

System.Threading.Parallel.ParallelEnvironment Class

```
[ILAsm]
.class public sealed ParallelEnvironment extends System.Object

[C#]
public sealed class ParallelEnvironment
```

Assembly Info:

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

Summary

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

Inherits From: System.Object

Library: Parallel

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

ParallelEnvironment.MaxThreads Property

```
[ILAsm]  
.property int32 MaxThreads { public hidebysig static specialname int32  
get_MaxThreads() public hidebysig static specialname void  
set_MaxThreads(int32 value) }
```

```
[C#]  
public static int MaxThreads { get; set; }
```

Summary

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

Property Value

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

Description

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

The initial value is `System.Threading.Parallel.ParallelEnvironment.RecommendedMaxThreads`.

ParallelEnvironment.RecommendedMaxThreads Property

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

Summary

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

Property Value

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

Description

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