

System.Net.WebResponse Class

```
[ILAsm]
.class public abstract serializable WebResponse extends
System.MarshalByRefObject implements System.IDisposable

[C#]
public abstract class WebResponse: MarshalByRefObject, IDisposable
```

Assembly Info:

- *Name:* System
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- *Version:* 2.0.x.x
- *Attributes:*
 - CLSCompliantAttribute(true)

Implements:

- **System.IDisposable**

Summary

Represents a response received from a Uniform Resource Identifier (URI).

Inherits From: System.MarshalByRefObject

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.WebResponse` is the base class from which protocol-specific response classes, such as `System.Net.HttpWebResponse`, are derived.

Classes that derive from `System.Net.WebResponse` are required to override the following members in the `System.Net.WebResponse` class:

- `System.Net.WebResponse.ContentLength`: Gets or sets the content length of the data being received.
- `System.Net.WebResponse.ContentType`: Gets or sets the media type of the data being received.

- 1 • `System.Net.WebResponse.GetResponseStream`: Returns a `System.IO.Stream` that
2 contains data from the current host.
- 3 • `System.Net.WebResponse.ResponseUri`: Gets a `System.Uri` containing the URI of
4 the resource associated with the current instance.
- 5 • `System.Net.WebResponse.Headers`: Gets or sets the collection of header
6 name/value pairs associated with the current instance.

7 [*Note*: Applications can participate in request/response transactions in a protocol-agnostic
8 manner using instances of the `System.Net.WebResponse` class while protocol-specific
9 classes derived from `System.Net.WebResponse` carry out the details of the request.

10
11 Applications do not create `System.Net.WebResponse` objects directly; they are created by
12 calling `System.Net.WebRequest.GetResponse`.

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15 **Example**

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17 The following example creates a `System.Net.WebResponse` instance from a
18 `System.Net.WebRequest`.

19
20 [C#]

```
21   using System;  
22   using System.Net;  
23  
24   public class WebResponseExample {  
25  
26       public static void Main() {  
27  
28           // Initialize the WebRequest.  
29           WebRequest myRequest =  
30               WebRequest.Create("http://www.contoso.com");  
31  
32           // Return the response.  
33           WebResponse myResponse = myRequest.GetResponse();  
34  
35           // Code to use the WebResponse goes here.  
36  
37           // Close the response to free resources.  
38           myResponse.Close();  
39       }  
40   }
```

WebResponse() Constructor

```
[ILAsm]  
family rtspecialname specialname instance void .ctor()  
  
[C#]  
protected WebResponse()
```

Summary

Constructs a new instance of the `System.Net.WebResponse` class.

Description

This constructor is called only by classes that derive from `System.Net.WebResponse`.

[*Note:* To obtain a `System.Net.WebResponse` instance, use the `System.Net.WebRequest.GetResponse` method; do not use this constructor.]

WebResponse.Close() Method

```
[ILAsm]  
.method public hidebysig virtual void Close()  
  
[C#]  
public virtual void Close()
```

Summary

Closes the response stream.

Behaviors

This method is required to free the connection used by the `System.IO.Stream` returned by a call to `System.Net.WebResponse.GetResponseStream`.

Default

The `System.Net.WebResponse` class is abstract and does not provide an implementation for this method. This method throws `System.NotSupportedException`.

How and When to Override

This method is required to be overridden in derived classes to close the response stream and free resources allocated by the current instance.

Usage

Use this method or `System.IO.Stream.Close` to clean up the resources used by a `System.Net.WebResponse`.

Exceptions

Exception	Condition
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System.NotSupportedException

This method is not implemented in the derived class.

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WebResponse.GetResponseStream() Method

```
[ILAsm]  
.method public hidebysig virtual class System.IO.Stream  
GetResponseStream()  
  
[C#]  
public virtual Stream GetResponseStream()
```

Summary

Returns a `System.IO.Stream` that contains data from the current host.

Return Value

A `System.IO.Stream` for reading data from the current host.

Behaviors

This method is required to return a `System.IO.Stream` from the host specified by the `System.Net.WebResponse.ResponseUri` property of the current instance.

Default

This method throws `System.NotSupportedException`.

How and When to Override

This method is required to be overridden by classes that inherit from `System.Net.WebResponse`.

Usage

Use this method to open a connection to the current host. To close the stream when it is no longer needed, in order to prevent the exhaustion of system resources, invoke either the `System.IO.Stream.Close` or `System.Net.WebResponse.Close` methods.

Exceptions

Exception	Condition
System.NotSupportedException	This method is not implemented in the derived class.

WebResponse.System.IDisposable.Dispose() Method

```
[ILAsm]  
.method private final hidebysig virtual void System.IDisposable.Dispose()  
  
[C#]  
void IDisposable.Dispose()
```

Summary

Implemented to support the System.IDisposable interface. [Note: For more information, see System.IDisposable.Dispose.]

WebResponse.ContentLength Property

```
[ILAsm]
.property int64 ContentLength { public hidebysig virtual specialname int64
get_ContentLength() public hidebysig virtual specialname void
set_ContentLength(int64 value) }

[C#]
public virtual long ContentLength { get; set; }
```

Summary

Gets or sets the content length of the data received from the server.

Property Value

A `System.Int64` containing the number of bytes returned from the resource.

Behaviors

This property contains the number of bytes of data in the response to the request associated with the current instance. For request methods that contain header information, the `System.Net.WebResponse.ContentLength` does not include the length of the header information. The value of this property is set by the Content-Length header received in the response.

Default

The `System.Net.WebResponse` class is abstract and does not provide an implementation for this property. This property throws `System.NotSupportedException`.

How and When to Override

This property is required to be overridden by classes that inherit from `System.Net.WebResponse` to set the content length as appropriate for the derived class.

Usage

Use this property to determine the number of bytes in the response.

Exceptions

Exception	Condition
System.NotSupportedException	This property is not implemented in the derived class.

WebResponse.ContentType Property

```
[ILAsm]
.property string ContentType { public hidebysig virtual specialname string
get_ContentType() public hidebysig virtual specialname void
set_ContentType(string value) }

[C#]
public virtual string ContentType { get; set; }
```

Summary

Gets or sets the media type of the data received.

Property Value

A `System.String` that contains the media type of the response data.

Description

[*Note:* The media type is typically the MIME encoding of the content.]

Behaviors

As described above.

Default

The `System.Net.WebResponse` class is abstract and does not provide an implementation for this property. This property throws `System.NotSupportedException`.

How and When to Override

This property is required to be overridden by classes that inherit from `System.Net.WebResponse`.

Usage

Use this property to get the media type of the response.

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Exceptions

Exception	Condition
System.NotSupportedException	This property is not implemented in the derived class.

WebResponse.Headers Property

```
[ILAsm]  
.property class System.Net.WebHeaderCollection Headers { public hidebysig  
virtual specialname class System.Net.WebHeaderCollection get_Headers() }  
  
[C#]  
public virtual WebHeaderCollection Headers { get; }
```

Summary

Gets the collection of header name/value pairs associated with the current instance.

Property Value

A `System.Net.WebHeaderCollection` containing the header name/value pairs associated with the current instance.

Description

This property contains a `System.Net.WebHeaderCollection` instance containing the header information returned in the response from the resource.

Behaviors

This property is read-only.

Default

The `System.Net.WebResponse` class is abstract and does not provide an implementation for this property. This property throws `System.NotSupportedException`.

How and When to Override

This property is required to be overridden by classes that inherit from `System.Net.WebResponse`.

Usage

Use this property to retrieve the header information received with the response.

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Exceptions

Exception	Condition
System.NotSupportedException	This property is not implemented in the derived class.

WebResponse.ResponseUri Property

```
[ILAsm]  
.property class System.Uri ResponseUri { public hidebysig virtual  
specialname class System.Uri get_ResponseUri() }  
  
[C#]  
public virtual Uri ResponseUri { get; }
```

Summary

Gets the URI of the resource associated with the current instance.

Property Value

A `System.Uri` containing the URI of the resource associated with the current response.

Behaviors

This property is read-only.

This property returns the URI that provided the response information in the current instance. [Note: If the method protocol used in the associated `System.Net.WebRequest` permits redirection, the value of this property might differ from the `System.Net.WebRequest.RequestUri` property of the request.]

Default

The `System.Net.WebResponse` class is abstract and does not provide an implementation for this property. This property throws `System.NotSupportedException`.

How and When to Override

This property is required to be overridden by classes that inherit from `System.Net.WebResponse`.

Usage

Use this property to determine the URI that originated the response.

Exceptions

Exception	Condition
System.NotSupportedException	This property is not implemented in the derived class.