| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DatagramPacket.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/net/CookieStore.html)   [**NEXT CLASS**](http://docs.google.com/java/net/DatagramSocket.html) | [**FRAMES**](http://docs.google.com/index.html?java/net/DatagramPacket.html)    [**NO FRAMES**](http://docs.google.com/DatagramPacket.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#lnxbz9) |

## **java.net**

Class DatagramPacket

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

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

This class represents a datagram packet.

Datagram packets are used to implement a connectionless packet delivery service. Each message is routed from one machine to another based solely on information contained within that packet. Multiple packets sent from one machine to another might be routed differently, and might arrive in any order. Packet delivery is not guaranteed.

**Since:** JDK1.0

| **Constructor Summary** | |
| --- | --- |
| [**DatagramPacket**](http://docs.google.com/java/net/DatagramPacket.html#DatagramPacket(byte%5B%5D,%20int))(byte[] buf, int length)            Constructs a DatagramPacket for receiving packets of length length. |
| [**DatagramPacket**](http://docs.google.com/java/net/DatagramPacket.html#DatagramPacket(byte%5B%5D,%20int,%20java.net.InetAddress,%20int))(byte[] buf, int length, [InetAddress](http://docs.google.com/java/net/InetAddress.html) address, int port)            Constructs a datagram packet for sending packets of length length to the specified port number on the specified host. |
| [**DatagramPacket**](http://docs.google.com/java/net/DatagramPacket.html#DatagramPacket(byte%5B%5D,%20int,%20int))(byte[] buf, int offset, int length)            Constructs a DatagramPacket for receiving packets of length length, specifying an offset into the buffer. |
| [**DatagramPacket**](http://docs.google.com/java/net/DatagramPacket.html#DatagramPacket(byte%5B%5D,%20int,%20int,%20java.net.InetAddress,%20int))(byte[] buf, int offset, int length, [InetAddress](http://docs.google.com/java/net/InetAddress.html) address, int port)            Constructs a datagram packet for sending packets of length length with offset ioffsetto the specified port number on the specified host. |
| [**DatagramPacket**](http://docs.google.com/java/net/DatagramPacket.html#DatagramPacket(byte%5B%5D,%20int,%20int,%20java.net.SocketAddress))(byte[] buf, int offset, int length, [SocketAddress](http://docs.google.com/java/net/SocketAddress.html) address)            Constructs a datagram packet for sending packets of length length with offset ioffsetto the specified port number on the specified host. |
| [**DatagramPacket**](http://docs.google.com/java/net/DatagramPacket.html#DatagramPacket(byte%5B%5D,%20int,%20java.net.SocketAddress))(byte[] buf, int length, [SocketAddress](http://docs.google.com/java/net/SocketAddress.html) address)            Constructs a datagram packet for sending packets of length length to the specified port number on the specified host. |

| **Method Summary** | |
| --- | --- |
| [InetAddress](http://docs.google.com/java/net/InetAddress.html) | [**getAddress**](http://docs.google.com/java/net/DatagramPacket.html#getAddress())()            Returns the IP address of the machine to which this datagram is being sent or from which the datagram was received. |
| byte[] | [**getData**](http://docs.google.com/java/net/DatagramPacket.html#getData())()            Returns the data buffer. |
| int | [**getLength**](http://docs.google.com/java/net/DatagramPacket.html#getLength())()            Returns the length of the data to be sent or the length of the data received. |
| int | [**getOffset**](http://docs.google.com/java/net/DatagramPacket.html#getOffset())()            Returns the offset of the data to be sent or the offset of the data received. |
| int | [**getPort**](http://docs.google.com/java/net/DatagramPacket.html#getPort())()            Returns the port number on the remote host to which this datagram is being sent or from which the datagram was received. |
| [SocketAddress](http://docs.google.com/java/net/SocketAddress.html) | [**getSocketAddress**](http://docs.google.com/java/net/DatagramPacket.html#getSocketAddress())()            Gets the SocketAddress (usually IP address + port number) of the remote host that this packet is being sent to or is coming from. |
| void | [**setAddress**](http://docs.google.com/java/net/DatagramPacket.html#setAddress(java.net.InetAddress))([InetAddress](http://docs.google.com/java/net/InetAddress.html) iaddr)            Sets the IP address of the machine to which this datagram is being sent. |
| void | [**setData**](http://docs.google.com/java/net/DatagramPacket.html#setData(byte%5B%5D))(byte[] buf)            Set the data buffer for this packet. |
| void | [**setData**](http://docs.google.com/java/net/DatagramPacket.html#setData(byte%5B%5D,%20int,%20int))(byte[] buf, int offset, int length)            Set the data buffer for this packet. |
| void | [**setLength**](http://docs.google.com/java/net/DatagramPacket.html#setLength(int))(int length)            Set the length for this packet. |
| void | [**setPort**](http://docs.google.com/java/net/DatagramPacket.html#setPort(int))(int iport)            Sets the port number on the remote host to which this datagram is being sent. |
| void | [**setSocketAddress**](http://docs.google.com/java/net/DatagramPacket.html#setSocketAddress(java.net.SocketAddress))([SocketAddress](http://docs.google.com/java/net/SocketAddress.html) address)            Sets the SocketAddress (usually IP address + port number) of the remote host to which this datagram is being sent. |

| **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** |
| --- |

### DatagramPacket

public **DatagramPacket**(byte[] buf,  
 int offset,  
 int length)

Constructs a DatagramPacket for receiving packets of length length, specifying an offset into the buffer.

The length argument must be less than or equal to buf.length.

**Parameters:**buf - buffer for holding the incoming datagram.offset - the offset for the bufferlength - the number of bytes to read.**Since:** 1.2

### DatagramPacket

public **DatagramPacket**(byte[] buf,  
 int length)

Constructs a DatagramPacket for receiving packets of length length.

The length argument must be less than or equal to buf.length.

**Parameters:**buf - buffer for holding the incoming datagram.length - the number of bytes to read.

### DatagramPacket

public **DatagramPacket**(byte[] buf,  
 int offset,  
 int length,  
 [InetAddress](http://docs.google.com/java/net/InetAddress.html) address,  
 int port)

Constructs a datagram packet for sending packets of length length with offset ioffsetto the specified port number on the specified host. The length argument must be less than or equal to buf.length.

**Parameters:**buf - the packet data.offset - the packet data offset.length - the packet data length.address - the destination address.port - the destination port number.**Since:** 1.2 **See Also:**[InetAddress](http://docs.google.com/java/net/InetAddress.html)

### DatagramPacket

public **DatagramPacket**(byte[] buf,  
 int offset,  
 int length,  
 [SocketAddress](http://docs.google.com/java/net/SocketAddress.html) address)  
 throws [SocketException](http://docs.google.com/java/net/SocketException.html)

Constructs a datagram packet for sending packets of length length with offset ioffsetto the specified port number on the specified host. The length argument must be less than or equal to buf.length.

**Parameters:**buf - the packet data.offset - the packet data offset.length - the packet data length.address - the destination socket address. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if address type is not supported [SocketException](http://docs.google.com/java/net/SocketException.html)**Since:** 1.4 **See Also:**[InetAddress](http://docs.google.com/java/net/InetAddress.html)

### DatagramPacket

public **DatagramPacket**(byte[] buf,  
 int length,  
 [InetAddress](http://docs.google.com/java/net/InetAddress.html) address,  
 int port)

Constructs a datagram packet for sending packets of length length to the specified port number on the specified host. The length argument must be less than or equal to buf.length.

**Parameters:**buf - the packet data.length - the packet length.address - the destination address.port - the destination port number.**See Also:**[InetAddress](http://docs.google.com/java/net/InetAddress.html)

### DatagramPacket

public **DatagramPacket**(byte[] buf,  
 int length,  
 [SocketAddress](http://docs.google.com/java/net/SocketAddress.html) address)  
 throws [SocketException](http://docs.google.com/java/net/SocketException.html)

Constructs a datagram packet for sending packets of length length to the specified port number on the specified host. The length argument must be less than or equal to buf.length.

**Parameters:**buf - the packet data.length - the packet length.address - the destination address. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if address type is not supported [SocketException](http://docs.google.com/java/net/SocketException.html)**Since:** 1.4 **See Also:**[InetAddress](http://docs.google.com/java/net/InetAddress.html)

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

### getAddress

public [InetAddress](http://docs.google.com/java/net/InetAddress.html) **getAddress**()

Returns the IP address of the machine to which this datagram is being sent or from which the datagram was received.

**Returns:**the IP address of the machine to which this datagram is being sent or from which the datagram was received.**See Also:**[InetAddress](http://docs.google.com/java/net/InetAddress.html), [setAddress(java.net.InetAddress)](http://docs.google.com/java/net/DatagramPacket.html#setAddress(java.net.InetAddress))

### getPort

public int **getPort**()

Returns the port number on the remote host to which this datagram is being sent or from which the datagram was received.

**Returns:**the port number on the remote host to which this datagram is being sent or from which the datagram was received.**See Also:**[setPort(int)](http://docs.google.com/java/net/DatagramPacket.html#setPort(int))

### getData

public byte[] **getData**()

Returns the data buffer. The data received or the data to be sent starts from the offset in the buffer, and runs for length long.

**Returns:**the buffer used to receive or send data**See Also:**[setData(byte[], int, int)](http://docs.google.com/java/net/DatagramPacket.html#setData(byte%5B%5D,%20int,%20int))

### getOffset

public int **getOffset**()

Returns the offset of the data to be sent or the offset of the data received.

**Returns:**the offset of the data to be sent or the offset of the data received.**Since:** 1.2

### getLength

public int **getLength**()

Returns the length of the data to be sent or the length of the data received.

**Returns:**the length of the data to be sent or the length of the data received.**See Also:**[setLength(int)](http://docs.google.com/java/net/DatagramPacket.html#setLength(int))

### setData

public void **setData**(byte[] buf,  
 int offset,  
 int length)

Set the data buffer for this packet. This sets the data, length and offset of the packet.

**Parameters:**buf - the buffer to set for this packetoffset - the offset into the datalength - the length of the data and/or the length of the buffer used to receive data **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if the argument is null**Since:** 1.2 **See Also:**[getData()](http://docs.google.com/java/net/DatagramPacket.html#getData()), [getOffset()](http://docs.google.com/java/net/DatagramPacket.html#getOffset()), [getLength()](http://docs.google.com/java/net/DatagramPacket.html#getLength())

### setAddress

public void **setAddress**([InetAddress](http://docs.google.com/java/net/InetAddress.html) iaddr)

Sets the IP address of the machine to which this datagram is being sent.

**Parameters:**iaddr - the InetAddress**Since:** JDK1.1 **See Also:**[getAddress()](http://docs.google.com/java/net/DatagramPacket.html#getAddress())

### setPort

public void **setPort**(int iport)

Sets the port number on the remote host to which this datagram is being sent.

**Parameters:**iport - the port number**Since:** JDK1.1 **See Also:**[getPort()](http://docs.google.com/java/net/DatagramPacket.html#getPort())

### setSocketAddress

public void **setSocketAddress**([SocketAddress](http://docs.google.com/java/net/SocketAddress.html) address)

Sets the SocketAddress (usually IP address + port number) of the remote host to which this datagram is being sent.

**Parameters:**address - the SocketAddress **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if address is null or is a SocketAddress subclass not supported by this socket**Since:** 1.4 **See Also:**[getSocketAddress()](http://docs.google.com/java/net/DatagramPacket.html#getSocketAddress())

### getSocketAddress

public [SocketAddress](http://docs.google.com/java/net/SocketAddress.html) **getSocketAddress**()

Gets the SocketAddress (usually IP address + port number) of the remote host that this packet is being sent to or is coming from.

**Returns:**the SocketAddress**Since:** 1.4 **See Also:**[setSocketAddress(java.net.SocketAddress)](http://docs.google.com/java/net/DatagramPacket.html#setSocketAddress(java.net.SocketAddress))

### setData

public void **setData**(byte[] buf)

Set the data buffer for this packet. With the offset of this DatagramPacket set to 0, and the length set to the length of buf.

**Parameters:**buf - the buffer to set for this packet. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if the argument is null.**Since:** JDK1.1 **See Also:**[getLength()](http://docs.google.com/java/net/DatagramPacket.html#getLength()), [getData()](http://docs.google.com/java/net/DatagramPacket.html#getData())

### setLength

public void **setLength**(int length)

Set the length for this packet. The length of the packet is the number of bytes from the packet's data buffer that will be sent, or the number of bytes of the packet's data buffer that will be used for receiving data. The length must be lesser or equal to the offset plus the length of the packet's buffer.

**Parameters:**length - the length to set for this packet. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if the length is negative of if the length is greater than the packet's data buffer length.**Since:** JDK1.1 **See Also:**[getLength()](http://docs.google.com/java/net/DatagramPacket.html#getLength()), [setData(byte[], int, int)](http://docs.google.com/java/net/DatagramPacket.html#setData(byte%5B%5D,%20int,%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/DatagramPacket.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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