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 00]
- *Version:* 2.0.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.

The security information declared by a security attribute is stored in the metadata of the attribute target, and is accessed by the system at run-time. Security attributes are used for declarative security only. For imperative security, use the corresponding permission class, `System.Security.Permissions.ReflectionPermission`.

The allowable `System.Security.Permissions.ReflectionPermissionAttribute` targets are determined by the `System.Security.Permissions.SecurityAction` passed to the constructor.

]

Example

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

```
[assembly:ReflectionPermissionAttribute(SecurityAction.RequestMinimu
m, MemberAccess=true)]
```

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

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

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
action	A `System.Security.Permissions.SecurityAction` value.

Exceptions

Exception	Condition
System.ArgumentException	*action* is not a valid `System.Security.Permissions.SecurityAction` 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.]