

1 System.Threading.Parallel.ParallelEnvironment 2 nt Class

```
3 [ILAsm]  
4 .class public sealed ParallelEnvironment extends System.Object  
5 [C#]  
6 public sealed class ParallelEnvironment
```

7 Assembly Info:

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

13 Summary

14 Provides the current settings for, and information about, the parallel-loop execution
15 environment.

16 Inherits From: System.Object

17

18 **Library:** Parallel

19

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

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1 ParallelEnvironment.MaxThreads Property

```
2 [ILAsm]  
3 .property int32 MaxThreads { public hidebysig static specialname int32  
4 get_MaxThreads() public hidebysig static specialname void  
5 set_MaxThreads(int32 value) }  
  
6 [C#]  
7 public static int MaxThreads { get; set; }
```

8 Summary

9 Default upper bound on the number of threads employed by a parallel loop.

10 Property Value

11 A `System.Int32` that limits the number of worker threads employed by parallel loop
12 constructs that do not explicitly specify an upper bound on the number of threads. The
13 bound includes the thread that calls
14 `System.Threading.Parallel.ParallelLoop<T>.BeginRun`, and hence `MaxThreads`
15 must be positive.

16 Description

17 Setting `System.Threading.Parallel.ParallelEnvironment.MaxThreads` to 1 causes
18 deterministic sequential execution of all parallel loop constructs that do not explicitly
19 specify an upper bound on the number of threads. This is useful for debugging of code.
20 Ordinarily, `System.Threading.Parallel.ParallelEnvironment.MaxThreads` should not
21 be set in production code because it affects parallel loops everywhere in a program.

22
23 The initial value is
24 `System.Threading.Parallel.ParallelEnvironment.RecommendedMaxThreads`.

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2 ParallelEnvironment.RecommendedMaxThrea

3 ds Property

```
4 [ILAsm]  
5 .property int32 MaxThreads { public hidebysig static specialname int32  
6 get_RecommendedMaxThreads() }  
7 [C#]  
8 public static int RecommendedMaxThreads { get; }
```

9 **Summary**

10 Recommended value for
11 System.Threading.Parallel.ParallelEnvironment.MaxThreads

12 **Property Value**

13 A System.Int32 that is the initial value for
14 System.Threading.Parallel.ParallelEnvironment.MaxThreads.

15 **Description**

16 Values between 1x and 2x the number of physical threads on the platform are
17 recommended.

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