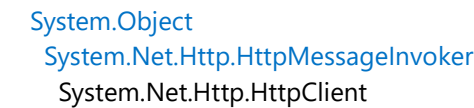# HttpClient Class

Provides a base class for sending HTTP requests and receiving HTTP responses from a resource identified by a URI.

Inheritance Hierarchy

System.Object
 System.Net.Http.HttpMessageInvoker
  System.Net.Http.HttpClient

Namespace: System.Net.Http
Assembly: System.Net.Http (in System.Net.Http.dll)

Syntax

C#

```
public class HttpClient : HttpMessageInvoker
```

The HttpClient type exposes the following members.

Constructors

Show: ☑ Inherited   ☑ Protected

	Name	Description
	HttpClient()	Initializes a new instance of the HttpClient class.
	HttpClient(HttpMessageHandler)	Initializes a new instance of the HttpClient class with a specific handler.
	HttpClient(HttpMessageHandler, Boolean)	Initializes a new instance of the HttpClient class with a specific handler and a value that indicates whether this instance is responsible for disposing the handler.

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Properties

Show: ☑ Inherited   ☑ Protected

	Name	Description
	BaseAddress	Gets or sets the base address of Uniform Resource Identifier (URI) of the Internet resource used when sending requests.
	DefaultRequestHeaders	Gets the headers which should be sent with each request.
	MaxResponseContentBufferSize	Gets or sets the maximum number of bytes to buffer when reading the response content.
	Timeout	Gets or sets the number of milliseconds to wait before the request times out.

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Methods

Show: ☑ Inherited　　☑ Protected

	Name	Description
	CancelPendingRequests	Cancel all pending requests on this instance.
	DeleteAsync(String)	Sends a DELETE request to the specified Uri as an asynchronous operation.
	DeleteAsync(Uri)	Sends a DELETE request to the specified Uri as an asynchronous operation.
	DeleteAsync(String, CancellationToken)	Sends a DELETE request to the specified Uri with a cancellation token as an asynchronous operation.
	DeleteAsync(Uri, CancellationToken)	Sends a DELETE request to the specified Uri with a cancellation token as an asynchronous operation.
	Dispose()	Releases the unmanaged resources and disposes of the managed resources used by the invoker. (Inherited from HttpMessageInvoker.)
	Dispose(Boolean)	Releases the unmanaged resources used by the HttpClient and optionally disposes of the managed resources. (Overrides HttpMessageInvoker.Dispose(Boolean).)
	Equals	(Inherited from Object.)
	Finalize	(Inherited from Object.)
	GetAsync(String)	Sends a GET request to the specified Uri as an asynchronous operation.

	GetAsync(Uri)	Sends a GET request to the specified Uri as an asynchronous operation.
	GetAsync(String, HttpCompletionOption)	Sends a GET request to the specified Uri with an HTTP completion option as an asynchronous operation.
	GetAsync(String, CancellationToken)	Sends a GET request to the specified Uri with a cancellation token as an asynchronous operation.
	GetAsync(Uri, HttpCompletionOption)	Sends a GET request to the specified Uri with an HTTP completion option as an asynchronous operation.
	GetAsync(Uri, CancellationToken)	Sends a GET request to the specified Uri with a cancellation token as an asynchronous operation.
	GetAsync(String, HttpCompletionOption, CancellationToken)	Sends a GET request to the specified Uri with an HTTP completion option and a cancellation token as an asynchronous operation.
	GetAsync(Uri, HttpCompletionOption, CancellationToken)	Sends a GET request to the specified Uri with an HTTP completion option and a cancellation token as an asynchronous operation.
	GetByteArrayAsync(String)	Sends a GET request to the specified Uri and returns the response body as a byte array in an asynchronous operation.
	GetByteArrayAsync(Uri)	Sends a GET request to the specified Uri and returns the response body as a byte array in an asynchronous operation.
	GetHashCode	(Inherited from Object.)
	GetStreamAsync(String)	Sends a GET request to the specified Uri and returns the response body as a stream in an asynchronous operation.
	GetStreamAsync(Uri)	Sends a GET request to the specified Uri and returns the response body as a stream in an asynchronous operation.
	GetStringAsync(String)	Sends a GET request to the specified Uri and returns the response body as a string in an asynchronous operation.
	GetStringAsync(Uri)	Sends a GET request to the specified Uri and returns the response body as a string in an asynchronous operation.
	GetType	(Inherited from Object.)
	MemberwiseClone	(Inherited from Object.)
	PostAsync(String, HttpContent)	Sends a POST request to the specified Uri as an asynchronous operation.

	PostAsync(Uri, HttpContent)	Sends a POST request to the specified Uri as an asynchronous operation.
	PostAsync(String, HttpContent, CancellationToken)	Sends a POST request with a cancellation token as an asynchronous operation.
	PostAsync(Uri, HttpContent, CancellationToken)	Sends a POST request with a cancellation token as an asynchronous operation.
	PutAsync(String, HttpContent)	Sends a PUT request to the specified Uri as an asynchronous operation.
	PutAsync(Uri, HttpContent)	Sends a PUT request to the specified Uri as an asynchronous operation.
	PutAsync(String, HttpContent, CancellationToken)	Sends a PUT request with a cancellation token as an asynchronous operation.
	PutAsync(Uri, HttpContent, CancellationToken)	Sends a PUT request with a cancellation token as an asynchronous operation.
	SendAsync(HttpRequestMessage)	Sends an HTTP request as an asynchronous operation.
	SendAsync(HttpRequestMessage, HttpCompletionOption)	Sends an HTTP request with an HTTP completion option as an asynchronous operation.
	SendAsync(HttpRequestMessage, CancellationToken)	Sends an HTTP request with a cancellation token as an asynchronous operation. (Overrides HttpMessageInvoker.SendAsync(HttpRequestMessage, CancellationToken).)
	SendAsync(HttpRequestMessage, HttpCompletionOption, CancellationToken)	Sends an HTTP request with an HTTP completion option and cancellation token as an asynchronous operation.
	ToString	(Inherited from Object.)

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Remarks

For a complete example of using the HttpClient class, see Calling a Web API From a .NET Client

Thread Safety

Any public **static** (**Shared** in Visual Basic) members of this type are thread safe. Any instance members are not guaranteed to be thread safe.

See Also

Reference
System.Net.Http Namespace

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