

1 System.Net.ServicePointManager Class

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

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 Manages System.Net.ServicePoint instances.

14 Inherits From: System.Object

15

16 **Library:** Networking

17

18 **Thread Safety:** The public static fields exposed in ServicePointManager are not thread safe.
19 Changing one of these values in one thread will change the value for any other thread
20 subsequently accessing the field.

21

22 Description

23 System.Net.ServicePointManager creates, maintains, and deletes
24 System.Net.ServicePoint instances.

25

26 When an application requests a connection to an Internet resource through the
27 System.Net.ServicePointManager, the System.Net.ServicePointManager returns a
28 System.Net.ServicePoint instance containing connection information for the host
29 identified by the Uniform Resource Identifier (URI) of the resource. If there is an
30 existing System.Net.ServicePoint for that host, the
31 System.Net.ServicePointManager returns the existing System.Net.ServicePoint,
32 otherwise the System.Net.ServicePointManager creates a new
33 System.Net.ServicePoint instance.

34

1
2 **ServicePointManager.DefaultNonPersistentCo**
3 **nnexionLimit Field**

```
4 [ILAsm]  
5 .field public static literal int32 DefaultNonPersistentConnectionLimit = 4  
6 [C#]  
7 public const int DefaultNonPersistentConnectionLimit = 4
```

8 **Summary**

9 The default number of non-persistent connections allowed on a
10 System.Net.ServicePoint.

11 **Description**

12 This field is read-only.

13
14 The value of this field is 4.

15

1

2 ServicePointManager.DefaultPersistentConne

3 ctionLimit Field

4 [ILAsm]
5 .field public static literal int32 DefaultPersistentConnectionLimit = 2

6 [C#]
7 public const int DefaultPersistentConnectionLimit = 2

8 Summary

9 The default number of persistent connections allowed on a System.Net.ServicePoint.

10 Description

11 This field is read-only.

12
13 The value of this field is 2.

14

ServicePointManager.FindServicePoint(System.Uri) Method

```
[ILAsm]
.method public hidebysig static class System.Net.ServicePoint
FindServicePoint(class System.Uri address)

[C#]
public static ServicePoint FindServicePoint(Uri address)
```

Summary

Finds an existing `System.Net.ServicePoint` or creates a new `System.Net.ServicePoint` to connect to the specified host.

Parameters

Parameter	Description
<i>address</i>	A <code>System.Uri</code> containing the Internet host to contact.

Return Value

A `System.Net.ServicePoint` that connects to the host identified in *address*.

Description

This method is identical to `System.Net.ServicePointManager.FindServicePoint(address, System.Net.GlobalProxySelection.GetEmptyWebProxy)`.

If no `System.Net.ServicePoint` exists for the host named in *address*, the `System.Net.ServicePointManager` attempts to create one.

Exceptions

Exception	Condition
<code>System.ArgumentNullException</code>	<i>address</i> is null.
<code>System.InvalidOperationException</code>	The maximum number of service points defined in <code>System.Net.ServicePointManager.MaxServicePoints</code> has been reached and there is no service point that connects to the specified host.

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2

1
2 **ServicePointManager.FindServicePoint(System.String, System.Net.IWebProxy) Method**
3

```
4 [ILAsm]  
5 .method public hidebysig static class System.Net.ServicePoint  
6 FindServicePoint(string uriString, class System.Net.IWebProxy proxy)  
  
7 [C#]  
8 public static ServicePoint FindServicePoint(string uriString, IWebProxy  
9 proxy)
```

10 **Summary**

11 Finds an existing System.Net.ServicePoint or creates a new
12 System.Net.ServicePoint to connect to the specified host.

13 **Parameters**

Parameter	Description
<i>uriString</i>	A System.String containing a URI that names the host to contact.
<i>proxy</i>	A System.Net.IWebProxy that represents a proxy server to access.

14
15 **Return Value**

16 A System.Net.ServicePoint that connects to the host identified in *uriString*.

17 **Description**

18 This method is identical to System.Net.ServicePointManager.FindServicePoint(new
19 System.Uri(*uriString*), *proxy*).

20
21 If no System.Net.ServicePoint exists for the host named in *uriString*, the
22 System.Net.ServicePointManager attempts to create one.

23 **Exceptions**

Exception	Condition
System.ArgumentNullException	<i>uriString</i> is null.
System.UriFormatException	The URI specified in <i>uriString</i> is in an invalid form.

System.InvalidOperationException

The maximum number of service points defined in `System.Net.ServicePointManager.MaxServicePoints` has been reached and there is no service point that connects to the specified host.

1

2

1
2 **ServicePointManager.FindServicePoint(System.Uri, System.Net.IWebProxy) Method**
3

```
4 [ILAsm]  
5 .method public hidebysig static class System.Net.ServicePoint  
6 FindServicePoint(class System.Uri address, class System.Net.IWebProxy  
7 proxy)  
8 [C#]  
9 public static ServicePoint FindServicePoint(Uri address, IWebProxy proxy)
```

10 **Summary**

11 Finds an existing System.Net.ServicePoint or creates a new
12 System.Net.ServicePoint to connect to the specified host.

13 **Parameters**

Parameter	Description
<i>address</i>	A System.Uri instance containing the address of the Internet resource to contact.
<i>proxy</i>	A System.Net.IWebProxy that represents a proxy server to access.

14
15 **Return Value**

16 A System.Net.ServicePoint that connects to the host identified in *address*.

17 **Description**

18 If no System.Net.ServicePoint exists for the System.Uri.Host specified in *address*,
19 the System.Net.ServicePointManager attempts to create one.

20 **Exceptions**

Exception	Condition
System.ArgumentNullException	<i>address</i> is null.
System.InvalidOperationException	The maximum number of service points defined in System.Net.ServicePointManager.MaxServicePoints has been reached and there is no service point that connects to the specified host.

1

2

1 ServicePointManager.DefaultConnectionLimit 2 Property

```
3 [ILAsm]  
4 .property int32 DefaultConnectionLimit { public hidebysig static  
5 specialname int32 get_DefaultConnectionLimit() public hidebysig static  
6 specialname void set_DefaultConnectionLimit(int32 value) }  
7 [C#]  
8 public static int DefaultConnectionLimit { get; set; }
```

9 Summary

10 Gets or sets the maximum number of concurrent connections allowed by a
11 System.Net.ServicePoint instance.

12 Property Value

13 A System.Int32 containing the maximum number of concurrent connections allowed by
14 a System.Net.ServicePoint instance.

15 Description

16 The System.Net.ServicePointManager.DefaultConnectionLimit property sets the
17 default maximum number of concurrent connections that the
18 System.Net.ServicePointManager assigns to the
19 System.Net.ServicePoint.ConnectionLimit property when creating
20 System.Net.ServicePoint instances.

21
22 [Note: Changing the System.Net.ServicePointManager.DefaultConnectionLimit
23 property has no effect on existing System.Net.ServicePoint instances; it affects only
24 System.Net.ServicePoint instances that are initialized after the change.]
25
26

27 Exceptions

Exception	Condition
System.ArgumentOutOfRangeException	The value specified for a set operation is less than or equal to zero.

28

29

1 2 ServicePointManager.MaxServicePointIdleTime 3 Property

```
4 [ILAsm]  
5 .property int32 MaxServicePointIdleTime { public hidebysig static  
6 specialname int32 get_MaxServicePointIdleTime() public hidebysig static  
7 specialname void set_MaxServicePointIdleTime(int32 value) }  
8 [C#]  
9 public static int MaxServicePointIdleTime { get; set; }
```

10 Summary

11 Gets or sets the maximum amount of time a `System.Net.ServicePoint` instance can be
12 idle, after which resources allocated to the service point can be released.

13 Property Value

14 A `System.Int32` containing the maximum idle time, in milliseconds, of a
15 `System.Net.ServicePoint` instance.

16 Description

17 A `System.Net.ServicePoint` is idle when the list of connections associated with the
18 `System.Net.ServicePoint` is empty.

19
20 The `System.Net.ServicePointManager.MaxServicePointIdleTime` property holds the
21 value for the maximum idle time for service points. When a `System.Net.ServicePoint`
22 instance is created, this value is assigned to its
23 `System.Net.ServicePoint.MaxIdleTime` property. Changes to the value of this
24 property affect only `System.Net.ServicePoint` instances that are initialized after this
25 property is changed.

26
27 After a `System.Net.ServicePoint` has been idle for the time specified in
28 `System.Net.ServicePoint.MaxIdleTime`, it is released by the service point manager,
29 and any resources allocated for it are freed.

30
31 The default value of this property is implementation defined.

32 Exceptions

Exception	Condition
System.ArgumentOutOfRangeException	The value specified for a set operation is less than <code>System.Threading.Timeout.Infinite</code> or greater than <code>System.Int32.MaxValue</code>

33

1 ServicePointManager.MaxServicePoints

2 Property

```
3 [ILAsm]  
4 .property int32 MaxServicePoints { public hidebysig static specialname  
5 int32 get_MaxServicePoints() public hidebysig static specialname void  
6 set_MaxServicePoints(int32 value) }  
7 [C#]  
8 public static int MaxServicePoints { get; set; }
```

9 Summary

10 Gets or sets the maximum number of `System.Net.ServicePoint` instances managed by
11 this class at any time.

12 Property Value

13 A `System.Int32` containing the maximum number of `System.Net.ServicePoint`
14 instances to maintain.

15 Description

16 If this property is set to a value that is less than the number of
17 `System.Net.ServicePoint` instances currently in existence, the
18 `System.Net.ServicePointManager` deletes the `System.Net.ServicePoint` instances
19 with the longest idle times. If the number of `System.Net.ServicePoint` instances with
20 active connections is greater than the value of
21 `System.Net.ServicePointManager.MaxServicePoints`, the
22 `System.Net.ServicePointManager` deletes `System.Net.ServicePoint` instances as
23 they become idle.

24
25 [*Note:* The default value of the `System.Net.ServicePointManager.MaxServicePoints`
26 property is 0, which indicates there is no limit to the number of
27 `System.Net.ServicePoint` instances.]
28
29

30 Exceptions

Exception	Condition
System.ArgumentOutOfRangeException	The value specified for a set operation is less than zero or greater than <code>System.Int32.MaxValue</code>

31
32