System.Threading.ThreadStateException Class

```
[ILAsm]
.class public serializable ThreadStateException extends
System.SystemException

[C#]
public class ThreadStateException: SystemException
```

Assembly Info:

- *Name:* mscorlib
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- *Version:* 2.0.x.x
- *Attributes:*
    - CLSCompliantAttribute(true)

Summary

Represents errors that occur when a method is invoked on a `System.Threading.Thread` and the thread is in a `System.Threading.Thread.ThreadState` that is invalid for the method.

Inherits From: System.SystemException

Library: BCL

Thread Safety: All public static members of this type are safe for multithreaded operations. No instance members are guaranteed to be thread safe.

Description

Once a thread is created, it is in one or more states, as defined by `System.Threading.ThreadState`, until it terminates. `System.Threading.ThreadStateException` is thrown by methods that cannot perform the requested operation due to the current state of a thread. For example, calling `System.Threading.Thread.Start` on a thread that has terminated results in a `System.Threading.ThreadStateException` exception.

Example

The following example demonstrates an error that causes a `System.Threading.ThreadStateException` exception to be thrown.

[C#]

```
using System;
using System.Threading;
public class ThreadWork {
 public static void DoWork() {
 Console.WriteLine("Working thread...");
 }
}

class ThreadStateTest{
 public static void Main() {
 ThreadStart myThreadDelegate = new ThreadStart(ThreadWork.DoWork);
 Thread myThread = new Thread(myThreadDelegate);
 myThread.Start();
 Thread.Sleep(0);
 Console.WriteLine("In main. Attempting to restart myThread.");
 try {
 myThread.Start();
 }
 catch (ThreadStateException e) {
 Console.WriteLine("Caught: {0}", e.Message);
 }

 }
}
```

The output is

```
Working thread...


In main. Attempting to restart myThread.


Caught: Thread is running or terminated. Cannot restart.
```

ThreadStateException() Constructor

[ILAsm]
```
public rtspecialname specialname instance void .ctor()
```

[C#]
```
public ThreadStateException()
```

Summary

Constructs and initializes a new instance of the `System.Threading.ThreadStateException` class.

Description

This constructor initializes the `System.Threading.ThreadStateException.Message` property of the new instance to a system-supplied message that describes the error, such as "The requested operation cannot be performed on the thread due to its current state." This message takes into account the current system culture.

The `System.Threading.ThreadStateException.InnerException` property of the new instance is initialized to `null`.

ThreadStateException(System.String) Constructor

```
[ILAsm]
public rtspecialname specialname instance void .ctor(string message)

[C#]
public ThreadStateException(string message)
```

Summary

Constructs and initializes a new instance of the `System.Threading.ThreadStateException` class.

Parameters

Parameter	Description
message	A `System.String` that describes the error. The content of *message* is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.

Description

This constructor initializes the `System.Threading.ThreadStateException.Message` property of the new instance using *message*. If *message* is `null`, the `System.Threading.ThreadStateException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments.

The `System.Threading.ThreadStateException.InnerException` property of the new instance is initialized to `null`.

ThreadStateException(System.String, System.Exception) Constructor

```
[ILAsm]
public rtspecialname specialname instance void .ctor(string message,
class System.Exception innerException)

[C#]
public ThreadStateException(string message, Exception
innerException)
```

Summary

Constructs and initializes a new instance of the `System.Threading.ThreadStateException` class.

Parameters

Parameter	**Description**
message	A `System.String` that describes the error. The content of *message* is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.
innerException	An instance of `System.Exception` that is the cause of the current exception. If *innerException* is non-null, then the current Exception was raised in a catch block handling *innerException.*

Description

This constructor initializes the `System.Threading.ThreadStateException.Message` property of the new instance using *message* and the `System.Threading.ThreadStateException.InnerException` property using *innerException*. If *message* is `null`, the `System.Threading.ThreadStateException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments.

[*Note:* For more information on inner exceptions, see `System.Exception.InnerException`.]