| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DataBufferByte.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/java/awt/image/DataBuffer.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/DataBufferDouble.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/DataBufferByte.html)    [**NO FRAMES**](http://docs.google.com/DataBufferByte.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#2s8eyo1) | [METHOD](#44sinio) |

## **java.awt.image**

Class DataBufferByte

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.awt.image.DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html)  
 **java.awt.image.DataBufferByte**

public final class **DataBufferByte**extends [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html)

This class extends DataBuffer and stores data internally as bytes. Values stored in the byte array(s) of this DataBuffer are treated as unsigned values.

| **Field Summary** | |
| --- | --- |

| **Fields inherited from class java.awt.image.**[**DataBuffer**](http://docs.google.com/java/awt/image/DataBuffer.html) |
| --- |
| [banks](http://docs.google.com/java/awt/image/DataBuffer.html#banks), [dataType](http://docs.google.com/java/awt/image/DataBuffer.html#dataType), [offset](http://docs.google.com/java/awt/image/DataBuffer.html#offset), [offsets](http://docs.google.com/java/awt/image/DataBuffer.html#offsets), [size](http://docs.google.com/java/awt/image/DataBuffer.html#size), [TYPE\_BYTE](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_BYTE), [TYPE\_DOUBLE](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_DOUBLE), [TYPE\_FLOAT](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_FLOAT), [TYPE\_INT](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_INT), [TYPE\_SHORT](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_SHORT), [TYPE\_UNDEFINED](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_UNDEFINED), [TYPE\_USHORT](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_USHORT) |

| **Constructor Summary** | |
| --- | --- |
| [**DataBufferByte**](http://docs.google.com/java/awt/image/DataBufferByte.html#DataBufferByte(byte%5B%5D%5B%5D,%20int))(byte[][] dataArray, int size)            Constructs a byte-based DataBuffer with the specified arrays. |
| [**DataBufferByte**](http://docs.google.com/java/awt/image/DataBufferByte.html#DataBufferByte(byte%5B%5D%5B%5D,%20int,%20int%5B%5D))(byte[][] dataArray, int size, int[] offsets)            Constructs a byte-based DataBuffer with the specified arrays, size, and offsets. |
| [**DataBufferByte**](http://docs.google.com/java/awt/image/DataBufferByte.html#DataBufferByte(byte%5B%5D,%20int))(byte[] dataArray, int size)            Constructs a byte-based DataBuffer with a single bank using the specified array. |
| [**DataBufferByte**](http://docs.google.com/java/awt/image/DataBufferByte.html#DataBufferByte(byte%5B%5D,%20int,%20int))(byte[] dataArray, int size, int offset)            Constructs a byte-based DataBuffer with a single bank using the specified array, size, and offset. |
| [**DataBufferByte**](http://docs.google.com/java/awt/image/DataBufferByte.html#DataBufferByte(int))(int size)            Constructs a byte-based DataBuffer with a single bank and the specified size. |
| [**DataBufferByte**](http://docs.google.com/java/awt/image/DataBufferByte.html#DataBufferByte(int,%20int))(int size, int numBanks)            Constructs a byte based DataBuffer with the specified number of banks all of which are the specified size. |

| **Method Summary** | |
| --- | --- |
| byte[][] | [**getBankData**](http://docs.google.com/java/awt/image/DataBufferByte.html#getBankData())()            Returns the data arrays for all banks. |
| byte[] | [**getData**](http://docs.google.com/java/awt/image/DataBufferByte.html#getData())()            Returns the default (first) byte data array. |
| byte[] | [**getData**](http://docs.google.com/java/awt/image/DataBufferByte.html#getData(int))(int bank)            Returns the data array for the specified bank. |
| int | [**getElem**](http://docs.google.com/java/awt/image/DataBufferByte.html#getElem(int))(int i)            Returns the requested data array element from the first (default) bank. |
| int | [**getElem**](http://docs.google.com/java/awt/image/DataBufferByte.html#getElem(int,%20int))(int bank, int i)            Returns the requested data array element from the specified bank. |
| void | [**setElem**](http://docs.google.com/java/awt/image/DataBufferByte.html#setElem(int,%20int))(int i, int val)            Sets the requested data array element in the first (default) bank to the specified value. |
| void | [**setElem**](http://docs.google.com/java/awt/image/DataBufferByte.html#setElem(int,%20int,%20int))(int bank, int i, int val)            Sets the requested data array element in the specified bank from the given integer. |

| **Methods inherited from class java.awt.image.**[**DataBuffer**](http://docs.google.com/java/awt/image/DataBuffer.html) |
| --- |
| [getDataType](http://docs.google.com/java/awt/image/DataBuffer.html#getDataType()), [getDataTypeSize](http://docs.google.com/java/awt/image/DataBuffer.html#getDataTypeSize(int)), [getElemDouble](http://docs.google.com/java/awt/image/DataBuffer.html#getElemDouble(int)), [getElemDouble](http://docs.google.com/java/awt/image/DataBuffer.html#getElemDouble(int,%20int)), [getElemFloat](http://docs.google.com/java/awt/image/DataBuffer.html#getElemFloat(int)), [getElemFloat](http://docs.google.com/java/awt/image/DataBuffer.html#getElemFloat(int,%20int)), [getNumBanks](http://docs.google.com/java/awt/image/DataBuffer.html#getNumBanks()), [getOffset](http://docs.google.com/java/awt/image/DataBuffer.html#getOffset()), [getOffsets](http://docs.google.com/java/awt/image/DataBuffer.html#getOffsets()), [getSize](http://docs.google.com/java/awt/image/DataBuffer.html#getSize()), [setElemDouble](http://docs.google.com/java/awt/image/DataBuffer.html#setElemDouble(int,%20double)), [setElemDouble](http://docs.google.com/java/awt/image/DataBuffer.html#setElemDouble(int,%20int,%20double)), [setElemFloat](http://docs.google.com/java/awt/image/DataBuffer.html#setElemFloat(int,%20float)), [setElemFloat](http://docs.google.com/java/awt/image/DataBuffer.html#setElemFloat(int,%20int,%20float)) |

| **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** |
| --- |

### DataBufferByte

public **DataBufferByte**(int size)

Constructs a byte-based DataBuffer with a single bank and the specified size.

**Parameters:**size - The size of the DataBuffer.

### DataBufferByte

public **DataBufferByte**(int size,  
 int numBanks)

Constructs a byte based DataBuffer with the specified number of banks all of which are the specified size.

**Parameters:**size - The size of the banks in the DataBuffer.numBanks - The number of banks in the aDataBuffer.

### DataBufferByte

public **DataBufferByte**(byte[] dataArray,  
 int size)

Constructs a byte-based DataBuffer with a single bank using the specified array. Only the first size elements should be used by accessors of this DataBuffer. dataArray must be large enough to hold size elements.

**Parameters:**dataArray - The byte array for the DataBuffer.size - The size of the DataBuffer bank.

### DataBufferByte

public **DataBufferByte**(byte[] dataArray,  
 int size,  
 int offset)

Constructs a byte-based DataBuffer with a single bank using the specified array, size, and offset. dataArray must have at least offset + size elements. Only elements offset through offset + size - 1 should be used by accessors of this DataBuffer.

**Parameters:**dataArray - The byte array for the DataBuffer.size - The size of the DataBuffer bank.offset - The offset into the dataArray. dataArray must have at least offset + size elements.

### DataBufferByte

public **DataBufferByte**(byte[][] dataArray,  
 int size)

Constructs a byte-based DataBuffer with the specified arrays. The number of banks is equal to dataArray.length. Only the first size elements of each array should be used by accessors of this DataBuffer.

**Parameters:**dataArray - The byte arrays for the DataBuffer.size - The size of the banks in the DataBuffer.

### DataBufferByte

public **DataBufferByte**(byte[][] dataArray,  
 int size,  
 int[] offsets)

Constructs a byte-based DataBuffer with the specified arrays, size, and offsets. The number of banks is equal to dataArray.length. Each array must be at least as large as size + the corresponding offset. There must be an entry in the offset array for each dataArray entry. For each bank, only elements offset through offset + size - 1 should be used by accessors of this DataBuffer.

**Parameters:**dataArray - The byte arrays for the DataBuffer.size - The size of the banks in the DataBuffer.offsets - The offsets into each array.

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

### getData

public byte[] **getData**()

Returns the default (first) byte data array.

**Returns:**The first byte data array.

### getData

public byte[] **getData**(int bank)

Returns the data array for the specified bank.

**Parameters:**bank - The bank whose data array you want to get. **Returns:**The data array for the specified bank.

### getBankData

public byte[][] **getBankData**()

Returns the data arrays for all banks.

**Returns:**All of the data arrays.

### getElem

public int **getElem**(int i)

Returns the requested data array element from the first (default) bank.

**Overrides:**[getElem](http://docs.google.com/java/awt/image/DataBuffer.html#getElem(int)) in class [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) **Parameters:**i - The data array element you want to get. **Returns:**The requested data array element as an integer.**See Also:**[setElem(int, int)](http://docs.google.com/java/awt/image/DataBufferByte.html#setElem(int,%20int)), [setElem(int, int, int)](http://docs.google.com/java/awt/image/DataBufferByte.html#setElem(int,%20int,%20int))

### getElem

public int **getElem**(int bank,  
 int i)

Returns the requested data array element from the specified bank.

**Specified by:**[getElem](http://docs.google.com/java/awt/image/DataBuffer.html#getElem(int,%20int)) in class [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) **Parameters:**bank - The bank from which you want to get a data array element.i - The data array element you want to get. **Returns:**The requested data array element as an integer.**See Also:**[setElem(int, int)](http://docs.google.com/java/awt/image/DataBufferByte.html#setElem(int,%20int)), [setElem(int, int, int)](http://docs.google.com/java/awt/image/DataBufferByte.html#setElem(int,%20int,%20int))

### setElem

public void **setElem**(int i,  
 int val)

Sets the requested data array element in the first (default) bank to the specified value.

**Overrides:**[setElem](http://docs.google.com/java/awt/image/DataBuffer.html#setElem(int,%20int)) in class [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) **Parameters:**i - The data array element you want to set.val - The integer value to which you want to set the data array element.**See Also:**[getElem(int)](http://docs.google.com/java/awt/image/DataBufferByte.html#getElem(int)), [getElem(int, int)](http://docs.google.com/java/awt/image/DataBufferByte.html#getElem(int,%20int))

### setElem

public void **setElem**(int bank,  
 int i,  
 int val)

Sets the requested data array element in the specified bank from the given integer.

**Specified by:**[setElem](http://docs.google.com/java/awt/image/DataBuffer.html#setElem(int,%20int,%20int)) in class [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) **Parameters:**bank - The bank in which you want to set the data array element.i - The data array element you want to set.val - The integer value to which you want to set the specified data array element.**See Also:**[getElem(int)](http://docs.google.com/java/awt/image/DataBufferByte.html#getElem(int)), [getElem(int, int)](http://docs.google.com/java/awt/image/DataBufferByte.html#getElem(int,%20int))

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DataBufferByte.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/java/awt/image/DataBuffer.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/DataBufferDouble.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/DataBufferByte.html)    [**NO FRAMES**](http://docs.google.com/DataBufferByte.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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