| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/FormatConversionProvider.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/sampled/spi/AudioFileWriter.html)   [**NEXT CLASS**](http://docs.google.com/javax/sound/sampled/spi/MixerProvider.html) | [**FRAMES**](http://docs.google.com/index.html?javax/sound/sampled/spi/FormatConversionProvider.html)    [**NO FRAMES**](http://docs.google.com/FormatConversionProvider.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.sampled.spi**

Class FormatConversionProvider

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.sound.sampled.spi.FormatConversionProvider**

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

A format conversion provider provides format conversion services from one or more input formats to one or more output formats. Converters include codecs, which encode and/or decode audio data, as well as transcoders, etc. Format converters provide methods for determining what conversions are supported and for obtaining an audio stream from which converted data can be read.

The source format represents the format of the incoming audio data, which will be converted.

The target format represents the format of the processed, converted audio data. This is the format of the data that can be read from the stream returned by one of the getAudioInputStream methods.

**Since:** 1.3

| **Constructor Summary** | |
| --- | --- |
| [**FormatConversionProvider**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#FormatConversionProvider())() |

| **Method Summary** | |
| --- | --- |
| abstract  [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) | [**getAudioInputStream**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getAudioInputStream(javax.sound.sampled.AudioFormat.Encoding,%20javax.sound.sampled.AudioInputStream))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding, [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) sourceStream)            Obtains an audio input stream with the specified encoding from the given audio input stream. |
| abstract  [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) | [**getAudioInputStream**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getAudioInputStream(javax.sound.sampled.AudioFormat,%20javax.sound.sampled.AudioInputStream))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) targetFormat, [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) sourceStream)            Obtains an audio input stream with the specified format from the given audio input stream. |
| abstract  [AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html)[] | [**getSourceEncodings**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getSourceEncodings())()            Obtains the set of source format encodings from which format conversion services are provided by this provider. |
| abstract  [AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html)[] | [**getTargetEncodings**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getTargetEncodings())()            Obtains the set of target format encodings to which format conversion services are provided by this provider. |
| abstract  [AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html)[] | [**getTargetEncodings**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getTargetEncodings(javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Obtains the set of target format encodings supported by the format converter given a particular source format. |
| abstract  [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html)[] | [**getTargetFormats**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getTargetFormats(javax.sound.sampled.AudioFormat.Encoding,%20javax.sound.sampled.AudioFormat))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Obtains the set of target formats with the encoding specified supported by the format converter If no target formats with the specified encoding are supported for this source format, an array of length 0 is returned. |
| boolean | [**isConversionSupported**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#isConversionSupported(javax.sound.sampled.AudioFormat.Encoding,%20javax.sound.sampled.AudioFormat))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Indicates whether the format converter supports conversion to a particular encoding from a particular format. |
| boolean | [**isConversionSupported**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#isConversionSupported(javax.sound.sampled.AudioFormat,%20javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) targetFormat, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Indicates whether the format converter supports conversion to one particular format from another. |
| boolean | [**isSourceEncodingSupported**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#isSourceEncodingSupported(javax.sound.sampled.AudioFormat.Encoding))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) sourceEncoding)            Indicates whether the format converter supports conversion from the specified source format encoding. |
| boolean | [**isTargetEncodingSupported**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#isTargetEncodingSupported(javax.sound.sampled.AudioFormat.Encoding))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding)            Indicates whether the format converter supports conversion to the specified target format encoding. |

| **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** |
| --- |

### FormatConversionProvider

public **FormatConversionProvider**()

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

### getSourceEncodings

public abstract [AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html)[] **getSourceEncodings**()

Obtains the set of source format encodings from which format conversion services are provided by this provider.

**Returns:**array of source format encodings. The array will always have a length of at least 1.

### getTargetEncodings

public abstract [AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html)[] **getTargetEncodings**()

Obtains the set of target format encodings to which format conversion services are provided by this provider.

**Returns:**array of target format encodings. The array will always have a length of at least 1.

### isSourceEncodingSupported

public boolean **isSourceEncodingSupported**([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) sourceEncoding)

Indicates whether the format converter supports conversion from the specified source format encoding.

**Parameters:**sourceEncoding - the source format encoding for which support is queried **Returns:**true if the encoding is supported, otherwise false

### isTargetEncodingSupported

public boolean **isTargetEncodingSupported**([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding)

Indicates whether the format converter supports conversion to the specified target format encoding.

**Parameters:**targetEncoding - the target format encoding for which support is queried **Returns:**true if the encoding is supported, otherwise false

### getTargetEncodings

public abstract [AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html)[] **getTargetEncodings**([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)

Obtains the set of target format encodings supported by the format converter given a particular source format. If no target format encodings are supported for this source format, an array of length 0 is returned.

**Returns:**array of supported target format encodings.

### isConversionSupported

public boolean **isConversionSupported**([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding,  
 [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)

Indicates whether the format converter supports conversion to a particular encoding from a particular format.

**Parameters:**targetEncoding - desired encoding of the outgoing datasourceFormat - format of the incoming data **Returns:**true if the conversion is supported, otherwise false

### getTargetFormats

public abstract [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html)[] **getTargetFormats**([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding,  
 [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)

Obtains the set of target formats with the encoding specified supported by the format converter If no target formats with the specified encoding are supported for this source format, an array of length 0 is returned.

**Returns:**array of supported target formats.

### isConversionSupported

public boolean **isConversionSupported**([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) targetFormat,  
 [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)

Indicates whether the format converter supports conversion to one particular format from another.

**Parameters:**targetFormat - desired format of outgoing datasourceFormat - format of the incoming data **Returns:**true if the conversion is supported, otherwise false

### getAudioInputStream

public abstract [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) **getAudioInputStream**([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding,  
 [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) sourceStream)

Obtains an audio input stream with the specified encoding from the given audio input stream.

**Parameters:**targetEncoding - desired encoding of the stream after processingsourceStream - stream from which data to be processed should be read **Returns:**stream from which processed data with the specified target encoding may be read **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if the format combination supplied is not supported.

### getAudioInputStream

public abstract [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) **getAudioInputStream**([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) targetFormat,  
 [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) sourceStream)

Obtains an audio input stream with the specified format from the given audio input stream.

**Parameters:**targetFormat - desired data format of the stream after processingsourceStream - stream from which data to be processed should be read **Returns:**stream from which processed data with the specified format may be read **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if the format combination supplied is not supported.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/FormatConversionProvider.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/sampled/spi/AudioFileWriter.html)   [**NEXT CLASS**](http://docs.google.com/javax/sound/sampled/spi/MixerProvider.html) | [**FRAMES**](http://docs.google.com/index.html?javax/sound/sampled/spi/FormatConversionProvider.html)    [**NO FRAMES**](http://docs.google.com/FormatConversionProvider.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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