

System.Net.WebProxy Class

```
[ILASM]
.class public serializable WebProxy extends System.Object
implements System.Net.IWebProxy

[C#]
public class WebProxy: IWebProxy
```

Assembly Info:

- Name: System
- Public Key: [00 00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- Version: 1.0.x.x
- Attributes:
 - CLSCompliantAttribute(true)

Implements:

- System.Net.IWebProxy

Summary

Contains HTTP proxy settings for the **System.Net.WebRequest** class.

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

System.Net.WebRequest instances use **System.Net.WebProxy** instances to override the proxy settings in **System.Net.GlobalProxySelection**.

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

Example

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

```
1
2     [C#]
3
4     using System;
5
6     public class WebProxyExample {
7
8         public static void Main() {
9
10            WebProxy proxyObject =
11                new WebProxy("http://proxyserver:80/",true);
12            WebRequest req =
13                WebRequest.Create("http://www.contoso.com");
14            req.Proxy = proxyObject;
15        }
16    }
17
```

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
8 **System.Net.WebProxy** class.

9 Description

10 This constructor initializes the properties of the new instance as
11 follows.

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

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1 WebProxy(System.Uri) Constructor

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

7 Summary

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

10 Parameters

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

13

14 Description

15 This constructor initializes the properties of the new instance as
16 follows.

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

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1 WebProxy(System.Uri, System.Boolean) 2 Constructor

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

8 Summary

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

12 Parameters

13
14

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

15
16

Description

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

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

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20

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

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

10 Summary

11 Constructs a new instance of the **System.Net.WebProxy** class with
12 the specified **System.Uri**, bypass setting, and list of URIs to bypass.

13 Parameters

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

16

17 Description

18 This constructor initializes the properties of the new instance as
19 follows.

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

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

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

12 Summary

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

16 Parameters

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Parameter	Description
<i>Address</i>	A System.Uri containing the address of the proxy server.
<i>BypassOnLocal</i>	A System.Boolean that indicates whether or not to bypass the proxy for local connections. Specify true to bypass the proxy for local connections; otherwise, false .
<i>BypassList</i>	A System.String 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 System.Net.ICredentials object to submit to the proxy server for client authentication.

19
20

Description

21 This constructor initializes the properties of the new instance as
22 follows.

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

	<i>BypassList</i> is null , a new empty System.Collections.ArrayList .
System.Net.WebProxy.BypassList	<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	<i>Credentials</i>

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1 WebProxy(System.String, System.Int32)

2 Constructor

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

8 Summary

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

12 Parameters

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

15 Description

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

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

19 Exceptions

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

1 WebProxy(System.String) Constructor

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

7 Summary

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

10 Parameters

11
12

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

13
14

Description

15 This constructor initializes the properties of the new instance as
16 follows.

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

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18 Exceptions

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

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

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

8 Summary

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

12 Parameters

13
14

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

15

16 Description

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

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

1

2 **Exceptions**

3

4

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

5

6

7

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

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

11 Summary

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

15 Parameters

16
17

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

18

19 Description

20 This constructor initializes the properties of the new instance as
21 follows.

Property	Value
System.Net.WebProxy.Address	A new System.Uri 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 .
System.Net.WebProxy.BypassArrayList	A new Svstem.Collections.ArrayvList

	constructed from <i>BypassList</i> or, if <i>BypassList</i> is null , a new empty System.Collections.ArrayList .
System.Net.WebProxy.BypassList	<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 **Exceptions**

3

4

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

5

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

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

11 Summary

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

15 Parameters

16
17

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

18

19 Description

20 This constructor initializes the properties of the new instance as
21 follows.

Property	Value
System.Net.WebProxy.Address	A new System.Uri 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 .

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

1

2 **Exceptions**

3

4

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

5

6

7

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
9 default proxy settings of the system.

10 Return Value

11

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

14 Description

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

16

1 WebProxy.GetProxy(System.Uri) Method

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

7 Summary

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

10 Parameters

11
12

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

13
14
15

14 Return Value

16 If *destination* is on the bypass list of the current instance, returns
17 *destination*; otherwise, returns the **System.Net.WebProxy.Address**
18 of the current instance.

19 Description

20 This method returns the URI that the **System.Net.WebRequest** uses
21 to access the resource. **System.Net.WebProxy.GetProxy** compares
22 *destination* with the contents of **System.Net.WebProxy.BypassList**
23 using the **System.Net.WebProxy.IsBypassed** method.

24

1 WebProxy.IsBypassed(System.Uri) 2 Method

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

8 Summary

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

11 Parameters

12
13

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

14
15
16

15 Return Value

17 Returns **true** under any of the following conditions:

- 18 • The **System.Net.WebProxy.BypassProxyOnLocal** property
19 of the current instance is **true** and *host* is a local URI.
- 20 • *host* matches a regular expression in
21 **System.Net.WebProxy.BypassList**.
- 22 • The **System.Net.WebProxy.Address** of the current instance
23 is **null**.

24 All other conditions return **false**.

25 Exceptions

26
27

Exception	Condition
System.ArgumentException	The System.Net.WebProxy.BypassList of the current instance contains an invalid regular expression.

28
29
30

1 WebProxy.Address Property

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

9 Summary

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

12 Property Value

13

14 A **System.Uri** containing the address of the proxy server represented
15 by the current instance.

16 Description

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

20

21 For additional information, see **System.Net.WebRequest.Proxy.**]

22

1 WebProxy.BypassArrayList Property

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

8 Summary

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

10 Property Value

11

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

16 Description

17 This property is read-only.

18

1 WebProxy.BypassList Property

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

9 Summary

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

11 Property Value

12

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

16 Description

17 This property is equivalent to
18 **System.Net.WebProxy.BypassArrayList.ToArray(typeof(System.**
19 **String))**.

20

1 WebProxy.BypassProxyOnLocal Property

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

9 Summary

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

12 Property Value

14 **true** to bypass the proxy server for local resources; otherwise, **false**.
15 The default value is **false**.

16 Description

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

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

31

1 WebProxy.Credentials Property

```
2 [ILASM]
3 .property class System.Net.ICredentials Credentials {
4 public final hidebysig virtual specialname class
5 System.Net.ICredentials get_Credentials() public final
6 hidebysig virtual specialname void set_Credentials(class
7 System.Net.ICredentials value) }
8
9 [C#]
public ICredentials Credentials { get; set; }
```

10 Summary

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

13 Property Value

14

15 A **System.Net.ICredentials** object containing the credentials to
16 submit to the proxy server for authentication.

17 Description

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

21

22 [*Note:* For more information regarding HTTP status code 407, see
23 **System.Net.HttpStatusCode.ProxyAuthenticationRequired.**]

24