

1 System.Threading.ThreadStateException

2 Class

```
3 [ILAsm]  
4 .class public serializable ThreadStateException extends  
5 System.SystemException  
  
6 [C#]  
7 public class ThreadStateException: SystemException
```

8 Assembly Info:

- 9 • *Name:* mscorlib
- 10 • *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- 11 • *Version:* 2.0.x.x
- 12 • *Attributes:*
 - 13 ○ CLSCompliantAttribute(true)

14 Summary

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

18 Inherits From: System.SystemException

19

20 **Library:** BCL

21

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

24

25 Description

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

32 Example

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

35

36 [C#]

```
37 using System;  
38 using System.Threading;
```

```
1 public class ThreadWork {
2     public static void DoWork() {
3         Console.WriteLine("Working thread...");
4     }
5 }
6
7 class ThreadStateTest{
8     public static void Main() {
9         ThreadStart myThreadDelegate = new ThreadStart(ThreadWork.DoWork);
10        Thread myThread = new Thread(myThreadDelegate);
11        myThread.Start();
12        Thread.Sleep(0);
13        Console.WriteLine("In main. Attempting to restart myThread.");
14        try {
15            myThread.Start();
16        }
17        catch (ThreadStateException e) {
18            Console.WriteLine("Caught: {0}", e.Message);
19        }
20
21    }
22 }
23
```

24 The output is

25

26 Working thread...

27

28

29 In main. Attempting to restart myThread.

30

31

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

33

34

1 ThreadStateException() Constructor

```
2 [ILAsm]  
3 public rtspecialname specialname instance void .ctor()  
4 [C#]  
5 public ThreadStateException()
```

6 Summary

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

9 Description

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

14
15 The `System.Threading.ThreadStateException.InnerException` property of the new
16 instance is initialized to null.

17

1 ThreadStateException(System.String) 2 Constructor

```
3 [ILAsm]  
4 public rtspecialname specialname instance void .ctor(string message)  
5 [C#]  
6 public ThreadStateException(string message)
```

7 Summary

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

10 Parameters

Parameter	Description
<i>message</i>	A System.String that describes the error. The content of <i>message</i> 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.

11 12 Description

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

17
18 The System.Threading.ThreadStateException.InnerException property of the new
19 instance is initialized to null.

20

1 ThreadStateException(System.String, 2 System.Exception) Constructor

```
3 [ILAsm]  
4 public rtspecialname specialname instance void .ctor(string message, class  
5 System.Exception innerException)  
  
6 [C#]  
7 public ThreadStateException(string message, Exception innerException)
```

8 Summary

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

11 Parameters

Parameter	Description
<i>message</i>	A System.String that describes the error. The content of <i>message</i> 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.
<i>innerException</i>	An instance of System.Exception that is the cause of the current exception. If <i>innerException</i> is non-null, then the current Exception was raised in a catch block handling <i>innerException</i> .

12 13 Description

14 This constructor initializes the System.Threading.ThreadStateException.Message
15 property of the new instance using *message* and the
16 System.Threading.ThreadStateException.InnerException property using
17 *innerException*. If *message* is null, the
18 System.Threading.ThreadStateException.Message property is initialized to the
19 system-supplied message provided by the constructor that takes no arguments.
20

21 [Note: For more information on inner exceptions, see
22 System.Exception.InnerException.]
23
24

25