**getResources**](http://docs.google.com/javax/sound/midi/Soundbank.html#getResources())()            Extracts a list of non-Instrument resources contained in the sound bank. |
| [String](http://docs.google.com/java/lang/String.html) | [**getVendor**](http://docs.google.com/javax/sound/midi/Soundbank.html#getVendor())()            Obtains a string naming the company that provides the sound bank |
| [String](http://docs.google.com/java/lang/String.html) | [**getVersion**](http://docs.google.com/javax/sound/midi/Soundbank.html#getVersion())()            Obtains the version string for the sound bank. |

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

### getName

[String](http://docs.google.com/java/lang/String.html) **getName**()

Obtains the name of the sound bank.

**Returns:**a String naming the sound bank

### getVersion

[String](http://docs.google.com/java/lang/String.html) **getVersion**()

Obtains the version string for the sound bank.

**Returns:**a String that indicates the sound bank's version

### getVendor

[String](http://docs.google.com/java/lang/String.html) **getVendor**()

Obtains a string naming the company that provides the sound bank

**Returns:**the vendor string

### getDescription

[String](http://docs.google.com/java/lang/String.html) **getDescription**()

Obtains a textual description of the sound bank, suitable for display.

**Returns:**a String that describes the sound bank

### getResources

[SoundbankResource](http://docs.google.com/javax/sound/midi/SoundbankResource.html)[] **getResources**()

Extracts a list of non-Instrument resources contained in the sound bank.

**Returns:**an array of resources, exclusing instruments. If the sound bank contains no resources (other than instruments), returns an array of length 0.

### getInstruments

[Instrument](http://docs.google.com/javax/sound/midi/Instrument.html)[] **getInstruments**()

Obtains a list of instruments contained in this sound bank.

**Returns:**an array of the Instruments in this SoundBank If the sound bank contains no instruments, returns an array of length 0.**See Also:**[Synthesizer.getLoadedInstruments()](http://docs.google.com/javax/sound/midi/Synthesizer.html#getLoadedInstruments()), [getInstrument(Patch)](http://docs.google.com/javax/sound/midi/Soundbank.html#getInstrument(javax.sound.midi.Patch))

### getInstrument

[Instrument](http://docs.google.com/javax/sound/midi/Instrument.html) **getInstrument**([Patch](http://docs.google.com/javax/sound/midi/Patch.html) patch)

Obtains an Instrument from the given Patch.

**Parameters:**patch - a Patch object specifying the bank index and program change number **Returns:**the requested instrument, or null if the sound bank doesn't contain that instrument**See Also:**[getInstruments()](http://docs.google.com/javax/sound/midi/Soundbank.html#getInstruments()), [Synthesizer.loadInstruments(Soundbank, Patch[])](http://docs.google.com/javax/sound/midi/Synthesizer.html#loadInstruments(javax.sound.midi.Soundbank,%20javax.sound.midi.Patch%5B%5D))

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Soundbank.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/ShortMessage.html)   [**NEXT CLASS**](http://docs.google.com/javax/sound/midi/SoundbankResource.html) | [**FRAMES**](http://docs.google.com/index.html?javax/sound/midi/Soundbank.html)    [**NO FRAMES**](http://docs.google.com/Soundbank.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#2et92p0) |

[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.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).