HttpApplication Class

**.NET Framework 4**

[Other Versions](javascript:;)

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Defines the methods, properties, and events that are common to all application objects in an ASP.NET application. This class is the base class for applications that are defined by the user in the Global.asax file.

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

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

**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.httpapplication(v=vs.100).aspx?cs-save-lang=1&cs-lang=cpp#code-snippet-1)

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

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

public class HttpApplication : IHttpAsyncHandler,

IHttpHandler, IComponent, IDisposable

The HttpApplication type exposes the following members.

[Constructors](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Public method | [HttpApplication](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.httpapplication(v=vs.100).aspx) | Initializes a new instance of the HttpApplication class. |

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

[Properties](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Public property | [Application](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.application(v=vs.100).aspx) | Gets the current state of an application. |
| Public property | [Context](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.context(v=vs.100).aspx) | Gets HTTP-specific information about the current request. |
| Protected property | [Events](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.events(v=vs.100).aspx) | Gets the list of event handler delegates that process all application events. |
| Public property | [Modules](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.modules(v=vs.100).aspx) | Gets the collection of modules for the current application. |
| Public property | [Request](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.request(v=vs.100).aspx) | Gets the intrinsic request object for the current request. |
| Public property | [Response](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.response(v=vs.100).aspx) | Gets the intrinsic response object for the current request. |
| Public property | [Server](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.server(v=vs.100).aspx) | Gets the intrinsic server object for the current request. |
| Public property | [Session](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.session(v=vs.100).aspx) | Gets the intrinsic session object that provides access to session data. |
| Public property | [Site](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.site(v=vs.100).aspx) | Gets or sets a site interface for an [IComponent](http://msdn.microsoft.com/en-us/library/system.componentmodel.icomponent(v=vs.100).aspx) implementation. |
| Public property | [User](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.user(v=vs.100).aspx) | Gets the intrinsic user object for the current request. |

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

[Methods](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Public method | [AddOnAcquireRequestStateAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/30dbw42y(v=vs.100).aspx) | Adds the specified [AcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.acquirerequeststate(v=vs.100).aspx) event to the collection of asynchronous [AcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.acquirerequeststate(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnAcquireRequestStateAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/t8064146(v=vs.100).aspx) | Adds the specified [AcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.acquirerequeststate(v=vs.100).aspx) event to the collection of asynchronous [AcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.acquirerequeststate(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnAuthenticateRequestAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/bzthx3ak(v=vs.100).aspx) | Adds the specified [AuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authenticaterequest(v=vs.100).aspx) event to the collection of asynchronous [AuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authenticaterequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnAuthenticateRequestAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/ws65zw54(v=vs.100).aspx) | Adds the specified [AuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authenticaterequest(v=vs.100).aspx) event to the collection of asynchronous [AuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authenticaterequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnAuthorizeRequestAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/kcyh9kc0(v=vs.100).aspx) | Adds the specified [AuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authorizerequest(v=vs.100).aspx) event to the collection of asynchronous [AuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authorizerequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnAuthorizeRequestAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/twd37w0d(v=vs.100).aspx) | Adds the specified [AuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authorizerequest(v=vs.100).aspx) event to the collection of asynchronous [AuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authorizerequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnBeginRequestAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/7d929d82(v=vs.100).aspx) | Adds the specified [BeginRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.beginrequest(v=vs.100).aspx) event to the collection of asynchronous [BeginRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.beginrequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnBeginRequestAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/00e2t043(v=vs.100).aspx) | Adds the specified [BeginRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.beginrequest(v=vs.100).aspx) event to the collection of asynchronous [BeginRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.beginrequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnEndRequestAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/zkh2afa3(v=vs.100).aspx) | Adds the specified [EndRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.endrequest(v=vs.100).aspx) event to the collection of asynchronous [EndRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.endrequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnEndRequestAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/f5txdbdd(v=vs.100).aspx) | Adds the specified [EndRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.endrequest(v=vs.100).aspx) event to the collection of asynchronous [EndRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.endrequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnLogRequestAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/ms586655(v=vs.100).aspx) | Adds the specified [LogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.logrequest(v=vs.100).aspx) event to the collection of asynchronous [LogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.logrequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnLogRequestAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/ms586657(v=vs.100).aspx) | Adds the specified [LogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.logrequest(v=vs.100).aspx) event to the collection of asynchronous [LogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.logrequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnMapRequestHandlerAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/ms586658(v=vs.100).aspx) | Adds the specified [MapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.maprequesthandler(v=vs.100).aspx) event to the collection of asynchronous [MapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.maprequesthandler(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnMapRequestHandlerAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/ms586670(v=vs.100).aspx) | Adds the specified [MapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.maprequesthandler(v=vs.100).aspx) event to the collection of asynchronous [MapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.maprequesthandler(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostAcquireRequestStateAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/kdd7c9ex(v=vs.100).aspx) | Adds the specified [PostAcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postacquirerequeststate(v=vs.100).aspx) event to the collection of asynchronous [PostAcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postacquirerequeststate(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostAcquireRequestStateAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/43dfe8t7(v=vs.100).aspx) | Adds the specified [PostAcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postacquirerequeststate(v=vs.100).aspx) event to the collection of asynchronous [PostAcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postacquirerequeststate(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostAuthenticateRequestAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/ch2wh2t0(v=vs.100).aspx) | Adds the specified [PostAuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthenticaterequest(v=vs.100).aspx) event to the collection of asynchronous [PostAuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthenticaterequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostAuthenticateRequestAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/xctaezwk(v=vs.100).aspx) | Adds the specified [PostAuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthorizerequest(v=vs.100).aspx) event to the collection of asynchronous [PostAuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthorizerequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostAuthorizeRequestAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/ebk0tkw0(v=vs.100).aspx) | Adds the specified [PostAuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthorizerequest(v=vs.100).aspx) event to the collection of asynchronous [PostAuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthorizerequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostAuthorizeRequestAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/45b4b493(v=vs.100).aspx) | Adds the specified [PostAuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthorizerequest(v=vs.100).aspx) to the collection of asynchronous [PostAuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthorizerequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostLogRequestAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/ms586671(v=vs.100).aspx) | Adds the specified [PostLogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postlogrequest(v=vs.100).aspx) event to the collection of asynchronous [PostLogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postlogrequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostLogRequestAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/ms586672(v=vs.100).aspx) | Adds the specified [PostLogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postlogrequest(v=vs.100).aspx) event to the collection of asynchronous [PostLogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postlogrequest(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostMapRequestHandlerAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/9c583a8b(v=vs.100).aspx) | Adds the specified [PostMapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postmaprequesthandler(v=vs.100).aspx) event to the collection of asynchronous [PostMapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postmaprequesthandler(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostMapRequestHandlerAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/1339d100(v=vs.100).aspx) | Adds the specified [PostMapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postmaprequesthandler(v=vs.100).aspx) event to the collection of asynchronous [PostMapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postmaprequesthandler(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostReleaseRequestStateAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/6beza5c1(v=vs.100).aspx) | Adds the specified [PostReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postreleaserequeststate(v=vs.100).aspx) event to the collection of asynchronous [PostReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postreleaserequeststate(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostReleaseRequestStateAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/f3dtzs8x(v=vs.100).aspx) | Adds the specified [PostReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postreleaserequeststate(v=vs.100).aspx) event to the collection of asynchronous [PostReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postreleaserequeststate(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostRequestHandlerExecuteAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/8f759s7b(v=vs.100).aspx) | Adds the specified [PostRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postrequesthandlerexecute(v=vs.100).aspx) event to the collection of asynchronous [PostRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postrequesthandlerexecute(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostRequestHandlerExecuteAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/7t97a6ct(v=vs.100).aspx) | Adds the specified [PostRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postrequesthandlerexecute(v=vs.100).aspx) event to the collection of asynchronous [PostRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postrequesthandlerexecute(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostResolveRequestCacheAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/ssc4b2wk(v=vs.100).aspx) | Adds the specified [PostResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postresolverequestcache(v=vs.100).aspx) event to the collection of asynchronous [PostResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postresolverequestcache(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostResolveRequestCacheAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/hytdxz36(v=vs.100).aspx) | Adds the specified [PostResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postresolverequestcache(v=vs.100).aspx) event to the collection of asynchronous [PostResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postresolverequestcache(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostUpdateRequestCacheAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/39fae0kz(v=vs.100).aspx) | Adds the specified [PostUpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postupdaterequestcache(v=vs.100).aspx) event to the collection of asynchronous [PostUpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postupdaterequestcache(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPostUpdateRequestCacheAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/ckts6a04(v=vs.100).aspx) | Adds the specified [PostUpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postupdaterequestcache(v=vs.100).aspx) event to the collection of asynchronous [PostUpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postupdaterequestcache(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPreRequestHandlerExecuteAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/397k349z(v=vs.100).aspx) | Adds the specified [PreRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.prerequesthandlerexecute(v=vs.100).aspx) event to the collection of asynchronous [PreRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.prerequesthandlerexecute(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnPreRequestHandlerExecuteAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/3ts11k4x(v=vs.100).aspx) | Adds the specified [PreRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.prerequesthandlerexecute(v=vs.100).aspx) event to the collection of asynchronous [PreRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.prerequesthandlerexecute(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnReleaseRequestStateAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/b3hhafdk(v=vs.100).aspx) | Adds the specified [ReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.releaserequeststate(v=vs.100).aspx) event to the collection of asynchronous [ReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.releaserequeststate(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnReleaseRequestStateAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/4sck4zyh(v=vs.100).aspx) | Adds the specified [ReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.releaserequeststate(v=vs.100).aspx) event to the collection of asynchronous [ReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.releaserequeststate(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnResolveRequestCacheAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/xb3awsy0(v=vs.100).aspx) | Adds the specified [ResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.resolverequestcache(v=vs.100).aspx) event handler to the collection of asynchronous [ResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.resolverequestcache(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnResolveRequestCacheAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/a368de6w(v=vs.100).aspx) | Adds the specified [ResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.resolverequestcache(v=vs.100).aspx) event handler to the collection of asynchronous [ResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.resolverequestcache(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnUpdateRequestCacheAsync(BeginEventHandler, EndEventHandler)](http://msdn.microsoft.com/en-us/library/9awt7x0y(v=vs.100).aspx) | Adds the specified [UpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.updaterequestcache(v=vs.100).aspx) event to the collection of asynchronous [UpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.updaterequestcache(v=vs.100).aspx) event handlers for the current request. |
| Public method | [AddOnUpdateRequestCacheAsync(BeginEventHandler, EndEventHandler, Object)](http://msdn.microsoft.com/en-us/library/s5e9a9t5(v=vs.100).aspx) | Adds the specified [UpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.updaterequestcache(v=vs.100).aspx) event to the collection of asynchronous [UpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.updaterequestcache(v=vs.100).aspx) event handlers for the current request. |
| Public method | [CompleteRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.completerequest(v=vs.100).aspx) | Causes ASP.NET to bypass all events and filtering in the HTTP pipeline chain of execution and directly execute the[EndRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.endrequest(v=vs.100).aspx) event. |
| Public method | [Dispose](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.dispose(v=vs.100).aspx) | Disposes the HttpApplication instance. |
| 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 | [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 | [GetOutputCacheProviderName](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.getoutputcacheprovidername(v=vs.100).aspx) | Gets the name of the default output-cache provider that is configured for a Web site. |
| 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 | [GetVaryByCustomString](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.getvarybycustomstring(v=vs.100).aspx) | Provides an application-wide implementation of the[VaryByCustom](http://msdn.microsoft.com/en-us/library/system.web.ui.partialcachingattribute.varybycustom(v=vs.100).aspx) property. |
| Public method | [Init](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.init(v=vs.100).aspx) | Executes custom initialization code after all event handler modules have been added. |
| 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 | [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).) |

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[Events](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Public event | [AcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.acquirerequeststate(v=vs.100).aspx) | Occurs when ASP.NET acquires the current state (for example, session state) that is associated with the current request. |
| Public event | [AuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authenticaterequest(v=vs.100).aspx) | Occurs when a security module has established the identity of the user. |
| Public event | [AuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authorizerequest(v=vs.100).aspx) | Occurs when a security module has verified user authorization. |
| Public event | [BeginRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.beginrequest(v=vs.100).aspx) | Occurs as the first event in the HTTP pipeline chain of execution when ASP.NET responds to a request. |
| Public event | [Disposed](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.disposed(v=vs.100).aspx) | Occurs when the application is disposed. |
| Public event | [EndRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.endrequest(v=vs.100).aspx) | Occurs as the last event in the HTTP pipeline chain of execution when ASP.NET responds to a request. |
| Public event | [Error](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.error(v=vs.100).aspx) | Occurs when an unhandled exception is thrown. |
| Public event | [LogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.logrequest(v=vs.100).aspx) | Occurs just before ASP.NET performs any logging for the current request. |
| Public event | [MapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.maprequesthandler(v=vs.100).aspx) | Infrastructure. Occurs when the handler is selected to respond to the request. |
| Public event | [PostAcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postacquirerequeststate(v=vs.100).aspx) | Occurs when the request state (for example, session state) that is associated with the current request has been obtained. |
| Public event | [PostAuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthenticaterequest(v=vs.100).aspx) | Occurs when a security module has established the identity of the user. |
| Public event | [PostAuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthorizerequest(v=vs.100).aspx) | Occurs when the user for the current request has been authorized. |
| Public event | [PostLogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postlogrequest(v=vs.100).aspx) | Occurs when ASP.NET has completed processing all the event handlers for the [LogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.logrequest(v=vs.100).aspx)event. |
| Public event | [PostMapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postmaprequesthandler(v=vs.100).aspx) | Occurs when ASP.NET has mapped the current request to the appropriate event handler. |
| Public event | [PostReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postreleaserequeststate(v=vs.100).aspx) | Occurs when ASP.NET has completed executing all request event handlers and the request state data has been stored. |
| Public event | [PostRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postrequesthandlerexecute(v=vs.100).aspx) | Occurs when the ASP.NET event handler (for example, a page or an XML Web service) finishes execution. |
| Public event | [PostResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postresolverequestcache(v=vs.100).aspx) | Occurs when ASP.NET bypasses execution of the current event handler and allows a caching module to serve a request from the cache. |
| Public event | [PostUpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postupdaterequestcache(v=vs.100).aspx) | Occurs when ASP.NET finishes updating caching modules and storing responses that are used to serve subsequent requests from the cache. |
| Public event | [PreRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.prerequesthandlerexecute(v=vs.100).aspx) | Occurs just before ASP.NET starts executing an event handler (for example, a page or an XML Web service). |
| Public event | [PreSendRequestContent](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.presendrequestcontent(v=vs.100).aspx) | Occurs just before ASP.NET sends content to the client. |
| Public event | [PreSendRequestHeaders](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.presendrequestheaders(v=vs.100).aspx) | Occurs just before ASP.NET sends HTTP headers to the client. |
| Public event | [ReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.releaserequeststate(v=vs.100).aspx) | Occurs after ASP.NET finishes executing all request event handlers. This event causes state modules to save the current state data. |
| Public event | [ResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.resolverequestcache(v=vs.100).aspx) | Occurs when ASP.NET finishes an authorization event to let the caching modules serve requests from the cache, bypassing execution of the event handler (for example, a page or an XML Web service). |
| Public event | [UpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.updaterequestcache(v=vs.100).aspx) | Occurs when ASP.NET finishes executing an event handler in order to let caching modules store responses that will be used to serve subsequent requests from the cache. |

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[Explicit Interface Implementations](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Explicit interface implemetationPrivate method | [IHttpAsyncHandler.BeginProcessRequest](http://msdn.microsoft.com/en-us/library/bb339421(v=vs.100).aspx) | Initiates an asynchronous call to the HTTP event handler. |
| Explicit interface implemetationPrivate method | [IHttpAsyncHandler.EndProcessRequest](http://msdn.microsoft.com/en-us/library/bb354257(v=vs.100).aspx) | Provides an asynchronous process **End** method when the process finishes. |
| Explicit interface implemetationPrivate property | [IHttpHandler.IsReusable](http://msdn.microsoft.com/en-us/library/bb350943(v=vs.100).aspx) | Gets a **Boolean** value indicating whether another request can use the [IHttpHandler](http://msdn.microsoft.com/en-us/library/system.web.ihttphandler(v=vs.100).aspx)object. |
| Explicit interface implemetationPrivate method | [IHttpHandler.ProcessRequest](http://msdn.microsoft.com/en-us/library/bb292181(v=vs.100).aspx) | Enables processing of HTTP Web requests by a custom HTTP handler that implements the [IHttpHandler](http://msdn.microsoft.com/en-us/library/system.web.ihttphandler(v=vs.100).aspx) interface. |

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[Remarks](javascript:void(0))

Instances of the HttpApplication class are created in the ASP.NET infrastructure, not by the user directly. One instance of the HttpApplication class is used to process many requests in its lifetime. However, it can process only one request at a time. Thus, member variables can be used to store per-request data.

An application raises events that can be handled by custom modules that implement the [IHttpModule](http://msdn.microsoft.com/en-us/library/system.web.ihttpmodule(v=vs.100).aspx) interface or by event handler code that is defined in the Global.asax file. Custom modules that implement the [IHttpModule](http://msdn.microsoft.com/en-us/library/system.web.ihttpmodule(v=vs.100).aspx) interface can be put in the App\_Code folder or in a DLL in the Bin folder.

HttpApplication is introduced in the .NET Framework version 3.5. For more information, see [.NET Framework Versions and Dependencies](http://msdn.microsoft.com/en-us/library/bb822049(v=vs.100).aspx).

|  |
| --- |
| **NoteNote** |
| When running IIS 7.0 in Integrated mode, custom modules in the App\_Code folder or Bin folder apply to all requests in the request pipeline. Event handler code in the Global.asax file only applies to requests that are mapped to an ASP.NET handler. |

The application events are raised in the following order:

1. [BeginRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.beginrequest(v=vs.100).aspx)
2. [AuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authenticaterequest(v=vs.100).aspx)
3. [PostAuthenticateRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthenticaterequest(v=vs.100).aspx)
4. [AuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.authorizerequest(v=vs.100).aspx)
5. [PostAuthorizeRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postauthorizerequest(v=vs.100).aspx)
6. [ResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.resolverequestcache(v=vs.100).aspx)
7. [PostResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postresolverequestcache(v=vs.100).aspx)

After the [PostResolveRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postresolverequestcache(v=vs.100).aspx) event and before the [PostMapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postmaprequesthandler(v=vs.100).aspx) event, an event handler (which is a page that corresponds to the request URL) is created. When a server is running IIS 7.0 in Integrated mode and at least the .NET Framework version 3.0, the [MapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.maprequesthandler(v=vs.100).aspx) event is raised. When a server is running IIS 7.0 in Classic mode or an earlier version of IIS, this event cannot be handled.

1. [PostMapRequestHandler](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postmaprequesthandler(v=vs.100).aspx)
2. [AcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.acquirerequeststate(v=vs.100).aspx)
3. [PostAcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postacquirerequeststate(v=vs.100).aspx)
4. [PreRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.prerequesthandlerexecute(v=vs.100).aspx)

The event handler is executed.

1. [PostRequestHandlerExecute](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postrequesthandlerexecute(v=vs.100).aspx)
2. [ReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.releaserequeststate(v=vs.100).aspx)
3. [PostReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postreleaserequeststate(v=vs.100).aspx)

After the [PostReleaseRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postreleaserequeststate(v=vs.100).aspx) event is raised, any existing response filters will filter the output.

1. [UpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.updaterequestcache(v=vs.100).aspx)
2. [PostUpdateRequestCache](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postupdaterequestcache(v=vs.100).aspx)
3. [LogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.logrequest(v=vs.100).aspx).

This event is supported in IIS 7.0 Integrated mode and at least the .NET Framework 3.0

1. [PostLogRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.postlogrequest(v=vs.100).aspx)

This event is supported IIS 7.0 Integrated mode and at least the .NET Framework 3.0

1. [EndRequest](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.endrequest(v=vs.100).aspx)

[Examples](javascript:void(0))

The following two examples demonstrate how to use the HttpApplication class and its events. The first example demonstrates how to create a custom HTTP module and connect an event to it. The second example demonstrates how to modify the Web.config file.

The following example demonstrates how to create a custom HTTP module and connect the [AcquireRequestState](http://msdn.microsoft.com/en-us/library/system.web.httpapplication.acquirerequeststate(v=vs.100).aspx) event to the HTTP module. HTTP modules intercept each request to Web application resources, thereby allowing you to filter client requests. Any HTTP module that subscribes to an HttpApplication event must implement the [IHttpModule](http://msdn.microsoft.com/en-us/library/system.web.ihttpmodule(v=vs.100).aspx) interface.

C#

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

using System;

using System.Web;

namespace Samples.AspNet.CS

{

public class CustomHTTPModule : IHttpModule

{

public CustomHTTPModule()

{

// Class constructor.

}

// Classes that inherit IHttpModule

// must implement the Init and Dispose methods.

public void Init(HttpApplication app)

{

app.AcquireRequestState += new EventHandler(app\_AcquireRequestState);

app.PostAcquireRequestState += new EventHandler(app\_PostAcquireRequestState);

}

public void Dispose()

{

// Add code to clean up the

// instance variables of a module.

}

// Define a custom AcquireRequestState event handler.

public void app\_AcquireRequestState(object o, EventArgs ea)

{

HttpApplication httpApp = (HttpApplication)o;

HttpContext ctx = HttpContext.Current;

ctx.Response.Write(" Executing AcquireRequestState ");

}

// Define a custom PostAcquireRequestState event handler.

public void app\_PostAcquireRequestState(object o, EventArgs ea)

{

HttpApplication httpApp = (HttpApplication)o;

HttpContext ctx = HttpContext.Current;

ctx.Response.Write(" Executing PostAcquireRequestState ");

}

}

}

Before an event in a custom HTTP module can occur, you must modify the configuration settings in the Web.config file to notify ASP.NET about the HTTP module. The following example shows the appropriate configuration setting in the **httpModules** section of the Web.config file. The following setting applies to IIS 7.0 Classic mode and to earlier versions of IIS.

C#

[**VB**](http://msdn.microsoft.com/en-us/library/system.web.httpapplication(v=vs.100).aspx?cs-save-lang=1&cs-lang=vb#code-snippet-3)

<configuration>

<system.web>

<httpModules>

<add type="Samples.AspNet.CS.CustomHTTPModule"

name="CustomHttpModule" />

</httpModules>

</system.web>

</configuration>

The following setting applies to IIS 7.0 Integrated mode.

C#

[**VB**](http://msdn.microsoft.com/en-us/library/system.web.httpapplication(v=vs.100).aspx?cs-save-lang=1&cs-lang=vb#code-snippet-4)

<configuration>

<system.webServer>

<modules>

<add type="Samples.AspNet.CS.CustomHTTPModule"

name="CustomHttpModule" />

</modules>

</system.webServer>

</configuration>

[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