

# 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:* 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.]

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

# InAttribute() Constructor

```
[ILAsm]  
public rtspecialname specialname instance void .ctor()
```

```
[C#]  
public InAttribute()
```

## Summary

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