

1 System.Net.Sockets.MulticastOption Class

```
2 [ILAsm]  
3 .class public MulticastOption extends System.Object  
4 [C#]  
5 public class MulticastOption
```

6 Assembly Info:

- 7 • *Name:* System
- 8 • *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- 9 • *Version:* 2.0.x.x
- 10 • *Attributes:*
 - 11 ○ CLSCompliantAttribute(true)

12 Summary

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

15 Inherits From: System.Object

16

17 **Library:** Networking

18

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

21

22 Description

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

26

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

32

1 MulticastOption(System.Net.IPAddress, 2 System.Net.IPAddress) Constructor

```
3 [ILAsm]  
4 public rtspecialname specialname instance void .ctor(class  
5 System.Net.IPAddress group, class System.Net.IPAddress mcint)  
  
6 [C#]  
7 public MulticastOption(IPAddress group, IPAddress mcint)
```

8 Summary

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

11 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.

12

13 Description

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

16 Exceptions

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

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18

1 MulticastOption(System.Net.IPAddress)

2 Constructor

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

8 Summary

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

11 Parameters

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

12 13 Description

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

19 Exceptions

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

20
21

1 MulticastOption.Group Property

```
2 [ILAsm]  
3 .property class System.Net.IPAddress Group { public hidebysig specialname  
4 instance class System.Net.IPAddress get_Group() public hidebysig  
5 specialname instance void set_Group(class System.Net.IPAddress value) }  
6 [C#]  
7 public IPAddress Group { get; set; }
```

8 Summary

9 Gets or sets the IP address of a multicast group.

10 Property Value

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

12 Description

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

15
16 [*Note:* Valid IP addresses for multicast groups are in the range 224.0.0.0 to
17 239.255.255.255 with some addresses reserved for special purposes.

18
19]

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1 MulticastOption.LocalAddress Property

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

9 Summary

10 Gets or sets the local IP address to receive data.

11 Property Value

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

13 Description

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

16