| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/MemoryNotificationInfo.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/lang/management/MemoryMXBean.html)   [**NEXT CLASS**](http://docs.google.com/java/lang/management/MemoryPoolMXBean.html) | [**FRAMES**](http://docs.google.com/index.html?java/lang/management/MemoryNotificationInfo.html)    [**NO FRAMES**](http://docs.google.com/MemoryNotificationInfo.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#17dp8vu) | [METHOD](#26in1rg) |

## **java.lang.management**

Class MemoryNotificationInfo

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

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

The information about a memory notification.

A memory notification is emitted by [MemoryMXBean](http://docs.google.com/java/lang/management/MemoryMXBean.html) when the Java virtual machine detects that the memory usage of a memory pool is exceeding a threshold value. The notification emitted will contain the memory notification information about the detected condition:

* The name of the memory pool.
* The memory usage of the memory pool when the notification was constructed.
* The number of times that the memory usage has crossed a threshold when the notification was constructed. For usage threshold notifications, this count will be the [usage threshold count](http://docs.google.com/java/lang/management/MemoryPoolMXBean.html#getUsageThresholdCount()). For collection threshold notifications, this count will be the [collection usage threshold count](http://docs.google.com/java/lang/management/MemoryPoolMXBean.html#getCollectionUsageThresholdCount()).

A [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html) representing the MemoryNotificationInfo object is stored in the [user data](http://docs.google.com/javax/management/Notification.html#setUserData(java.lang.Object)) of a [notification](http://docs.google.com/javax/management/Notification.html). The [from](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#from(javax.management.openmbean.CompositeData)) method is provided to convert from a CompositeData to a MemoryNotificationInfo object. For example:

Notification notif;  
  
 // receive the notification emitted by MemoryMXBean and set to notif  
 ...  
   
 String notifType = notif.getType();  
 if (notifType.equals(MemoryNotificationInfo.MEMORY\_THRESHOLD\_EXCEEDED) ||  
 notifType.equals(MemoryNotificationInfo.MEMORY\_COLLECTION\_THRESHOLD\_EXCEEDED)) {  
 // retrieve the memory notification information  
 CompositeData cd = (CompositeData) notif.getUserData();  
 MemoryNotificationInfo info = MemoryNotificationInfo.from(cd);  
 ....  
 }

The types of notifications emitted by MemoryMXBean are:

* A [usage threshold exceeded notification](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#MEMORY_THRESHOLD_EXCEEDED).  
  This notification will be emitted when the memory usage of a memory pool is increased and has reached or exceeded its  [usage threshold](http://docs.google.com/MemoryPoolMXBean.html#UsageThreshold) value. Subsequent crossing of the usage threshold value does not cause further notification until the memory usage has returned to become less than the usage threshold value.
* A [collection usage threshold exceeded notification](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#MEMORY_COLLECTION_THRESHOLD_EXCEEDED).  
  This notification will be emitted when the memory usage of a memory pool is greater than or equal to its  [collection usage threshold](http://docs.google.com/MemoryPoolMXBean.html#CollectionThreshold) after the Java virtual machine has expended effort in recycling unused objects in that memory pool.

**Since:** 1.5

| **Field Summary** | |
| --- | --- |
| static [String](http://docs.google.com/java/lang/String.html) | [**MEMORY\_COLLECTION\_THRESHOLD\_EXCEEDED**](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#MEMORY_COLLECTION_THRESHOLD_EXCEEDED)            Notification type denoting that the memory usage of a memory pool is greater than or equal to its  [collection usage threshold](http://docs.google.com/MemoryPoolMXBean.html#CollectionThreshold) after the Java virtual machine has expended effort in recycling unused objects in that memory pool. |
| static [String](http://docs.google.com/java/lang/String.html) | [**MEMORY\_THRESHOLD\_EXCEEDED**](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#MEMORY_THRESHOLD_EXCEEDED)            Notification type denoting that the memory usage of a memory pool has reached or exceeded its  [usage threshold](http://docs.google.com/MemoryPoolMXBean.html#UsageThreshold) value. |

| **Constructor Summary** | |
| --- | --- |
| [**MemoryNotificationInfo**](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#MemoryNotificationInfo(java.lang.String,%20java.lang.management.MemoryUsage,%20long))([String](http://docs.google.com/java/lang/String.html) poolName, [MemoryUsage](http://docs.google.com/java/lang/management/MemoryUsage.html) usage, long count)            Constructs a MemoryNotificationInfo object. |

| **Method Summary** | |
| --- | --- |
| static [MemoryNotificationInfo](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html) | [**from**](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#from(javax.management.openmbean.CompositeData))([CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html) cd)            Returns a MemoryNotificationInfo object represented by the given CompositeData. |
| long | [**getCount**](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#getCount())()            Returns the number of times that the memory usage has crossed a threshold when the notification was constructed. |
| [String](http://docs.google.com/java/lang/String.html) | [**getPoolName**](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#getPoolName())()            Returns the name of the memory pool that triggers this notification. |
| [MemoryUsage](http://docs.google.com/java/lang/management/MemoryUsage.html) | [**getUsage**](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html#getUsage())()            Returns the memory usage of the memory pool when this notification was constructed. |

| **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)) |

| **Field Detail** |
| --- |

### MEMORY\_THRESHOLD\_EXCEEDED

public static final [String](http://docs.google.com/java/lang/String.html) **MEMORY\_THRESHOLD\_EXCEEDED**

Notification type denoting that the memory usage of a memory pool has reached or exceeded its  [usage threshold](http://docs.google.com/MemoryPoolMXBean.html#UsageThreshold) value. This notification is emitted by [MemoryMXBean](http://docs.google.com/java/lang/management/MemoryMXBean.html). Subsequent crossing of the usage threshold value does not cause further notification until the memory usage has returned to become less than the usage threshold value. The value of this notification type is java.management.memory.threshold.exceeded.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.lang.management.MemoryNotificationInfo.MEMORY_THRESHOLD_EXCEEDED)

### MEMORY\_COLLECTION\_THRESHOLD\_EXCEEDED

public static final [String](http://docs.google.com/java/lang/String.html) **MEMORY\_COLLECTION\_THRESHOLD\_EXCEEDED**

Notification type denoting that the memory usage of a memory pool is greater than or equal to its  [collection usage threshold](http://docs.google.com/MemoryPoolMXBean.html#CollectionThreshold) after the Java virtual machine has expended effort in recycling unused objects in that memory pool. This notification is emitted by [MemoryMXBean](http://docs.google.com/java/lang/management/MemoryMXBean.html). The value of this notification type is java.management.memory.collection.threshold.exceeded.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.lang.management.MemoryNotificationInfo.MEMORY_COLLECTION_THRESHOLD_EXCEEDED)

| **Constructor Detail** |
| --- |

### MemoryNotificationInfo

public **MemoryNotificationInfo**([String](http://docs.google.com/java/lang/String.html) poolName,  
 [MemoryUsage](http://docs.google.com/java/lang/management/MemoryUsage.html) usage,  
 long count)

Constructs a MemoryNotificationInfo object.

**Parameters:**poolName - The name of the memory pool which triggers this notification.usage - Memory usage of the memory pool.count - The threshold crossing count.

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

### getPoolName

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

Returns the name of the memory pool that triggers this notification. The memory pool usage has crossed a threshold.

**Returns:**the name of the memory pool that triggers this notification.

### getUsage

public [MemoryUsage](http://docs.google.com/java/lang/management/MemoryUsage.html) **getUsage**()

Returns the memory usage of the memory pool when this notification was constructed.

**Returns:**the memory usage of the memory pool when this notification was constructed.

### getCount

public long **getCount**()

Returns the number of times that the memory usage has crossed a threshold when the notification was constructed. For usage threshold notifications, this count will be the [threshold count](http://docs.google.com/java/lang/management/MemoryPoolMXBean.html#getUsageThresholdCount()). For collection threshold notifications, this count will be the [collection usage threshold count](http://docs.google.com/java/lang/management/MemoryPoolMXBean.html#getCollectionUsageThresholdCount()).

**Returns:**the number of times that the memory usage has crossed a threshold when the notification was constructed.

### from

public static [MemoryNotificationInfo](http://docs.google.com/java/lang/management/MemoryNotificationInfo.html) **from**([CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html) cd)

Returns a MemoryNotificationInfo object represented by the given CompositeData. The given CompositeData must contain the following attributes:

| Attribute Name | Type |
| --- | --- |
| poolName | java.lang.String |
| usage | javax.management.openmbean.CompositeData |
| count | java.lang.Long |

**Parameters:**cd - CompositeData representing a MemoryNotificationInfo **Returns:**a MemoryNotificationInfo object represented by cd if cd is not null; null otherwise. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if cd does not represent a MemoryNotificationInfo object.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/MemoryNotificationInfo.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/lang/management/MemoryMXBean.html)   [**NEXT CLASS**](http://docs.google.com/java/lang/management/MemoryPoolMXBean.html) | [**FRAMES**](http://docs.google.com/index.html?java/lang/management/MemoryNotificationInfo.html)    [**NO FRAMES**](http://docs.google.com/MemoryNotificationInfo.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#17dp8vu) | [METHOD](#26in1rg) |

[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).