

# System.Security.Permissions.ReflectionPermissionAttribute Class

```
[ILASM]
.class public sealed serializable
ReflectionPermissionAttribute extends
System.Security.Permissions.CodeAccessSecurityAttribute

[C#]
public sealed class ReflectionPermissionAttribute:
CodeAccessSecurityAttribute
```

## 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.Assembly | AttributeTargets.Class | AttributeTargets.Struct | AttributeTargets.Constructor | AttributeTargets.Method, AllowMultiple=true, Inherited=false)

## Summary

Used to declaratively specify security actions to control access to non-public types using reflection.

**Inherits From:** System.Security.Permissions.CodeAccessSecurityAttribute

**Library:** Reflection

**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 level of access to non-public types and members is specified using the **System.Security.Permissions.ReflectionPermissionAttribute.Flags** property and the **System.Security.Permissions.ReflectionPermissionFlag** enumeration.

1 The security information declared by a security attribute is stored in  
2 the metadata of the attribute target, and is accessed by the system at  
3 run-time. Security attributes are used for declarative security only. For  
4 imperative security, use the corresponding permission class,  
5 **System.Security.Permissions.ReflectionPermission**.  
6  
7 The allowable  
8 **System.Security.Permissions.ReflectionPermissionAttribute**  
9 targets are determined by the  
10 **System.Security.Permissions.SecurityAction** passed to the  
11 constructor.]

## 12 Example 13

14 The following example shows a declarative request for access to non-  
15 public members of loaded assemblies. The  
16 **System.Security.Permissions.SecurityAction.RequestMinimum**  
17 security action indicates that this is the minimum permission required  
18 for the target assembly to be able to execute.

```
19  
20 [assembly:ReflectionPermissionAttribute(SecurityAction.Requ  
21 estMinimum, MemberAccess=true)]
```

22  
23 The following example shows how to demand that the calling code has  
24 unrestricted access to non-public types. Demands are typically made  
25 to protect methods or classes from malicious code.

```
26  
27 [ReflectionPermissionAttribute(SecurityAction.Demand,  
28 Unrestricted=true)]
```

29

# ReflectionPermissionAttribute(System.Security.Permissions.SecurityAction) Constructor

```
[ILASM]
public rtspecialname specialname instance void
.ctor(valuetype System.Security.Permissions.SecurityAction
action)

[C#]
public ReflectionPermissionAttribute(SecurityAction action)
```

## Summary

Constructs and initializes a new instance of the **System.Security.Permissions.ReflectionPermissionAttribute** class with the specified **System.Security.Permissions.SecurityAction** value.

## Parameters

Parameter	Description
<i>action</i>	A <b>System.Security.Permissions.SecurityAction</b> value.

## Exceptions

Exception	Condition
<b>System.ArgumentException</b>	<i>action</i> is not a valid <b>System.Security.Permissions.SecurityAction</b> value.

# ReflectionPermissionAttribute.CreatePermission() Method

```
[ILASM]
.method public hidebysig virtual class
System.Security.IPermission CreatePermission()

[C#]
public override IPermission CreatePermission()
```

## Summary

Returns a new **System.Security.Permissions.ReflectionPermission** that contains the security information of the current instance.

## Return Value

A new **System.Security.Permissions.ReflectionPermission** object with the security information of the current instance.

## Description

[Note: Applications typically do not call this method; it is intended for use by the system.]

The security information described by a security attribute is stored in the metadata of the attribute target, and is accessed by the system at run-time. The system uses the object returned by this method to convert the security information of the current instance into the form stored in metadata.

This method overrides **System.Security.Permissions.SecurityAttribute.CreatePermission()**.

# ReflectionPermissionAttribute.Flags Property

```
[ILASM]
.property valuetype
System.Security.Permissions.ReflectionPermissionFlag Flags
{ public hidebysig specialname instance valuetype
System.Security.Permissions.ReflectionPermissionFlag
get_Flags() public hidebysig specialname instance void
set_Flags(valuetype
System.Security.Permissions.ReflectionPermissionFlag value)
}

[C#]
public ReflectionPermissionFlag Flags { get; set; }
```

## Summary

Gets or sets levels of access to non-public types using reflection.

## Property Value

One or more of the  
**System.Security.Permissions.ReflectionPermissionFlag** values.

## Description

[*Note:* To specify multiple  
**System.Security.Permissions.ReflectionPermissionFlag** values  
for a set operation, use the bitwise OR operator.]