

System.Diagnostics.ConditionalAttribute Class

```
[ILASM]
.class public sealed serializable ConditionalAttribute
extends System.Attribute

[C#]
public sealed class ConditionalAttribute: 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.Method, AllowMultiple=true, Inherited=true)

Summary

Indicates to compilers that a method is callable if and only if a specified pre-processing identifier has been defined on the method.

Inherits From: System.Attribute

Library: BCL

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: A **System.Diagnostics.ConditionalAttribute**, which has an associated condition **System.Diagnostics.ConditionalAttribute.ConditionString**, can be attached to the definition of a method, creating a *conditional method*. Thereafter, when a compiler encounters a call to that method, it may choose to ignore the call unless a compilation variable is defined at the site of the call, with a value that matches in a case-sensitive manner the **System.Diagnostics.ConditionalAttribute.ConditionString** supplied to the **System.Diagnostics.ConditionalAttribute**.

1 Note that compilers may provide several techniques to define such
2 compilation variables, such as:

- 3 • compiler command-line switches (for example, /define:DEBUG)
- 4 • environment variables in the operating system shell (for example, SET
5 DEBUG=1)
- 6 • as pragmas in the source code (for example, #define DEBUG, to define
7 the compilation variable, or #undef DEBUG to undefine it)

8 CLS-Compliant compilers are permitted to ignore uses of the
9 **System.Diagnostics.ConditionalAttribute.**]

10 Example

11

12 The following example demonstrates the use of
13 **System.Diagnostics.ConditionalAttribute** with a particular compiler
14 that supports the use of this attribute. The
15 **System.Diagnostics.ConditionalAttribute.ConditionString**
16 property of the current attribute is initialized as "DEBUG".

```
17 [C#]  
18  
19 using System;  
20 using System.Diagnostics;  
21  
22 public class MyClass {  
23  
24     [ConditionalAttribute("DEBUG")]  
25     public static void Display() {  
26  
27         Console.WriteLine("Compiled with DEBUG");  
28     }  
29 }  
30  
31 public class TestCondition {  
32  
33     public static void Main() {  
34  
35         Console.WriteLine("How was this compiled?");  
36         MyClass.Display();  
37         Console.WriteLine("<eop>");  
38     }  
39 }  
40
```

41 When this code is compiled with the compilation-variable DEBUG
42 defined at the callsite, the output when run is
43

```
1      How was this compiled?
2
3
4      Compiled with DEBUG
5
6
7      <eop>
8
9
10     When this code is compiled without the compilation-variable DEBUG
11     defined at the callsite, the output when run is
12
13     How was this compiled?
14
15
16     <eop>
17
18
```

1 ConditionalAttribute(System.String)

2 Constructor

```
3 [ILASM]  
4 public rtspecialname specialname instance void .ctor(string  
5 conditionString)  
  
6 [C#]  
7 public ConditionalAttribute(string conditionString)
```

8 Summary

9 Constructs and initializes a new instance of the
10 **System.Diagnostics.ConditionalAttribute** class.

11 Parameters

12
13

Parameter	Description
<i>conditionString</i>	A System.String that contains the pre-processing identifier that makes callable the target method of the current instance.

14

15 Description

16 This constructor initializes the
17 **System.Diagnostics.ConditionalAttribute.ConditionString**
18 property of the current instance using *conditionString*.

19

1 ConditionalAttribute.ConditionString

2 Property

```
3 [ILASM]  
4 .property string ConditionString { public hideby sig  
5 specialname instance string get_ConditionString() }  
  
6 [C#]  
7 public string ConditionString { get; }
```

8 Summary

9 Gets the **System.String** that contains the pre-processing identifier
10 that makes callable the target method of the current instance.

11 Property Value

12

13 A **System.String** that contains the pre-processing identifier that
14 makes callable the target method of the current instance.

15 Description

16 This property is read-only.

17