HttpRequest Class

<http://msdn.microsoft.com/en-us/library/system.web.httprequest(v=vs.100).aspx>

**.NET Framework 4**

[Other Versions](javascript:;)

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Enables ASP.NET to read the HTTP values sent by a client during a Web request.

[Inheritance Hierarchy](javascript:void(0))

[System.Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx)  
  System.Web.HttpRequest

**Namespace:**  [System.Web](http://msdn.microsoft.com/en-us/library/system.web(v=vs.100).aspx)  
**Assembly:**  System.Web (in System.Web.dll)

[Syntax](javascript:void(0))

C#

[**C++**](http://msdn.microsoft.com/en-us/library/system.web.httprequest(v=vs.100).aspx?cs-save-lang=1&cs-lang=cpp#code-snippet-1)

[**F#**](http://msdn.microsoft.com/en-us/library/system.web.httprequest(v=vs.100).aspx?cs-save-lang=1&cs-lang=fsharp#code-snippet-1)

[**VB**](http://msdn.microsoft.com/en-us/library/system.web.httprequest(v=vs.100).aspx?cs-save-lang=1&cs-lang=vb#code-snippet-1)

public sealed class HttpRequest

The HttpRequest type exposes the following members.

[Constructors](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Public method | [HttpRequest](http://msdn.microsoft.com/en-us/library/system.web.httprequest.httprequest(v=vs.100).aspx) | Infrastructure. Initializes an HttpRequest object. |

[Top](http://msdn.microsoft.com/en-us/library/system.web.httprequest(v=vs.100).aspx#mainBody)

[Properties](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Public property | [AcceptTypes](http://msdn.microsoft.com/en-us/library/system.web.httprequest.accepttypes(v=vs.100).aspx) | Gets a string array of client-supported MIME accept types. |
| Public property | [AnonymousID](http://msdn.microsoft.com/en-us/library/system.web.httprequest.anonymousid(v=vs.100).aspx) | Gets the anonymous identifier for the user, if present. |
| Public property | [ApplicationPath](http://msdn.microsoft.com/en-us/library/system.web.httprequest.applicationpath(v=vs.100).aspx) | Gets the ASP.NET application's virtual application root path on the server. |
| Public property | [AppRelativeCurrentExecutionFilePath](http://msdn.microsoft.com/en-us/library/system.web.httprequest.apprelativecurrentexecutionfilepath(v=vs.100).aspx) | Gets the virtual path of the application root and makes it relative by using the tilde (~) notation for the application root (as in "~/page.aspx"). |
| Public property | [Browser](http://msdn.microsoft.com/en-us/library/system.web.httprequest.browser(v=vs.100).aspx) | Gets or sets information about the requesting client's browser capabilities. |
| Public property | [ClientCertificate](http://msdn.microsoft.com/en-us/library/system.web.httprequest.clientcertificate(v=vs.100).aspx) | Gets the current request's client security certificate. |
| Public property | [ContentEncoding](http://msdn.microsoft.com/en-us/library/system.web.httprequest.contentencoding(v=vs.100).aspx) | Gets or sets the character set of the entity-body. |
| Public property | [ContentLength](http://msdn.microsoft.com/en-us/library/system.web.httprequest.contentlength(v=vs.100).aspx) | Specifies the length, in bytes, of content sent by the client. |
| Public property | [ContentType](http://msdn.microsoft.com/en-us/library/system.web.httprequest.contenttype(v=vs.100).aspx) | Gets or sets the MIME content type of the incoming request. |
| Public property | [Cookies](http://msdn.microsoft.com/en-us/library/system.web.httprequest.cookies(v=vs.100).aspx) | Gets a collection of cookies sent by the client. |
| Public property | [CurrentExecutionFilePath](http://msdn.microsoft.com/en-us/library/system.web.httprequest.currentexecutionfilepath(v=vs.100).aspx) | Gets the virtual path of the current request. |
| Public property | [CurrentExecutionFilePathExtension](http://msdn.microsoft.com/en-us/library/system.web.httprequest.currentexecutionfilepathextension(v=vs.100).aspx) | Gets the extension of the file name that is specified in the [CurrentExecutionFilePath](http://msdn.microsoft.com/en-us/library/system.web.httprequest.currentexecutionfilepath(v=vs.100).aspx)property. |
| Public property | [FilePath](http://msdn.microsoft.com/en-us/library/system.web.httprequest.filepath(v=vs.100).aspx) | Gets the virtual path of the current request. |
| Public property | [Files](http://msdn.microsoft.com/en-us/library/system.web.httprequest.files(v=vs.100).aspx) | Gets the collection of files uploaded by the client, in multipart MIME format. |
| Public property | [Filter](http://msdn.microsoft.com/en-us/library/system.web.httprequest.filter(v=vs.100).aspx) | Gets or sets the filter to use when reading the current input stream. |
| Public property | [Form](http://msdn.microsoft.com/en-us/library/system.web.httprequest.form(v=vs.100).aspx) | Gets a collection of form variables. |
| Public property | [Headers](http://msdn.microsoft.com/en-us/library/system.web.httprequest.headers(v=vs.100).aspx) | Gets a collection of HTTP headers. |
| Public property | [HttpChannelBinding](http://msdn.microsoft.com/en-us/library/system.web.httprequest.httpchannelbinding(v=vs.100).aspx) | Gets the [ChannelBinding](http://msdn.microsoft.com/en-us/library/system.security.authentication.extendedprotection.channelbinding(v=vs.100).aspx) object of the current [HttpWorkerRequest](http://msdn.microsoft.com/en-us/library/system.web.httpworkerrequest(v=vs.100).aspx) instance. |
| Public property | [HttpMethod](http://msdn.microsoft.com/en-us/library/system.web.httprequest.httpmethod(v=vs.100).aspx) | Gets the HTTP data transfer method (such as **GET**, **POST**, or **HEAD**) used by the client. |
| Public property | [InputStream](http://msdn.microsoft.com/en-us/library/system.web.httprequest.inputstream(v=vs.100).aspx) | Gets the contents of the incoming HTTP entity body. |
| Public property | [IsAuthenticated](http://msdn.microsoft.com/en-us/library/system.web.httprequest.isauthenticated(v=vs.100).aspx) | Gets a value indicating whether the request has been authenticated. |
| Public property | [IsLocal](http://msdn.microsoft.com/en-us/library/system.web.httprequest.islocal(v=vs.100).aspx) | Gets a value indicating whether the request is from the local computer. |
| Public property | [IsSecureConnection](http://msdn.microsoft.com/en-us/library/system.web.httprequest.issecureconnection(v=vs.100).aspx) | Gets a value indicating whether the HTTP connection uses secure sockets (that is, HTTPS). |
| Public property | [Item](http://msdn.microsoft.com/en-us/library/system.web.httprequest.item(v=vs.100).aspx) | Gets the specified object from the [QueryString](http://msdn.microsoft.com/en-us/library/system.web.httprequest.querystring(v=vs.100).aspx), [Form](http://msdn.microsoft.com/en-us/library/system.web.httprequest.form(v=vs.100).aspx), [Cookies](http://msdn.microsoft.com/en-us/library/system.web.httprequest.cookies(v=vs.100).aspx), or [ServerVariables](http://msdn.microsoft.com/en-us/library/system.web.httprequest.servervariables(v=vs.100).aspx)collections. |
| Public property | [LogonUserIdentity](http://msdn.microsoft.com/en-us/library/system.web.httprequest.logonuseridentity(v=vs.100).aspx) | Gets the [WindowsIdentity](http://msdn.microsoft.com/en-us/library/system.security.principal.windowsidentity(v=vs.100).aspx) type for the current user. |
| Public property | [Params](http://msdn.microsoft.com/en-us/library/system.web.httprequest.params(v=vs.100).aspx) | Gets a combined collection of [QueryString](http://msdn.microsoft.com/en-us/library/system.web.httprequest.querystring(v=vs.100).aspx), [Form](http://msdn.microsoft.com/en-us/library/system.web.httprequest.form(v=vs.100).aspx), [Cookies](http://msdn.microsoft.com/en-us/library/system.web.httprequest.cookies(v=vs.100).aspx), and [ServerVariables](http://msdn.microsoft.com/en-us/library/system.web.httprequest.servervariables(v=vs.100).aspx) items. |
| Public property | [Path](http://msdn.microsoft.com/en-us/library/system.web.httprequest.path(v=vs.100).aspx) | Gets the virtual path of the current request. |
| Public property | [PathInfo](http://msdn.microsoft.com/en-us/library/system.web.httprequest.pathinfo(v=vs.100).aspx) | Gets additional path information for a resource with a URL extension. |
| Public property | [PhysicalApplicationPath](http://msdn.microsoft.com/en-us/library/system.web.httprequest.physicalapplicationpath(v=vs.100).aspx) | Gets the physical file system path of the currently executing server application's root directory. |
| Public property | [PhysicalPath](http://msdn.microsoft.com/en-us/library/system.web.httprequest.physicalpath(v=vs.100).aspx) | Gets the physical file system path corresponding to the requested URL. |
| Public property | [QueryString](http://msdn.microsoft.com/en-us/library/system.web.httprequest.querystring(v=vs.100).aspx) | Gets the collection of HTTP query string variables. |
| Public property | [RawUrl](http://msdn.microsoft.com/en-us/library/system.web.httprequest.rawurl(v=vs.100).aspx) | Gets the raw URL of the current request. |
| Public property | [RequestContext](http://msdn.microsoft.com/en-us/library/system.web.httprequest.requestcontext(v=vs.100).aspx) | Gets the [RequestContext](http://msdn.microsoft.com/en-us/library/system.web.routing.requestcontext(v=vs.100).aspx) instance of the current request. |
| Public property | [RequestType](http://msdn.microsoft.com/en-us/library/system.web.httprequest.requesttype(v=vs.100).aspx) | Gets or sets the HTTP data transfer method (**GET** or **POST**) used by the client. |
| Public property | [ServerVariables](http://msdn.microsoft.com/en-us/library/system.web.httprequest.servervariables(v=vs.100).aspx) | Gets a collection of Web server variables. |
| Public property | [TotalBytes](http://msdn.microsoft.com/en-us/library/system.web.httprequest.totalbytes(v=vs.100).aspx) | Gets the number of bytes in the current input stream. |
| Public property | [Url](http://msdn.microsoft.com/en-us/library/system.web.httprequest.url(v=vs.100).aspx) | Gets information about the URL of the current request. |
| Public property | [UrlReferrer](http://msdn.microsoft.com/en-us/library/system.web.httprequest.urlreferrer(v=vs.100).aspx) | Gets information about the URL of the client's previous request that linked to the current URL. |
| Public property | [UserAgent](http://msdn.microsoft.com/en-us/library/system.web.httprequest.useragent(v=vs.100).aspx) | Gets the raw user agent string of the client browser. |
| Public property | [UserHostAddress](http://msdn.microsoft.com/en-us/library/system.web.httprequest.userhostaddress(v=vs.100).aspx) | Gets the IP host address of the remote client. |
| Public property | [UserHostName](http://msdn.microsoft.com/en-us/library/system.web.httprequest.userhostname(v=vs.100).aspx) | Gets the DNS name of the remote client. |
| Public property | [UserLanguages](http://msdn.microsoft.com/en-us/library/system.web.httprequest.userlanguages(v=vs.100).aspx) | Gets a sorted string array of client language preferences. |

[Top](http://msdn.microsoft.com/en-us/library/system.web.httprequest(v=vs.100).aspx#mainBody)

[Methods](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Public method | [BinaryRead](http://msdn.microsoft.com/en-us/library/system.web.httprequest.binaryread(v=vs.100).aspx) | Performs a binary read of a specified number of bytes from the current input stream. |
| Public method | [Equals(Object)](http://msdn.microsoft.com/en-us/library/bsc2ak47(v=vs.100).aspx) | Determines whether the specified [Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx) is equal to the current [Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx). (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx).) |
| Protected method | [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize(v=vs.100).aspx) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx).) |
| Public method | [GetBufferlessInputStream](http://msdn.microsoft.com/en-us/library/ff406798(v=vs.100).aspx) | Gets a [Stream](http://msdn.microsoft.com/en-us/library/system.io.stream(v=vs.100).aspx) object that can be used to read the incoming HTTP entity body. |
| Public method | [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode(v=vs.100).aspx) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx).) |
| Public method | [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype(v=vs.100).aspx) | Gets the [Type](http://msdn.microsoft.com/en-us/library/system.type(v=vs.100).aspx) of the current instance. (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx).) |
| Public method | [InsertEntityBody()](http://msdn.microsoft.com/en-us/library/ee169616(v=vs.100).aspx) | Provides IIS with a copy of the HTTP request entity body. |
| Public method | [InsertEntityBody(Byte[], Int32, Int32)](http://msdn.microsoft.com/en-us/library/ee169600(v=vs.100).aspx) | Provides IIS with a copy of the HTTP request entity body and with information about the request entity object. |
| Public method | [MapImageCoordinates](http://msdn.microsoft.com/en-us/library/system.web.httprequest.mapimagecoordinates(v=vs.100).aspx) | Maps an incoming image-field form parameter to appropriate x-coordinate and y-coordinate values. |
| Public method | [MapPath(String)](http://msdn.microsoft.com/en-us/library/0e7ykf56(v=vs.100).aspx) | Maps the specified virtual path to a physical path. |
| Public method | [MapPath(String, String, Boolean)](http://msdn.microsoft.com/en-us/library/3z2189ck(v=vs.100).aspx) | Maps the specified virtual path to a physical path. |
| Protected method | [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone(v=vs.100).aspx) | Creates a shallow copy of the current [Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx). (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx).) |
| Public method | [SaveAs](http://msdn.microsoft.com/en-us/library/system.web.httprequest.saveas(v=vs.100).aspx) | Saves an HTTP request to disk. |
| Public method | [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring(v=vs.100).aspx) | Returns a string that represents the current object. (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object(v=vs.100).aspx).) |
| Public method | [ValidateInput](http://msdn.microsoft.com/en-us/library/system.web.httprequest.validateinput(v=vs.100).aspx) | Causes validation to occur for the collections accessed through the [Cookies](http://msdn.microsoft.com/en-us/library/system.web.httprequest.cookies(v=vs.100).aspx), [Form](http://msdn.microsoft.com/en-us/library/system.web.httprequest.form(v=vs.100).aspx), and[QueryString](http://msdn.microsoft.com/en-us/library/system.web.httprequest.querystring(v=vs.100).aspx) properties. |

[Top](http://msdn.microsoft.com/en-us/library/system.web.httprequest(v=vs.100).aspx#mainBody)

[Remarks](javascript:void(0))

The methods and properties of the HttpRequest class are exposed through the **Request** properties of the [HttpApplication](http://msdn.microsoft.com/en-us/library/system.web.httpapplication(v=vs.100).aspx), [HttpContext](http://msdn.microsoft.com/en-us/library/system.web.httpcontext(v=vs.100).aspx), [Page](http://msdn.microsoft.com/en-us/library/system.web.ui.page(v=vs.100).aspx), and [UserControl](http://msdn.microsoft.com/en-us/library/system.web.ui.usercontrol(v=vs.100).aspx) classes.

|  |  |  |
| --- | --- | --- |
| **NoteNote** | | |
| Unicode support for HttpRequest class members requires IIS version 6.0 or later. | | |
| **Topic** | **Location** | |
| [How to: Pass Values Between ASP.NET Web Pages](http://msdn.microsoft.com/en-us/library/6c3yckfw(v=vs.85).aspx) | Building ASP .NET Web Applications | |
| [How to: Pass Values Between ASP.NET Web Pages](http://msdn.microsoft.com/en-us/library/6c3yckfw(v=vs.80).aspx) | Building ASP .NET Web Applications | |

[Examples](javascript:void(0))

A Visual Studio Web site project with source code is available to accompany this topic: [Download](http://go.microsoft.com/fwlink/?LinkID=191455).

The following example uses the [StreamWriter](http://msdn.microsoft.com/en-us/library/system.io.streamwriter(v=vs.100).aspx) class to write the values of several HttpRequest class properties to a file. For properties that are of type string, the values are HTML encoded as they are written to the file. Properties that represent a collection are looped through, and each key/value pair that they contain is written to the file. In ASP.NET markup, the **Request** keyword refers to the HttpRequest object.

|  |
| --- |
| **Security noteSecurity Note** |
| This example has a text box that accepts user input, which is a potential security threat. By default, ASP.NET Web pages validate that user input does not include script or HTML elements. For more information, see [Script Exploits Overview](http://msdn.microsoft.com/en-us/library/w1sw53ds(v=vs.100).aspx). |

C#

[**VB**](http://msdn.microsoft.com/en-us/library/system.web.httprequest(v=vs.100).aspx?cs-save-lang=1&cs-lang=vb#code-snippet-2)

<%@ Page Language="C#" %>

<%@ import Namespace="System.Threading" %>

<%@ import Namespace="System.IO" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"

"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<script runat="server">

/\* NOTE: To use this sample, create a c:\temp\CS folder,

\* add the ASP.NET account (in IIS 5.x <machinename>\ASPNET,

\* in IIS 6.x NETWORK SERVICE), and give it write permissions

\* to the folder.\*/

private const string INFO\_DIR = @"c:\temp\CS\RequestDetails";

public static int requestCount;

private void Page\_Load(object sender, System.EventArgs e)

{

// Create a variable to use when iterating

// through the UserLanguages property.

int langCount;

int requestNumber = Interlocked.Increment(ref requestCount);

// Create the file to contain information about the request.

string strFilePath = INFO\_DIR + requestNumber.ToString() + @".txt";

StreamWriter sw = File.CreateText(strFilePath);

try

{

// Write request information to the file with HTML encoding.

sw.WriteLine(Server.HtmlEncode(DateTime.Now.ToString()));

sw.WriteLine(Server.HtmlEncode(Request.CurrentExecutionFilePath));

sw.WriteLine(Server.HtmlEncode(Request.ApplicationPath));

sw.WriteLine(Server.HtmlEncode(Request.FilePath));

sw.WriteLine(Server.HtmlEncode(Request.Path));

// Iterate through the Form collection and write

// the values to the file with HTML encoding.

// String[] formArray = Request.Form.AllKeys;

foreach (string s in Request.Form)

{

sw.WriteLine("Form: " + Server.HtmlEncode(s));

}

// Write the PathInfo property value

// or a string if it is empty.

if (Request.PathInfo == String.Empty)

{

sw.WriteLine("The PathInfo property contains no information.");

}

else

{

sw.WriteLine(Server.HtmlEncode(Request.PathInfo));

}

// Write request information to the file with HTML encoding.

sw.WriteLine(Server.HtmlEncode(Request.PhysicalApplicationPath));

sw.WriteLine(Server.HtmlEncode(Request.PhysicalPath));

sw.WriteLine(Server.HtmlEncode(Request.RawUrl));

// Write a message to the file dependent upon

// the value of the TotalBytes property.

if (Request.TotalBytes > 1000)

{

sw.WriteLine("The request is 1KB or greater");

}

else

{

sw.WriteLine("The request is less than 1KB");

}

// Write request information to the file with HTML encoding.

sw.WriteLine(Server.HtmlEncode(Request.RequestType));

sw.WriteLine(Server.HtmlEncode(Request.UserHostAddress));

sw.WriteLine(Server.HtmlEncode(Request.UserHostName));

sw.WriteLine(Server.HtmlEncode(Request.HttpMethod));

// Iterate through the UserLanguages collection and

// write its HTML encoded values to the file.

for (langCount=0; langCount < Request.UserLanguages.Length; langCount++)

{

sw.WriteLine(@"User Language " + langCount +": " + Server.HtmlEncode(Request.UserLanguages[langCount]));

}

}

finally

{

// Close the stream to the file.

sw.Close();

}

lblInfoSent.Text = "Information about this request has been sent to a file.";

}

private void btnSendInfo\_Click(object sender, System.EventArgs e)

{

lblInfoSent.Text = "Hello, " + Server.HtmlEncode(txtBoxName.Text) +

". You have created a new request info file.";

}

</script>

<html xmlns="http://www.w3.org/1999/xhtml" >

<head>

<title>ASP.NET Example</title>

</head>

<body>

<form id="form1" runat="server">

<p>

</p>

<p>

Enter your name here:

<asp:TextBox id="txtBoxName" runat="server"></asp:TextBox>

</p>

<p>

<asp:Button id="btnSendInfo" onclick="btnSendInfo\_Click" runat="server" Text="Click Here"></asp:Button>

</p>

<p>

<asp:Label id="lblInfoSent" runat="server"></asp:Label>

</p>

</form>

</body>

</html>

[Version Information](javascript:void(0))

.NET Framework

Supported in: 4, 3.5, 3.0, 2.0, 1.1, 1.0

[Platforms](javascript:void(0))

Windows 7, Windows Vista SP1 or later, Windows XP SP3, Windows XP SP2 x64 Edition, Windows Server 2008 (Server Core not supported), Windows Server 2008 R2 (Server Core supported with SP1 or later), Windows Server 2003 SP2

The .NET Framework does not support all versions of every platform. For a list of the supported versions, see [.NET Framework System Requirements](http://msdn.microsoft.com/en-us/library/8z6watww(v=vs.100).aspx).

[Thread Safety](javascript:void(0))

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