System.Net.SocketPermissionAttribute Class

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

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

Assembly Info:

- *Name:* System
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 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 socket connections.

Inherits From: System.Security.Permissions.CodeAccessSecurityAttribute

Library: Networking

Thread Safety: All public static members of this type are safe for multithreaded operations. No instance members are guaranteed to be thread safe.

Description

The properties of a **System.Net.SocketPermissionAttribute** are required to have non-null values. Once set, the values of the properties cannot be changed.

[*Note:* The details of a socket connection are specified using the properties of the current instance. For example, to secure a socket connection to port 80, set the

System.Net.SocketPermissionAttribute.Port property equal to "80".

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.Net.SocketPermission**.

The allowable **System.Net.SocketPermissionAttribute** targets are determined by the **System.Security.Permissions.SecurityAction** passed to the constructor.]

SocketPermissionAttribute(System.Security.Permissions.SecurityAction) Constructor

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

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

Summary

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

Parameters

Parameter	Description
action	A **System.Security.Permissions.SecurityAction** value.

Permissions

Permission	Description
System.ArgumentException	*action* is not a valid **System.Security.Permissions.SecurityAction** value.

SocketPermissionAttribute.CreatePermission() Method

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

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

Summary

Returns a **System.Net.SocketPermission** that contains the security information of the current instance.

Return Value

A **System.Net.SocketPermission** object with the security information of the current instance.

Description

[*Note:* This method overrides **System.Security.Permissions.SecurityAttribute.CreatePermission**.

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.]

Exceptions

Exception	Condition
System.ArgumentException	One or more of the current instance's **System.Net.SocketPermissionAttribute.Access**, **System.Net.SocketPermissionAttribute.Host**, **System.Net.SocketPermissionAttribute.Transport** or **System.Net.SocketPermissionAttribute.Port** properties is **null**.

SocketPermissionAttribute.Access Property

```
[ILASM]
.property string Access { public hidebysig specialname
instance string get_Access() public hidebysig specialname
instance void set_Access(string value) }

[C#]
public string Access { get; set; }
```

Summary

Gets or sets the network access method specified by the current instance.

Property Value

A **System.String** containing a network access method allowed by the current instance. Valid values are "Accept" and "Connect".

Description

This property is write-once. Once this property has been set to a non-null value, attempts to set this property to new value cause a **System.ArgumentException**.

Valid values for this property correspond to **System.Net.NetworkAccess** enumeration values.

Exceptions

Exception	Condition
System.ArgumentException	**System.Net.SocketPermissionAttribute.Access** is being set and is not **null**.

SocketPermissionAttribute.Host Property

```
[ILASM]
.property string Host { public hidebysig specialname
instance string get_Host() public hidebysig specialname
instance void set_Host(string value) }

[C#]
public string Host { get; set; }
```

Summary

Gets or sets the DNS host name or IP address specified by the current instance.

Property Value

A **System.String** containing a DNS host name or IP address.

Description

This property is write-once. Once this property has been set to a non-null value, attempts to set this property to new value cause a **System.ArgumentException**.

Exceptions

Exception	Condition
System.ArgumentException	**System.Net.SocketPermissionAttribute.Host** is being set and is not **null**.

SocketPermissionAttribute.Port Property

```
[ILASM]
.property string Port { public hidebysig specialname
instance string get_Port() public hidebysig specialname
instance void set_Port(string value) }

[C#]
public string Port { get; set; }
```

Summary

Gets or sets the port specified by the current instance.

Property Value

A **System.String** containing a port number, or "All" or -1 to indicate all ports.

Description

This property is write-once. Once this property has been set to a non-null value, attempts to set this property to new value cause a **System.ArgumentException**.

Exceptions

Exception	Condition
System.ArgumentException	**System.Net.SocketPermissionAttribute.Port** is being set and is not **null**.

SocketPermissionAttribute.Transport Property

```
[ILASM]
.property string Transport { public hidebysig specialname
instance string get_Transport() public hidebysig
specialname instance void set_Transport(string value) }

[C#]
public string Transport { get; set; }
```

Summary

Gets or sets the transport type specified by the current instance.

Property Value

A **System.String** containing the transport type associated with the current instance. Valid values are "All", "Connectionless", "ConnectionOriented", "Tcp", and "Udp".

Description

This property is write-once. Once this property has been set to a non-null value, attempts to set this property to new value cause a **System.ArgumentException**.

[*Note:* Valid values for this property correspond to **System.Net.TransportType** enumeration values.]

Exceptions

Exception	Condition
System.ArgumentException	**System.Net.SocketPermissionAttribute.Transport** is being set and is not **null**.