

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]
- *Version:* 1.0.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

1 **System.Runtime.InteropServices.OutAttribute** to eliminate the
2 generation of unnecessary copies.]

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

10

1 InAttribute() Constructor

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

6 Summary

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

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