

# System.Runtime.InteropServices.InAttribute Class

```
[ILAsm]
.class public sealed InAttribute extends System.Attribute

[C#]
public sealed class InAttribute: Attribute
```

## 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)

## Type Attributes:

- AttributeUsageAttribute(AttributeTargets.Parameter, AllowMultiple=false, Inherited=false)

## Summary

Indicates that a parameter will be marshaled from the caller to the callee.

## Inherits From: System.Attribute

**Library:** RuntimeInfrastructure

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

## Description

[*Note:* The System.Runtime.InteropServices.InAttribute and System.Runtime.InteropServices.OutAttribute are not required. In the absence of explicit settings, the system assumes that all arguments passed by reference are passed in/out and that all non-reference parameters are in. The only exception is the System.Text.StringBuilder class, which is always assumed to be in/out. The System.Runtime.InteropServices.InAttribute and System.Runtime.InteropServices.OutAttribute are particularly useful when applied to formatted types that cannot be block-copied. Since these types require copying during marshaling, you can use System.Runtime.InteropServices.InAttribute and System.Runtime.InteropServices.OutAttribute to eliminate the generation of unnecessary copies.]

1  
2 Compilers are required to not preserve this type in metadata as a custom attribute.  
3 Instead, compilers are required to emit it directly in the file format, as described in  
4 Partition II of the CLI Specification. Metadata consumers, such as the Reflection API, are  
5 required to retrieve this data from the file format and return it as if it were a custom  
6 attribute.

7

# 1 InAttribute() Constructor

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

## 6 Summary

7 Constructs and initializes a new instance of the  
8 System.Runtime.InteropServices.InAttribute class.

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