

# 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:* 2.0.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 might 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`.

Note that compilers might provide several techniques to define such compilation variables, such as:

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

CLS-Compliant compilers are permitted to ignore uses of the `System.Diagnostics.ConditionalAttribute`.

]

## Example

The following example demonstrates the use of `System.Diagnostics.ConditionalAttribute` with a particular compiler that supports the use of this attribute. The `System.Diagnostics.ConditionalAttribute.ConditionString` property of the current attribute is initialized as "DEBUG".

[C#]

```
using System;
using System.Diagnostics;

public class MyClass {

    [ConditionalAttribute("DEBUG")]
    public static void Display() {

        Console.WriteLine("Compiled with DEBUG");
    }
}

public class TestCondition {

    public static void Main() {

        Console.WriteLine("How was this compiled?");
        MyClass.Display();
        Console.WriteLine("<eop>");
    }
}
```

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

How was this compiled?

Compiled with DEBUG

<eop>

When this code is compiled without the compilation-variable DEBUG defined at the callsite, the output when run is

How was this compiled?

<eop>

# ConditionalAttribute(System.String) Constructor

```
[ILAsm]  
public rtspecialname specialname instance void .ctor(string  
conditionString)  
  
[C#]  
public ConditionalAttribute(string conditionString)
```

## Summary

Constructs and initializes a new instance of the `System.Diagnostics.ConditionalAttribute` class.

## Parameters

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

## Description

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

# ConditionalAttribute.ConditionString Property

```
[ILAsm]
.property string ConditionString { public hidebysig specialname
instance string get_ConditionString() }

[C#]
public string ConditionString { get; }
```

## Summary

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

## Property Value

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

## Description

This property is read-only.