

System.Net.Sockets.MulticastOption Class

```
[ILAsm]
.class public MulticastOption extends System.Object

[C#]
public class MulticastOption
```

Assembly Info:

- *Name:* System
- *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)

Summary

Contains Internet Protocol (IP) addresses used when joining or leaving an IP multicast group.

Inherits From: System.Object

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

Collectively, the hosts listening to a specific IP multicast address (the group address) are called a multicast group. Each member of the group receives any IP messages sent to the group address.

An instance of this class is passed into the `System.Net.Sockets.Socket.SetSocketOption` method and returned by the `System.Net.Sockets.Socket.GetSocketOption` method when the *optionName* parameter is set to `System.Net.Sockets.SocketOptionName.AddMembership` or `System.Net.Sockets.SocketOptionName.DropMembership`.

MulticastOption(System.Net.IPAddress, System.Net.IPAddress) Constructor

```
[ILAsm]
public rtspecialname specialname instance void .ctor(class
System.Net.IPAddress group, class System.Net.IPAddress mcint)

[C#]
public MulticastOption(IPAddress group, IPAddress mcint)
```

Summary

Constructs and initializes a new instance of the `System.Net.Sockets.MulticastOption` class with the specified IP multicast group and local addresses.

Parameters

| Parameter | Description |
|--------------|---|
| <i>group</i> | An instance of <code>System.Net.IPAddress</code> containing the group IP address. |
| <i>mcint</i> | An instance of <code>System.Net.IPAddress</code> containing the local IP address. |

Description

The `System.Net.Sockets.MulticastOption.Group` property is set to *group* and the `System.Net.Sockets.MulticastOption.LocalAddress` property is set to *mcint*.

Exceptions

| Exception | Condition |
|---|---------------------------------------|
| <code>System.ArgumentNullException</code> | <i>group</i> or <i>mcint</i> is null. |

MulticastOption(System.Net.IPAddress) Constructor

```
[ILAsm]  
public rtspecialname specialname instance void .ctor(class  
System.Net.IPAddress group)  
  
[C#]  
public MulticastOption(IPAddress group)
```

Summary

Constructs and initializes a new instance of the `System.Net.Sockets.MulticastOption` class with the specified IP multicast group address.

Parameters

| Parameter | Description |
|--------------|--|
| <i>group</i> | An instance of <code>System.Net.IPAddress</code> containing the IP address of a multicast group. |

Description

This constructor initializes the `System.Net.Sockets.MulticastOption.Group` property of the new instance using *group*. The `System.Net.Sockets.MulticastOption.LocalAddress` property is initialized to `System.Net.IPAddress.Any`. Any allows the protocol to decide which local IP address to use.

Exceptions

| Exception | Condition |
|---|-----------------------|
| <code>System.ArgumentNullException</code> | <i>group</i> is null. |

MulticastOption.Group Property

```
[ILAsm]
.property class System.Net.IPAddress Group { public hidebysig
specialname instance class System.Net.IPAddress get_Group() public
hidebysig specialname instance void set_Group(class
System.Net.IPAddress value) }

[C#]
public IPAddress Group { get; set; }
```

Summary

Gets or sets the IP address of a multicast group.

Property Value

An instance of `System.Net.IPAddress` containing the IP address of a multicast group.

Description

Collectively, the hosts listening to a specific IP multicast address are called a multicast group. Each member of the group receives any IP messages sent to this address.

[*Note:* Valid IP addresses for multicast groups are in the range 224.0.0.0 to 239.255.255.255 with some addresses reserved for special purposes.

]

MulticastOption.LocalAddress Property

```
[ILAsm]  
.property class System.Net.IPAddress LocalAddress { public hidebysig  
specialname instance class System.Net.IPAddress get_LocalAddress()  
public hidebysig specialname instance void set_LocalAddress(class  
System.Net.IPAddress value) }  
  
[C#]  
public IPAddress LocalAddress { get; set; }
```

Summary

Gets or sets the local IP address to receive data.

Property Value

An instance of `System.Net.IPAddress` containing the local IP address.

Description

This property specifies the local IP address used to receive data sent to the multicast group.