

System.Threading.ManualResetEvent Class

```
[ILAsm]
.class public sealed beforefieldinit ManualResetEvent extends
System.Threading.EventWaitHandle

[C#]
public sealed class ManualResetEvent : System.Threading.EventWaitHandle
```

Assembly Info:

- *Name:* mscorlib
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- *Version:* 4.0.0.0
- *Attributes:*
 - CLSCompliantAttribute(true)

Summary

Notifies one or more waiting threads that an event has occurred. This class cannot be inherited.

Inherits From: System.Threading.EventWaitHandle

Library: BCL

Description

`System.Threading.ManualResetEvent` derives from the new `System.Threading.EventWaitHandle` class. A `System.Threading.ManualResetEvent` is functionally equivalent to an `System.Threading.EventWaitHandle` created with `System.Threading.EventResetMode.ManualReset`.

`System.Threading.ManualResetEvent` allows threads to communicate with each other by signaling. Typically, this communication concerns a task which one thread must complete before other threads can proceed.

When a thread begins an activity that must complete before other threads proceed, it calls `System.Threading.EventWaitHandle.Reset` to put `ManualResetEvent` in the non-sigaled state. This thread can be thought of as controlling the `ManualResetEvent`. Threads that call `System.Threading.WaitHandle.WaitOne` on the `ManualResetEvent` will block, awaiting the signal. When the controlling thread completes the activity, it calls `System.Threading.EventWaitHandle.Set` to signal that the waiting threads can proceed. All waiting threads are released.

Once it has been sigaled, `ManualResetEvent` remains sigaled until it is manually reset. That is, calls to `WaitOne` return immediately.

You can control the initial state of a `ManualResetEvent` by passing a Boolean value to the constructor, `true` if the initial state is sigaled and `false` otherwise.

1
2 ManualResetEvent can also be used with the
3 static System.Threading.WaitHandle.WaitAll and
4 System.Threading.WaitHandle.WaitAny methods.

5

1 ManualResetEvent(System.Boolean)

2 Constructor

```
3 [ILAsm]  
4 .method public hidebysig specialname rtspecialname instance void  
5 .ctor(bool initialState) cil managed  
  
6 [C#]  
7 public ManualResetEvent (bool initialState)
```

8 Summary

9 Initializes a new instance of the `System.Threading.ManualResetEvent` class with a
10 Boolean value indicating whether to set the initial state to signaled.

11 Parameters

Parameter	Description
<i>initialState</i>	true to set the initial state signaled; false to set the initial state to nonsignaled.

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