| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ObjID.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/rmi/server/LogStream.html)   [**NEXT CLASS**](http://docs.google.com/java/rmi/server/Operation.html) | [**FRAMES**](http://docs.google.com/index.html?java/rmi/server/ObjID.html)    [**NO FRAMES**](http://docs.google.com/ObjID.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#3rdcrjn) | [METHOD](#35nkun2) |

## **java.rmi.server**

Class ObjID

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **java.rmi.server.ObjID**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html)

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

An ObjID is used to identify a remote object exported to an RMI runtime. When a remote object is exported, it is assigned an object identifier either implicitly or explicitly, depending on the API used to export.

The [ObjID()](http://docs.google.com/java/rmi/server/ObjID.html#ObjID()) constructor can be used to generate a unique object identifier. Such an ObjID is unique over time with respect to the host it is generated on. The [ObjID(int)](http://docs.google.com/java/rmi/server/ObjID.html#ObjID(int)) constructor can be used to create a "well-known" object identifier. The scope of a well-known ObjID depends on the RMI runtime it is exported to.

An ObjID instance contains an object number (of type long) and an address space identifier (of type [UID](http://docs.google.com/java/rmi/server/UID.html)). In a unique ObjID, the address space identifier is unique with respect to a given host over time. In a well-known ObjID, the address space identifier is equivalent to one returned by invoking the [UID.UID(short)](http://docs.google.com/java/rmi/server/UID.html#UID(short)) constructor with the value zero.

If the system property java.rmi.server.randomIDs is defined to equal the string "true" (case insensitive), then the [ObjID()](http://docs.google.com/java/rmi/server/ObjID.html#ObjID()) constructor will use a cryptographically strong random number generator to choose the object number of the returned ObjID.

**Since:** JDK1.1 **See Also:**[Serialized Form](http://docs.google.com/serialized-form.html#java.rmi.server.ObjID)

| **Field Summary** | |
| --- | --- |
| static int | [**ACTIVATOR\_ID**](http://docs.google.com/java/rmi/server/ObjID.html#ACTIVATOR_ID)            Object number for well-known ObjID of the activator. |
| static int | [**DGC\_ID**](http://docs.google.com/java/rmi/server/ObjID.html#DGC_ID)            Object number for well-known ObjID of the distributed garbage collector. |
| static int | [**REGISTRY\_ID**](http://docs.google.com/java/rmi/server/ObjID.html#REGISTRY_ID)            Object number for well-known ObjID of the registry. |

| **Constructor Summary** | |
| --- | --- |
| [**ObjID**](http://docs.google.com/java/rmi/server/ObjID.html#ObjID())()            Generates a unique object identifier. |
| [**ObjID**](http://docs.google.com/java/rmi/server/ObjID.html#ObjID(int))(int objNum)            Creates a "well-known" object identifier. |

| **Method Summary** | |
| --- | --- |
| boolean | [**equals**](http://docs.google.com/java/rmi/server/ObjID.html#equals(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) obj)            Compares the specified object with this ObjID for equality. |
| int | [**hashCode**](http://docs.google.com/java/rmi/server/ObjID.html#hashCode())()            Returns the hash code value for this object identifier, the object number. |
| static [ObjID](http://docs.google.com/java/rmi/server/ObjID.html) | [**read**](http://docs.google.com/java/rmi/server/ObjID.html#read(java.io.ObjectInput))([ObjectInput](http://docs.google.com/java/io/ObjectInput.html) in)            Constructs and returns a new ObjID instance by unmarshalling a binary representation from an ObjectInput instance. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/java/rmi/server/ObjID.html#toString())()            Returns a string representation of this object identifier. |
| void | [**write**](http://docs.google.com/java/rmi/server/ObjID.html#write(java.io.ObjectOutput))([ObjectOutput](http://docs.google.com/java/io/ObjectOutput.html) out)            Marshals a binary representation of this ObjID to an ObjectOutput instance. |

| **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()), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [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** |
| --- |

### REGISTRY\_ID

public static final int **REGISTRY\_ID**

Object number for well-known ObjID of the registry.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.rmi.server.ObjID.REGISTRY_ID)

### ACTIVATOR\_ID

public static final int **ACTIVATOR\_ID**

Object number for well-known ObjID of the activator.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.rmi.server.ObjID.ACTIVATOR_ID)

### DGC\_ID

public static final int **DGC\_ID**

Object number for well-known ObjID of the distributed garbage collector.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.rmi.server.ObjID.DGC_ID)

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

### ObjID

public **ObjID**()

Generates a unique object identifier.

If the system property java.rmi.server.randomIDs is defined to equal the string "true" (case insensitive), then this constructor will use a cryptographically strong random number generator to choose the object number of the returned ObjID.

### ObjID

public **ObjID**(int objNum)

Creates a "well-known" object identifier.

An ObjID created via this constructor will not clash with any ObjIDs generated via the no-arg constructor.

**Parameters:**objNum - object number for well-known object identifier

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

### write

public void **write**([ObjectOutput](http://docs.google.com/java/io/ObjectOutput.html) out)  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Marshals a binary representation of this ObjID to an ObjectOutput instance.

Specifically, this method first invokes the given stream's [DataOutput.writeLong(long)](http://docs.google.com/java/io/DataOutput.html#writeLong(long)) method with this object identifier's object number, and then it writes its address space identifier by invoking its [UID.write(DataOutput)](http://docs.google.com/java/rmi/server/UID.html#write(java.io.DataOutput)) method with the stream.

**Parameters:**out - the ObjectOutput instance to write this ObjID to **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if an I/O error occurs while performing this operation

### read

public static [ObjID](http://docs.google.com/java/rmi/server/ObjID.html) **read**([ObjectInput](http://docs.google.com/java/io/ObjectInput.html) in)  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Constructs and returns a new ObjID instance by unmarshalling a binary representation from an ObjectInput instance.

Specifically, this method first invokes the given stream's [DataInput.readLong()](http://docs.google.com/java/io/DataInput.html#readLong()) method to read an object number, then it invokes [UID.read(DataInput)](http://docs.google.com/java/rmi/server/UID.html#read(java.io.DataInput)) with the stream to read an address space identifier, and then it creates and returns a new ObjID instance that contains the object number and address space identifier that were read from the stream.

**Parameters:**in - the ObjectInput instance to read ObjID from **Returns:**unmarshalled ObjID instance **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if an I/O error occurs while performing this operation

### hashCode

public int **hashCode**()

Returns the hash code value for this object identifier, the object number.

**Overrides:**[hashCode](http://docs.google.com/java/lang/Object.html#hashCode()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**the hash code value for this object identifier**See Also:**[Object.equals(java.lang.Object)](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

### equals

public boolean **equals**([Object](http://docs.google.com/java/lang/Object.html) obj)

Compares the specified object with this ObjID for equality. This method returns true if and only if the specified object is an ObjID instance with the same object number and address space identifier as this one.

**Overrides:**[equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)) in class [Object](http://docs.google.com/java/lang/Object.html) **Parameters:**obj - the object to compare this ObjID to **Returns:**true if the given object is equivalent to this one, and false otherwise**See Also:**[Object.hashCode()](http://docs.google.com/java/lang/Object.html#hashCode()), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

### toString

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

Returns a string representation of this object identifier.

**Overrides:**[toString](http://docs.google.com/java/lang/Object.html#toString()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a string representation of this object identifier

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ObjID.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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