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`compact1, compact2, compact3`
`java.util.concurrent.atomic`

Class AtomicBoolean

`java.lang.Object`
`java.util.concurrent.atomic.AtomicBoolean`

All Implemented Interfaces:

[Serializable](#)

```
public class AtomicBoolean
extends Object
implements Serializable
```

A boolean value that may be updated atomically. See the `java.util.concurrent.atomic` package specification for description of the properties of atomic variables. An `AtomicBoolean` is used in applications such as atomically updated flags, and cannot be used as a replacement for a `Boolean`.

Since:

1.5

See Also:

[Serialized Form](#)

Constructor Summary

Constructors

Constructor	Description
AtomicBoolean()	Creates a new <code>AtomicBoolean</code> with initial value false.
AtomicBoolean(boolean initialValue)	Creates a new <code>AtomicBoolean</code> with the given initial value.

Method Summary

All Methods Instance Methods Concrete Methods

Modifier and Type	Method	Description
<code>boolean</code>	compareAndSet (<code>boolean expect</code> , <code>boolean update</code>)	Atomically sets the value to the given updated value if the

		current value == the expected value.
boolean	get()	Returns the current value.
boolean	getAndSet (boolean newValue)	Atomically sets to the given value and returns the previous value.
void	lazySet (boolean newValue)	Eventually sets to the given value.
void	set (boolean newValue)	Unconditionally sets to the given value.
String	toString()	Returns the String representation of the current value.
boolean	weakCompareAndSet (boolean expect, boolean update)	Atomically sets the value to the given updated value if the current value == the expected value.

Methods inherited from class java.lang.Object

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Constructor Detail

AtomicBoolean

```
public AtomicBoolean(boolean initialValue)
```

Creates a new AtomicBoolean with the given initial value.

Parameters:

`initialValue` - the initial value

AtomicBoolean

```
public AtomicBoolean()
```

Creates a new AtomicBoolean with initial value false.

Method Detail

get

```
public final boolean get()
```

Returns the current value.

Returns:

the current value

compareAndSet

```
public final boolean compareAndSet(boolean expect,  
                                  boolean update)
```

Atomically sets the value to the given updated value if the current value == the expected value.

Parameters:

expect - the expected value

update - the new value

Returns:

true if successful. False return indicates that the actual value was not equal to the expected value.

weakCompareAndSet

```
public boolean weakCompareAndSet(boolean expect,  
                                 boolean update)
```

Atomically sets the value to the given updated value if the current value == the expected value.

May fail spuriously and does not provide ordering guarantees, so is only rarely an appropriate alternative to compareAndSet.

Parameters:

expect - the expected value

update - the new value

Returns:

true if successful

set

```
public final void set(boolean newValue)
```

Unconditionally sets to the given value.

Parameters:

newValue - the new value

lazySet

```
public final void lazySet(boolean newValue)
```

Eventually sets to the given value.

Parameters:

newValue - the new value

Since:

1.6

getAndSet

```
public final boolean getAndSet(boolean newValue)
```

Atomically sets to the given value and returns the previous value.

Parameters:

newValue - the new value

Returns:

the previous value

toString

```
public String toString()
```

Returns the String representation of the current value.

Overrides:

`toString` in class `Object`

Returns:

the String representation of the current value

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