

System.Net.ServicePointManager Class

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

[C#]
public class ServicePointManager
```

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

Manages System.Net.ServicePoint instances.

Inherits From: System.Object

Library: Networking

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

Description

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

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

ServicePointManager.DefaultNonPersistentConnectionLimit Field

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

Summary

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

Description

This field is read-only.

The value of this field is 4.

ServicePointManager.DefaultPersistentConnectionLimit Field

```
[ILAsm]  
.field public static literal int32 DefaultPersistentConnectionLimit  
= 2  
  
[C#]  
public const int DefaultPersistentConnectionLimit = 2
```

Summary

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

Description

This field is read-only.

The value of this field is 2.

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
System.ArgumentNullException	<i>address</i> is null.
System.InvalidOperationException	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.

ServicePointManager.FindServicePoint(System.String, System.Net.IWebProxy) Method

```
[ILAsm]  
.method public hidebysig static class System.Net.ServicePoint  
FindServicePoint(string uriString, class System.Net.IWebProxy proxy)  
  
[C#]  
public static ServicePoint FindServicePoint(string uriString,  
IWebProxy proxy)
```

Summary

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

Parameters

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

Return Value

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

Description

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

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

Exceptions

Exception	Condition
<code>System.ArgumentNullException</code>	<i>uriString</i> is null.
<code>System.UriFormatException</code>	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.

ServicePointManager.FindServicePoint(System.Uri, System.Net.IWebProxy) Method

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

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

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

Return Value

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

Description

If no `System.Net.ServicePoint` exists for the `System.Uri.Host` specified 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.

ServicePointManager.DefaultConnectionLimit Property

```
[ILAsm]
.property int32 DefaultConnectionLimit { public hidebysig static
specialname int32 get_DefaultConnectionLimit() public hidebysig
static specialname void set_DefaultConnectionLimit(int32 value) }

[C#]
public static int DefaultConnectionLimit { get; set; }
```

Summary

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

Property Value

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

Description

The `System.Net.ServicePointManager.DefaultConnectionLimit` property sets the default maximum number of concurrent connections that the `System.Net.ServicePointManager` assigns to the `System.Net.ServicePoint.ConnectionLimit` property when creating `System.Net.ServicePoint` instances.

[*Note:* Changing the `System.Net.ServicePointManager.DefaultConnectionLimit` property has no effect on existing `System.Net.ServicePoint` instances; it affects only `System.Net.ServicePoint` instances that are initialized after the change.]

Exceptions

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

ServicePointManager.MaxServicePointIdle Time Property

```
[ILAsm]
.property int32 MaxServicePointIdleTime { public hidebysig static
specialname int32 get_MaxServicePointIdleTime() public hidebysig
static specialname void set_MaxServicePointIdleTime(int32 value) }

[C#]
public static int MaxServicePointIdleTime { get; set; }
```

Summary

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

Property Value

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

Description

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

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

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

The default value of this property is implementation defined.

Exceptions

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

System.Int32.MaxValue

ServicePointManager.MaxServicePoints Property

```
[ILAsm]
.property int32 MaxServicePoints { public hidebysig static
specialname int32 get_MaxServicePoints() public hidebysig static
specialname void set_MaxServicePoints(int32 value) }

[C#]
public static int MaxServicePoints { get; set; }
```

Summary

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

Property Value

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

Description

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

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

Exceptions

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

