

# 1 System.Net.WebProxy Class

```
2 [ILAsm]  
3 .class public serializable WebProxy extends System.Object implements  
4 System.Net.IWebProxy  
  
5 [C#]  
6 public class WebProxy: IWebProxy
```

## 7 Assembly Info:

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

## 13 Implements:

- 14 • **System.Net.IWebProxy**

## 15 Summary

16 Contains HTTP proxy settings for the `System.Net.WebRequest` class.

## 17 Inherits From: System.Object

18  
19 **Library:** Networking

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

## 23 24 Description

25 `System.Net.WebRequest` instances use `System.Net.WebProxy` instances to override the  
26 proxy settings in `System.Net.GlobalProxySelection`.

27  
28 *[Note:* Local requests are identified by the lack of a period (.) in the authority of the  
29 URI, as in "http://webserver/" versus "http://www.contoso.com/ ".]

## 30 31 32 Example

33 The following example sets a `System.Net.WebProxy` for a `System.Net.WebRequest`. The  
34 `System.Net.WebRequest` instance uses the proxy to connect to external Internet  
35 resources.

36  
37 [C#]

```
1 using System;
2 using System.Net;
3
4 public class WebProxyExample {
5
6     public static void Main() {
7
8         WebProxy proxyObject =
9             new WebProxy("http://proxyserver:80/",true);
10        WebRequest req =
11            WebRequest.Create("http://www.contoso.com");
12        req.Proxy = proxyObject;
13    }
14 }
15
```

# 1 WebProxy(System.String, System.Boolean, 2 System.String[], System.Net.ICredentials) 3 Constructor

```
4 [ILAsm]  
5 public rtspecialname specialname instance void .ctor(string Address, bool  
6 BypassOnLocal, string[] BypassList, class System.Net.ICredentials  
7 Credentials)  
  
8 [C#]  
9 public WebProxy(string Address, bool BypassOnLocal, string[] BypassList,  
10 ICredentials Credentials)
```

## 11 Summary

12 Constructs and initializes a new instance of the `System.Net.WebProxy` class with the  
13 specified URI, bypass setting, list of URIs to bypass, and credentials.

## 14 Parameters

Parameter	Description
<i>Address</i>	A <code>System.String</code> that represents the URI of the proxy server.
<i>BypassOnLocal</i>	A <code>System.Boolean</code> that indicates whether or not to bypass the proxy for local connections. Specify <code>true</code> to bypass the proxy for local connections; otherwise, <code>false</code> .
<i>BypassList</i>	A <code>System.String</code> array of regular expressions that describe the URIs that will not be accessed using the current instance. [ <i>Note:</i> For more information on the format of these regular expressions, see IETF RFC 2396, Appendix B.]
<i>Credentials</i>	A <code>System.Net.ICredentials</code> object to submit to the proxy server for client authentication.

## 15 16 Description

17 This constructor initializes the properties of the new instance as follows.

Property	Value
<code>System.Net.WebProxy.Address</code>	A new <code>System.Uri</code> constructed from <i>Address</i>

	or, if <i>Address</i> does not contain "://", constructed from "http:// <i>Address</i> ". If <i>Address</i> is null, this property is set to null.
<code>System.Net.WebProxy.BypassArrayList</code>	A new <code>System.Collections.ArrayList</code> constructed from <i>BypassList</i> or, if <i>BypassList</i> is null, a new empty <code>System.Collections.ArrayList</code> .
<code>System.Net.WebProxy.BypassList</code>	<i>BypassList</i> or, if <i>BypassList</i> is null, a new empty <code>System.String</code> array.
<code>System.Net.WebProxy.BypassProxyOnLocal</code>	<i>BypassOnLocal</i>
<code>System.Net.WebProxy.Credentials</code>	<i>Credentials</i>

1

## 2 Exceptions

Exception	Condition
<code>System.UriFormatException</code>	<i>Address</i> is not in a valid URI format.

3

4

# 1 WebProxy() Constructor

```
2 [ILAsm]  
3 public rtspecialname specialname instance void .ctor()  
4 [C#]  
5 public WebProxy()
```

## 6 Summary

7 Constructs and initializes a new instance of the `System.Net.WebProxy` class.

## 8 Description

9 This constructor initializes the properties of the new instance as follows.

Property	Value
<code>System.Net.WebProxy.Address</code>	null
<code>System.Net.WebProxy.BypassArrayList</code>	A new empty <code>System.Collections.ArrayList</code> .
<code>System.Net.WebProxy.BypassList</code>	A new empty <code>System.String</code> array.
<code>System.Net.WebProxy.BypassProxyOnLocal</code>	false
<code>System.Net.WebProxy.Credentials</code>	null

10

11

# 1 WebProxy(System.Uri) Constructor

```
2 [ILAsm]  
3 public rtspecialname specialname instance void .ctor(class System.Uri  
4 Address)  
  
5 [C#]  
6 public WebProxy(Uri Address)
```

## 7 Summary

8 Constructs and initializes a new instance of the `System.Net.WebProxy` class using the  
9 specified `System.Uri`.

## 10 Parameters

Parameter	Description
<i>Address</i>	A <code>System.Uri</code> containing the address of the proxy server.

## 11 12 Description

13 This constructor initializes the properties of the new instance as follows.

Property	Value
<code>System.Net.WebProxy.Address</code>	<i>Address</i>
<code>System.Net.WebProxy.BypassArrayList</code>	A new empty <code>System.Collections.ArrayList</code> .
<code>System.Net.WebProxy.BypassList</code>	A new empty <code>System.String</code> array.
<code>System.Net.WebProxy.BypassProxyOnLocal</code>	false
<code>System.Net.WebProxy.Credentials</code>	null

14  
15

# 1 WebProxy(System.Uri, System.Boolean)

## 2 Constructor

```
3 [ILAsm]  
4 public rtspecialname specialname instance void .ctor(class System.Uri  
5 Address, bool BypassOnLocal)  
  
6 [C#]  
7 public WebProxy(Uri Address, bool BypassOnLocal)
```

### 8 Summary

9 Constructs and initializes a new instance of the `System.Net.WebProxy` class using the  
10 specified `System.Uri` and specified bypass setting.

### 11 Parameters

Parameter	Description
<i>Address</i>	A <code>System.Uri</code> containing the address of the proxy server.
<i>BypassOnLocal</i>	A <code>System.Boolean</code> that indicates whether or not to bypass the proxy for local connections. Specify <code>true</code> to bypass the proxy for local connections; otherwise, <code>false</code> .

### 12 Description

14 The properties of the new instance are initialized as detailed in the following table.

Property	Value
<code>System.Net.WebProxy.Address</code>	<i>Address</i>
<code>System.Net.WebProxy.BypassArrayList</code>	A new empty <code>System.Collections.ArrayList</code> .
<code>System.Net.WebProxy.BypassList</code>	A new empty <code>System.String</code> array.
<code>System.Net.WebProxy.BypassProxyOnLocal</code>	<i>BypassOnLocal</i>
<code>System.Net.WebProxy.Credentials</code>	null

15  
16

# 1 WebProxy(System.Uri, System.Boolean, 2 System.String[]) Constructor

```
3 [ILAsm]  
4 public rtspecialname specialname instance void .ctor(class System.Uri  
5 Address, bool BypassOnLocal, string[] BypassList)  
  
6 [C#]  
7 public WebProxy(Uri Address, bool BypassOnLocal, string[] BypassList)
```

## 8 Summary

9 Constructs a new instance of the `System.Net.WebProxy` class with the specified  
10 `System.Uri`, bypass setting, and list of URIs to bypass.

## 11 Parameters

Parameter	Description
<i>Address</i>	A <code>System.Uri</code> containing the address of the proxy server.
<i>BypassOnLocal</i>	A <code>System.Boolean</code> that indicates whether or not to bypass the proxy for local connections. Specify <code>true</code> to bypass the proxy for local connections; otherwise, <code>false</code> .
<i>BypassList</i>	A <code>System.String</code> array of regular expressions that describe the URIs that will not be accessed using the current instance. [ <i>Note:</i> For more information on the format of these regular expressions, see IETF RFC 2396, Appendix B.]

12

## 13 Description

14 This constructor initializes the properties of the new instance as follows.

Property	Value
<code>System.Net.WebProxy.Address</code>	<i>Address</i>
<code>System.Net.WebProxy.BypassArrayList</code>	A new <code>System.Collections.ArrayList</code> constructed from <i>BypassList</i> or, if <i>BypassList</i> is null, a new empty <code>System.Collections.ArrayList</code> .
<code>System.Net.WebProxy.BypassList</code>	<i>BypassList</i> or, if <i>BypassList</i> is null, a new

	empty System.String array.
System.Net.WebProxy.BypassProxyOnLocal	<i>BypassOnLocal</i>
System.Net.WebProxy.Credentials	null

1

2

# 1 WebProxy(System.Uri, System.Boolean, 2 System.String[], System.Net.ICredentials) 3 Constructor

```
4 [ILAsm]  
5 public rtspecialname specialname instance void .ctor(class System.Uri  
6 Address, bool BypassOnLocal, string[] BypassList, class  
7 System.Net.ICredentials Credentials)  
  
8 [C#]  
9 public WebProxy(Uri Address, bool BypassOnLocal, string[] BypassList,  
10 ICredentials Credentials)
```

## 11 Summary

12 Constructs and initializes a new instance of the `System.Net.WebProxy` class with the  
13 specified `System.Uri`, bypass setting, list of URIs to bypass, and credentials.

## 14 Parameters

Parameter	Description
<i>Address</i>	A <code>System.Uri</code> containing the address of the proxy server.
<i>BypassOnLocal</i>	A <code>System.Boolean</code> that indicates whether or not to bypass the proxy for local connections. Specify <code>true</code> to bypass the proxy for local connections; otherwise, <code>false</code> .
<i>BypassList</i>	A <code>System.String</code> array of regular expressions that describe the URIs that will not be accessed using the current instance. [ <i>Note:</i> For more information on the format of these regular expressions, see IETF RFC 2396, Appendix B.]
<i>Credentials</i>	A <code>System.Net.ICredentials</code> object to submit to the proxy server for client authentication.

## 15 16 Description

17 This constructor initializes the properties of the new instance as follows.

Property	Value
<code>System.Net.WebProxy.Address</code>	<i>Address</i>

<code>System.Net.WebProxy.BypassArrayList</code>	A new <code>System.Collections.ArrayList</code> constructed from <i>BypassList</i> or, if <i>BypassList</i> is null, a new empty <code>System.Collections.ArrayList</code> .
<code>System.Net.WebProxy.BypassList</code>	<i>BypassList</i> or, if <i>BypassList</i> is null, a new empty <code>System.String</code> array.
<code>System.Net.WebProxy.BypassProxyOnLocal</code>	<i>BypassOnLocal</i>
<code>System.Net.WebProxy.Credentials</code>	<i>Credentials</i>

1

2

# 1 WebProxy(System.String, System.Int32)

## 2 Constructor

```
3 [ILAsm]  
4 public rtspecialname specialname instance void .ctor(string Host, int32  
5 Port)  
  
6 [C#]  
7 public WebProxy(string Host, int Port)
```

### 8 Summary

9 Constructs and initializes a new instance of the `System.Net.WebProxy` class with the  
10 specified host and port number.

### 11 Parameters

Parameter	Description
<i>Host</i>	A <code>System.String</code> containing the name of the proxy server.
<i>Port</i>	A <code>System.Int32</code> that contains the port number to use when accessing <i>Host</i> .

### 12 13 Description

14 This constructor initializes the properties of the new instance as follows.

Property	Value
<code>System.Net.WebProxy.Address</code>	A new <code>System.Uri</code> constructed from " <code>http://Host:Port</code> ".
<code>System.Net.WebProxy.BypassArrayList</code>	A new empty <code>System.Collections.ArrayList</code> .
<code>System.Net.WebProxy.BypassList</code>	A new empty <code>System.String</code> array.
<code>System.Net.WebProxy.BypassProxyOnLocal</code>	false
<code>System.Net.WebProxy.Credentials</code>	null

### 15 16 Exceptions

Exception	Condition
<b>System.UriFormatException</b>	The URI formed by combining <i>Host</i> and <i>Port</i> is not in a valid URI format.

1

2

# 1 WebProxy(System.String) Constructor

```
2 [ILAsm]  
3 public rtspecialname specialname instance void .ctor(string Address)  
4 [C#]  
5 public WebProxy(string Address)
```

## 6 Summary

7 Constructs and initializes a new instance of the `System.Net.WebProxy` class with the  
8 specified URI.

## 9 Parameters

Parameter	Description
<i>Address</i>	A <code>System.String</code> containing the URI of the proxy server.

10

## 11 Description

12 This constructor initializes the properties of the new instance as follows.

Property	Value
<code>System.Net.WebProxy.Address</code>	A new <code>System.Uri</code> constructed from <i>Address</i> or, if <i>Address</i> does not contain "://", constructed from "http:// <i>Address</i> ". If <i>Address</i> is null, this property is set to null.
<code>System.Net.WebProxy.BypassArrayList</code>	A new empty <code>System.Collections.ArrayList</code> .
<code>System.Net.WebProxy.BypassList</code>	A new empty <code>System.String</code> array.
<code>System.Net.WebProxy.BypassProxyOnLocal</code>	false
<code>System.Net.WebProxy.Credentials</code>	null

13

## 14 Exceptions

Exception	Condition
<b>System.UriFormatException</b>	<i>Address</i> is not null and not in a valid URI format.

1

2

# 1 WebProxy(System.String, System.Boolean) 2 Constructor

```
3 [ILAsm]  
4 public rtspecialname specialname instance void .ctor(string Address, bool  
5 BypassOnLocal)  
  
6 [C#]  
7 public WebProxy(string Address, bool BypassOnLocal)
```

## 8 Summary

9 Constructs and initializes a new instance of the `System.Net.WebProxy` class with the  
10 specified URI and bypass setting.

## 11 Parameters

Parameter	Description
<i>Address</i>	A <code>System.String</code> that represents the URI of the proxy server.
<i>BypassOnLocal</i>	A <code>System.Boolean</code> that indicates whether or not to bypass the proxy for local connections. Specify <code>true</code> to bypass the proxy for local connections; otherwise, <code>false</code> .

## 12 13 Description

14 This constructor initializes the properties of the new instance as follows.

Property	Value
<code>System.Net.WebProxy.Address</code>	A new <code>System.Uri</code> constructed from <i>Address</i> or, if <i>Address</i> does not contain "://", constructed from "http:// <i>Address</i> ". If <i>Address</i> is null, this property is set to null.
<code>System.Net.WebProxy.BypassArrayList</code>	A new empty <code>System.Collections.ArrayList</code> .
<code>System.Net.WebProxy.BypassList</code>	A new empty <code>System.String</code> array.
<code>System.Net.WebProxy.BypassProxyOnLocal</code>	<i>BypassOnLocal</i>
<code>System.Net.WebProxy.Credentials</code>	null

1

2 **Exceptions**

<b>Exception</b>	<b>Condition</b>
<b>System.UriFormatException</b>	<i>Address</i> is not in a valid URI format.

3

4

# 1 WebProxy(System.String, System.Boolean, 2 System.String[]) Constructor

```
3 [ILAsm]  
4 public rtspecialname specialname instance void .ctor(string Address, bool  
5 BypassOnLocal, string[] BypassList)  
  
6 [C#]  
7 public WebProxy(string Address, bool BypassOnLocal, string[] BypassList)
```

## 8 Summary

9 Constructs and initializes a new instance of the `System.Net.WebProxy` class with the  
10 specified URI, bypass setting, and list of URIs to bypass.

## 11 Parameters

Parameter	Description
<i>Address</i>	A <code>System.String</code> that represents the URI of the proxy server.
<i>BypassOnLocal</i>	A <code>System.Boolean</code> that indicates whether or not to bypass the proxy for local connections. Specify <code>true</code> to bypass the proxy for local connections; otherwise, <code>false</code> .
<i>BypassList</i>	A <code>System.String</code> array of regular expressions that describe the URIs that will not be accessed using the current instance. [ <i>Note:</i> For more information on the format of these regular expressions, see IETF RFC 2396, Appendix B.]

## 12 13 Description

14 This constructor initializes the properties of the new instance as follows.

Property	Value
<code>System.Net.WebProxy.Address</code>	A new <code>System.Uri</code> constructed from <i>Address</i> or, if <i>Address</i> does not contain "://", constructed from "http:// <i>Address</i> ". If <i>Address</i> is null, this property is set to null.
<code>System.Net.WebProxy.BypassArrayList</code>	A new <code>System.Collections.ArrayList</code> constructed from <i>BypassList</i> or, if <i>BypassList</i> is null, a new empty

	<code>System.Collections.ArrayList.</code>
<code>System.Net.WebProxy.BypassList</code>	<i>BypassList</i> or, if <i>BypassList</i> is null, a new empty <code>System.String</code> array.
<code>System.Net.WebProxy.BypassProxyOnLocal</code>	<i>BypassOnLocal</i>
<code>System.Net.WebProxy.Credentials</code>	null

1

## 2 Exceptions

Exception	Condition
<b><code>System.UriFormatException</code></b>	<i>Address</i> is not in a valid URI format.

3

4

# 1 WebProxy.GetDefaultProxy() Method

```
2 [ILAsm]  
3 .method public hidebysig static class System.Net.WebProxy  
4 GetDefaultProxy()  
5 [C#]  
6 public static WebProxy GetDefaultProxy()
```

## 7 Summary

8 Returns a new `System.Net.WebProxy` instance that contains the default proxy settings  
9 of the system.

## 10 Return Value

11 A new `System.Net.WebProxy` instance that contains the default proxy settings of the  
12 system.

## 13 Description

14 The default proxy settings of the system are implementation-defined.

15

# 1 WebProxy.GetProxy(System.Uri) Method

```
2 [ILAsm]  
3 .method public final hidebysig virtual class System.Uri GetProxy(class  
4 System.Uri destination)  
  
5 [C#]  
6 public Uri GetProxy(Uri destination)
```

## 7 Summary

8 Returns the URI of the server that is contacted for the specified resource.

## 9 Parameters

Parameter	Description
<i>destination</i>	The <code>System.Uri</code> of the requested resource.

10

## 11 Return Value

12 If *destination* is on the bypass list of the current instance, returns *destination*;  
13 otherwise, returns the `System.Net.WebProxy.Address` of the current instance.

## 14 Description

15 This method returns the URI that the `System.Net.WebRequest` uses to access the  
16 resource. `System.Net.WebProxy.GetProxy` compares *destination* with the contents of  
17 `System.Net.WebProxy.BypassList` using the `System.Net.WebProxy.IsBypassed`  
18 method.

19

# 1 WebProxy.IsBypassed(System.Uri) Method

```
2 [ILAsm]  
3 .method public final hidebysig virtual bool IsBypassed(class System.Uri  
4 host )  
  
5 [C#]  
6 public bool IsBypassed(Uri host )
```

## 7 Summary

8 Indicates whether a request will bypass the proxy server when accessing the resource  
9 represented by the specified URI.

## 10 Parameters

Parameter	Description
<i>host</i>	A <code>System.Uri</code> containing the URI of the server to check.

## 11 Return Value

13 Returns `true` under any of the following conditions:

- 14 • The `System.Net.WebProxy.BypassProxyOnLocal` property of the current instance is  
15 `true` and *host* is a local URI.
- 16 • *host* matches a regular expression in `System.Net.WebProxy.BypassList`.
- 17 • The `System.Net.WebProxy.Address` of the current instance is `null`.

18 All other conditions return `false`.

## 19 Exceptions

Exception	Condition
<b>System.ArgumentException</b>	The <code>System.Net.WebProxy.BypassList</code> of the current instance contains an invalid regular expression.

20

21

# 1 WebProxy.Address Property

```
2  [ILAsm]  
3  .property class System.Uri Address { public hidebysig specialname instance  
4  class System.Uri get_Address() public hidebysig specialname instance void  
5  set_Address(class System.Uri value) }  
6  [C#]  
7  public Uri Address { get; set; }
```

## 8 Summary

9 Gets or sets the address of the proxy server represented by the current instance.

## 10 Property Value

11 A `System.Uri` containing the address of the proxy server represented by the current  
12 instance.

## 13 Description

14 [*Note:* When `System.Net.WebProxy.Address` is null, all requests that reference the  
15 current instance bypass the proxy and connect directly to the destination host.

16  
17 For additional information, see `System.Net.WebRequest.Proxy`.

18  
19 ]

20

# 1 WebProxy.BypassArrayList Property

```
2 [ILAsm]  
3 .property class System.Collections.ArrayList BypassArrayList { public  
4 hidebysig specialname instance class System.Collections.ArrayList  
5 get_BypassArrayList() }  
  
6 [C#]  
7 public ArrayList BypassArrayList { get; }
```

## 8 Summary

9 Gets a list of the URIs that do not use the proxy server.

## 10 Property Value

11 A System.Collections.ArrayList of System.String instances. The elements of the  
12 list represent the URIs that a System.Net.WebRequest instance accesses directly instead  
13 of through the proxy server.

## 14 Description

15 This property is read-only.

16

# 1 WebProxy.BypassList Property

```
2 [ILAsm]  
3 .property string[] BypassList { public hidebysig specialname instance  
4 string[] get_BypassList() public hidebysig specialname instance void  
5 set_BypassList(string[] value) }  
  
6 [C#]  
7 public string[] BypassList { get; set; }
```

## 8 Summary

9 Gets or sets an array of the URIs that do not use the proxy server.

## 10 Property Value

11 A System.Array of System.String instances. The elements of the array represent URIs  
12 that a System.Net.WebRequest instance accesses directly instead of through the proxy  
13 server.

## 14 Description

15 This property is equivalent to  
16 System.Net.WebProxy.BypassArrayList.ToArray(typeof(System.String)).

17

# 1 WebProxy.BypassProxyOnLocal Property

```
2 [ILAsm]  
3 .property bool BypassProxyOnLocal { public hidebysig specialname instance  
4 bool get_BypassProxyOnLocal() public hidebysig specialname instance void  
5 set_BypassProxyOnLocal(bool value) }  
  
6 [C#]  
7 public bool BypassProxyOnLocal { get; set; }
```

## 8 Summary

9 Gets or sets a `System.Boolean` value indicating whether requests for local resources  
10 bypass the proxy server.

## 11 Property Value

12 `true` to bypass the proxy server for local resources; otherwise, `false`. The default value  
13 is `false`.

## 14 Description

15 The setting of this property determines whether `System.Net.WebRequest` instances use  
16 the proxy server when accessing local resources. If  
17 `System.Net.WebProxy.BypassProxyOnLocal` is `true`, requests to local resources do not  
18 use the proxy server. Local resources are identified by the lack of a period (.) in the  
19 URI, as in "http://webserver/". When `System.Net.WebProxy.BypassProxyOnLocal` is  
20 `false`, all requests for resources are made through the proxy server.

21  
22 [*Note:* If a request for a resource residing on a local machine is made using a URI that  
23 contains a period, the proxy is used to send the request. Create an entity in the  
24 `System.Net.WebProxy.BypassList` to access local resources directly.]  
25  
26  
27

# 1 WebProxy.Credentials Property

```
2 [ILAsm]
3 .property class System.Net.ICredentials Credentials { public final
4 hidebysig virtual specialname class System.Net.ICredentials
5 get_Credentials() public final hidebysig virtual specialname void
6 set_Credentials(class System.Net.ICredentials value) }

7 [C#]
8 public ICredentials Credentials { get; set; }
```

## 9 Summary

10 Gets or sets the credentials to submit to the proxy server for authentication.

## 11 Property Value

12 A `System.Net.ICredentials` object containing the credentials to submit to the proxy  
13 server for authentication.

## 14 Description

15 This property contains the authentication credentials to send to the proxy server in  
16 response to an HTTP 407 (proxy authorization) status code.

17  
18 [*Note:* For more information regarding HTTP status code 407, see  
19 `System.Net.HttpStatusCode.ProxyAuthenticationRequired`.]  
20  
21

22