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

## **javax.sound.midi**

Class SoundbankResource

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

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

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

A SoundbankResource represents any audio resource stored in a [Soundbank](http://docs.google.com/javax/sound/midi/Soundbank.html). Common soundbank resources include:

* Instruments. An instrument may be specified in a variety of ways. However, all soundbanks have some mechanism for defining instruments. In doing so, they may reference other resources stored in the soundbank. Each instrument has a Patch which specifies the MIDI program and bank by which it may be referenced in MIDI messages. Instrument information may be stored in [Instrument](http://docs.google.com/javax/sound/midi/Instrument.html) objects.
* Audio samples. A sample typically is a sampled audio waveform which contains a short sound recording whose duration is a fraction of a second, or at most a few seconds. These audio samples may be used by a [Synthesizer](http://docs.google.com/javax/sound/midi/Synthesizer.html) to synthesize sound in response to MIDI commands, or extracted for use by an application. (The terminology reflects musicians' use of the word "sample" to refer collectively to a series of contiguous audio samples or frames, rather than to a single, instantaneous sample.) The data class for an audio sample will be an object that encapsulates the audio sample data itself and information about how to interpret it (the format of the audio data), such as an [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html).
* Embedded sequences. A sound bank may contain built-in song data stored in a data object such as a [Sequence](http://docs.google.com/javax/sound/midi/Sequence.html).

Synthesizers that use wavetable synthesis or related techniques play back the audio in a sample when synthesizing notes, often when emulating the real-world instrument that was originally recorded. However, there is not necessarily a one-to-one correspondence between the Instruments and samples in a Soundbank. A single Instrument can use multiple SoundbankResources (typically for notes of dissimilar pitch or brightness). Also, more than one Instrument can use the same sample.

| **Constructor Summary** | |
| --- | --- |
| protected | [**SoundbankResource**](http://docs.google.com/javax/sound/midi/SoundbankResource.html#SoundbankResource(javax.sound.midi.Soundbank,%20java.lang.String,%20java.lang.Class))([Soundbank](http://docs.google.com/javax/sound/midi/Soundbank.html) soundBank, [String](http://docs.google.com/java/lang/String.html) name, [Class](http://docs.google.com/java/lang/Class.html)<?> dataClass)            Constructs a new SoundbankResource from the given sound bank and wavetable index. |

| **Method Summary** | |
| --- | --- |
| abstract  [Object](http://docs.google.com/java/lang/Object.html) | [**getData**](http://docs.google.com/javax/sound/midi/SoundbankResource.html#getData())()            Obtains the sampled audio that is stored in this SoundbankResource. |
| [Class](http://docs.google.com/java/lang/Class.html)<?> | [**getDataClass**](http://docs.google.com/javax/sound/midi/SoundbankResource.html#getDataClass())()            Obtains the class used by this sample to represent its data. |
| [String](http://docs.google.com/java/lang/String.html) | [**getName**](http://docs.google.com/javax/sound/midi/SoundbankResource.html#getName())()            Obtains the name of the resource. |
| [Soundbank](http://docs.google.com/javax/sound/midi/Soundbank.html) | [**getSoundbank**](http://docs.google.com/javax/sound/midi/SoundbankResource.html#getSoundbank())()            Obtains the sound bank that contains this SoundbankResource. |

| **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** |
| --- |

### SoundbankResource

protected **SoundbankResource**([Soundbank](http://docs.google.com/javax/sound/midi/Soundbank.html) soundBank,  
 [String](http://docs.google.com/java/lang/String.html) name,  
 [Class](http://docs.google.com/java/lang/Class.html)<?> dataClass)

Constructs a new SoundbankResource from the given sound bank and wavetable index. (Setting the SoundbankResource's name, sampled audio data, and instruments is a subclass responsibility.)

**Parameters:**soundBank - the sound bank containing this SoundbankResourcename - the name of the sampledataClass - the class used to represent the sample's data**See Also:**[getSoundbank()](http://docs.google.com/javax/sound/midi/SoundbankResource.html#getSoundbank()), [getName()](http://docs.google.com/javax/sound/midi/SoundbankResource.html#getName()), [getDataClass()](http://docs.google.com/javax/sound/midi/SoundbankResource.html#getDataClass()), [getData()](http://docs.google.com/javax/sound/midi/SoundbankResource.html#getData())

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

### getSoundbank

public [Soundbank](http://docs.google.com/javax/sound/midi/Soundbank.html) **getSoundbank**()

Obtains the sound bank that contains this SoundbankResource.

**Returns:**the sound bank in which this SoundbankResource is stored

### getName

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

Obtains the name of the resource. This should generally be a string descriptive of the resource.

**Returns:**the instrument's name

### getDataClass

public [Class](http://docs.google.com/java/lang/Class.html)<?> **getDataClass**()

Obtains the class used by this sample to represent its data. The object returned by getData will be of this class. If this SoundbankResource object does not support direct access to its data, returns null.

**Returns:**the class used to represent the sample's data, or null if the data is not accessible

### getData

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

Obtains the sampled audio that is stored in this SoundbankResource. The type of object returned depends on the implementation of the concrete class, and may be queried using getDataClass.

**Returns:**an object containing the sampled audio data**See Also:**[getDataClass()](http://docs.google.com/javax/sound/midi/SoundbankResource.html#getDataClass())

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/SoundbankResource.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/Soundbank.html)   [**NEXT CLASS**](http://docs.google.com/javax/sound/midi/Synthesizer.html) | [**FRAMES**](http://docs.google.com/index.html?javax/sound/midi/SoundbankResource.html)    [**NO FRAMES**](http://docs.google.com/SoundbankResource.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
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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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