

Tutorial: Setup Alaska Software WAA on Microsoft IIS7

Preface

This tutorial describes the steps required to setup the Alaska Software Web Application Adaptor (WAA) and the WAA ISAPI Gateway for the Microsoft Internet Information Server 7 (IIS7).

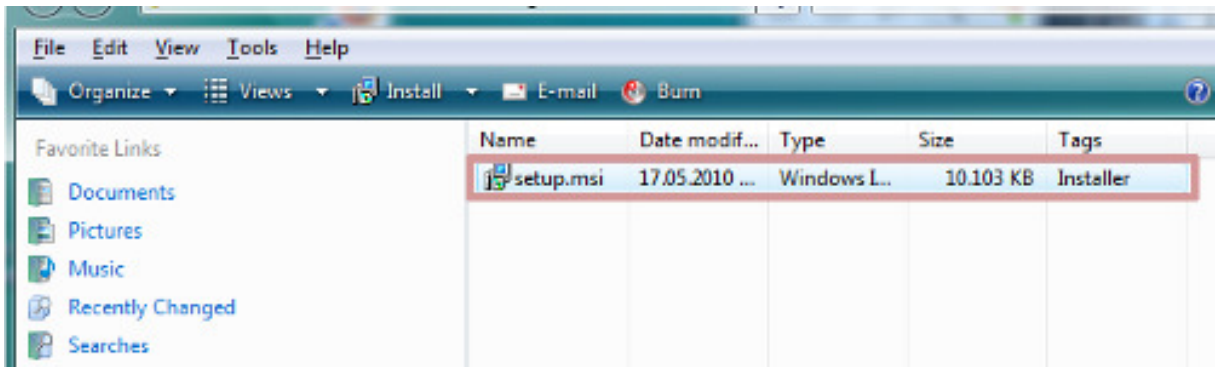
Technical requirements

This tutorial is based on following assumptions:

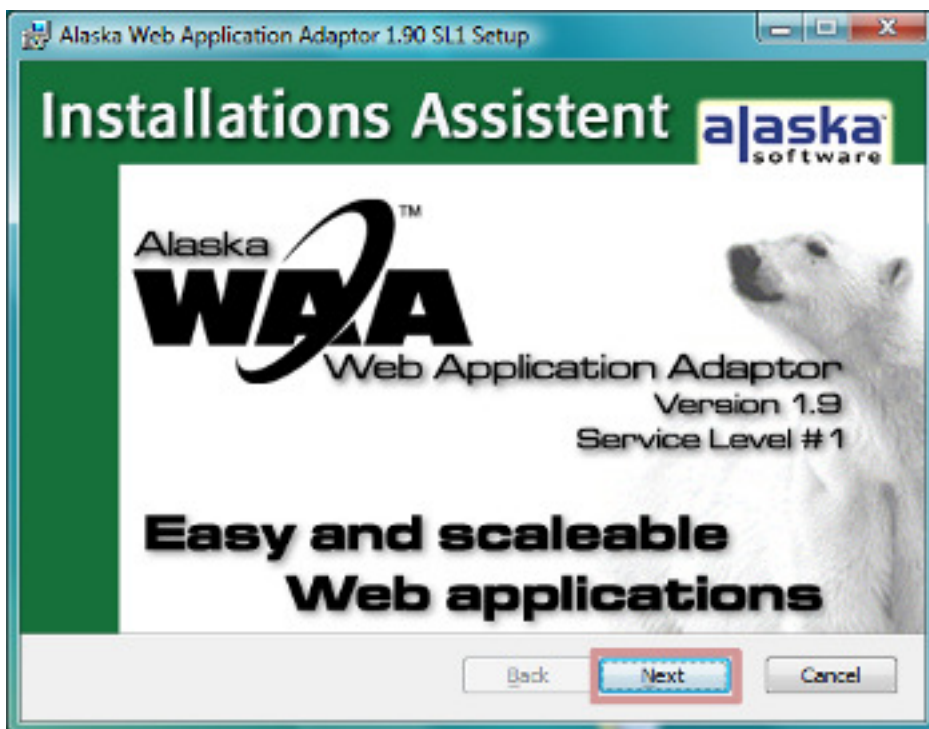
1. Operating System is Windows Vista Professional (Business, Enterprise, and Ultimate Editions). This tutorial also can be used for a Windows Server 2008 environment where all the steps must be followed through analogous.
2. **Service Pack 1 MUST be installed.**
3. User Account Control is enabled (default).
4. Logged in as user with Administrator privileges.
The Alaska Software WAA installation package is readily available.

1 Install the Alaska WAA Server

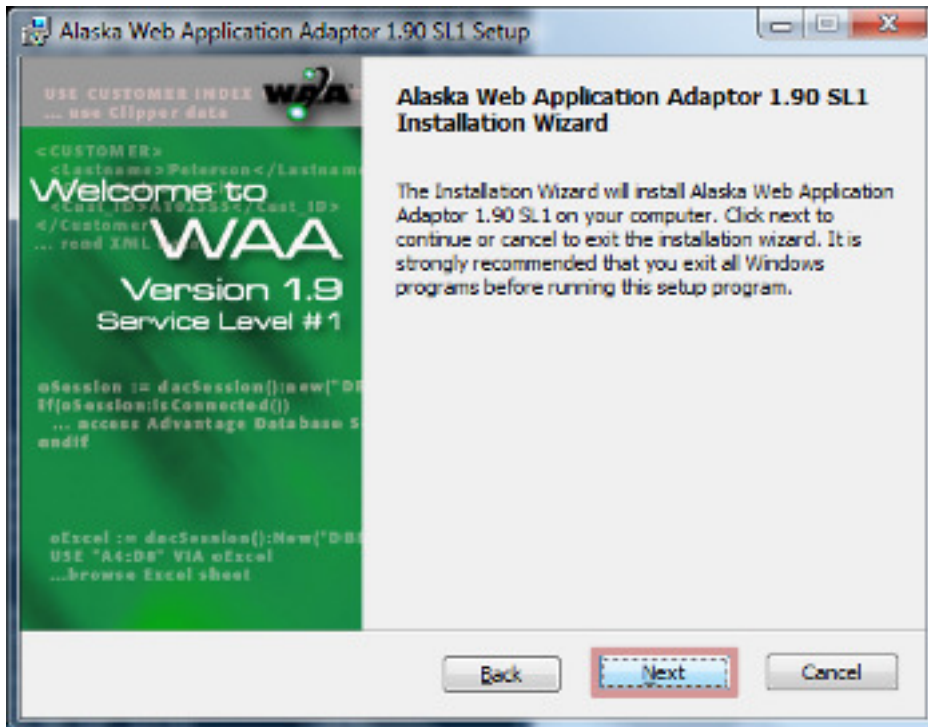
- Double click on *setup.msi* (marked on the picture below)



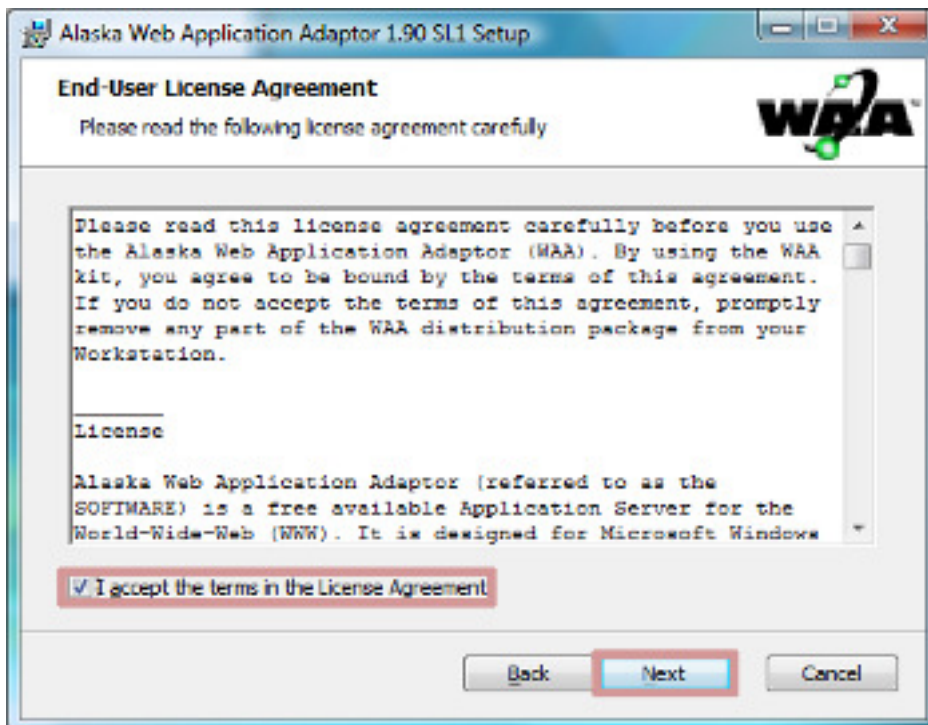
- On the welcome screen click on *Next*



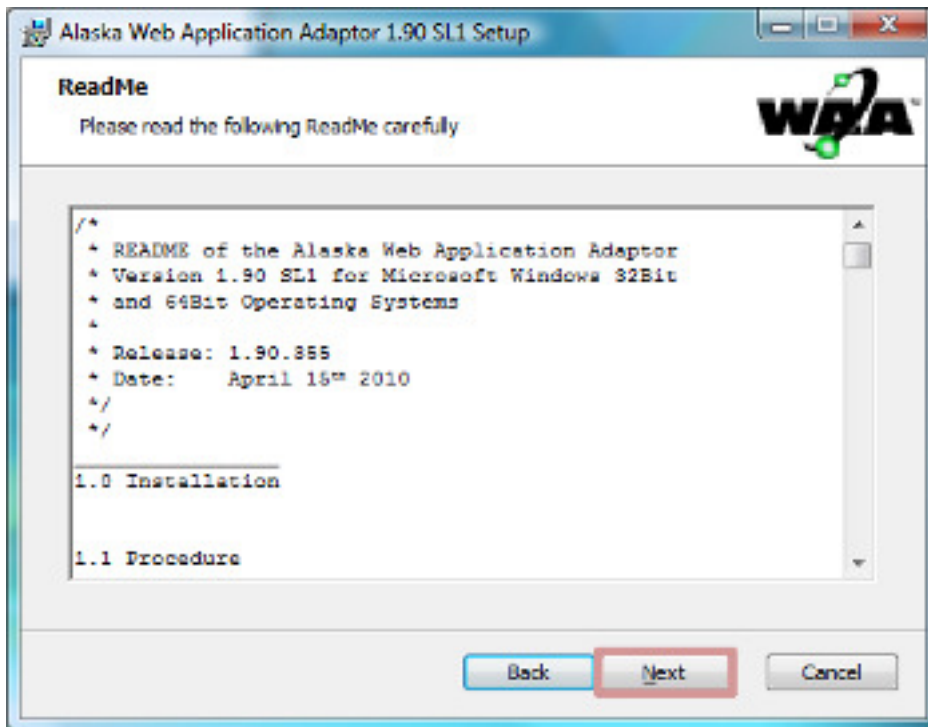
- On the introduction screen click on *Next*



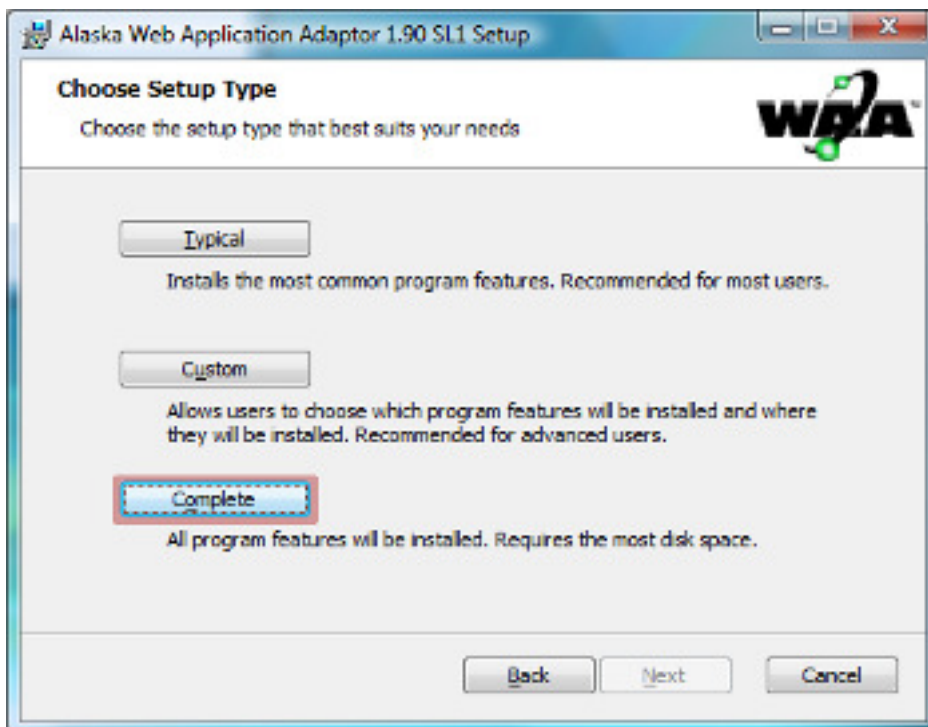
- On the dialog *End-User License Agreement* carefully read the License Agreement and confirm it by a click on the checkmark *I accept the terms in the License Agreement*. Then click on the button *Next* (shown on next picture)



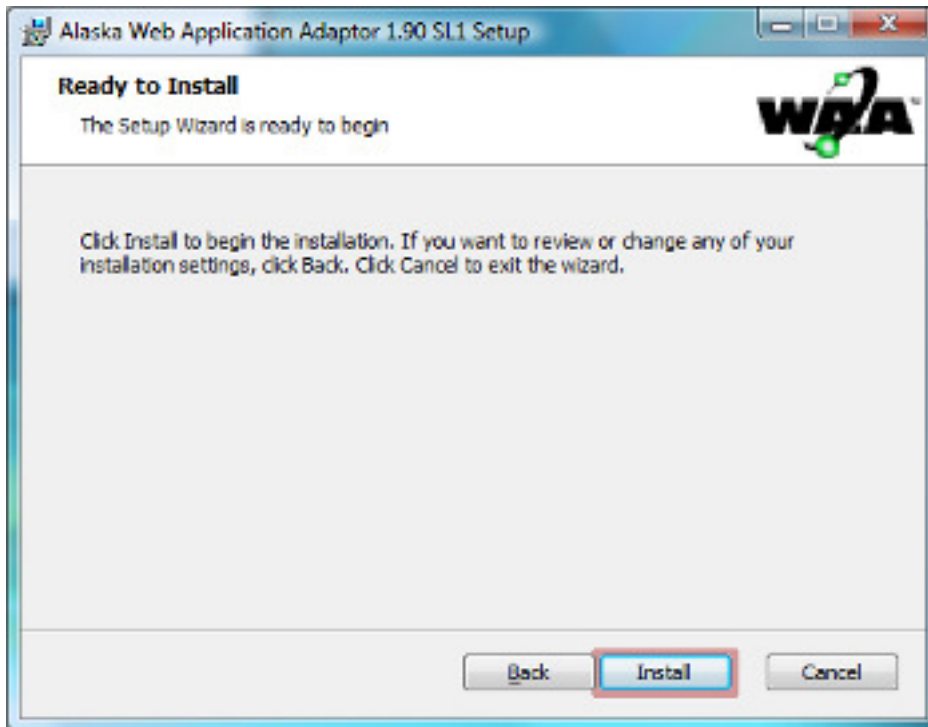
- On this dialog carefully and completely read the ReadMe-file and click the *Next* button (shown on next picture)



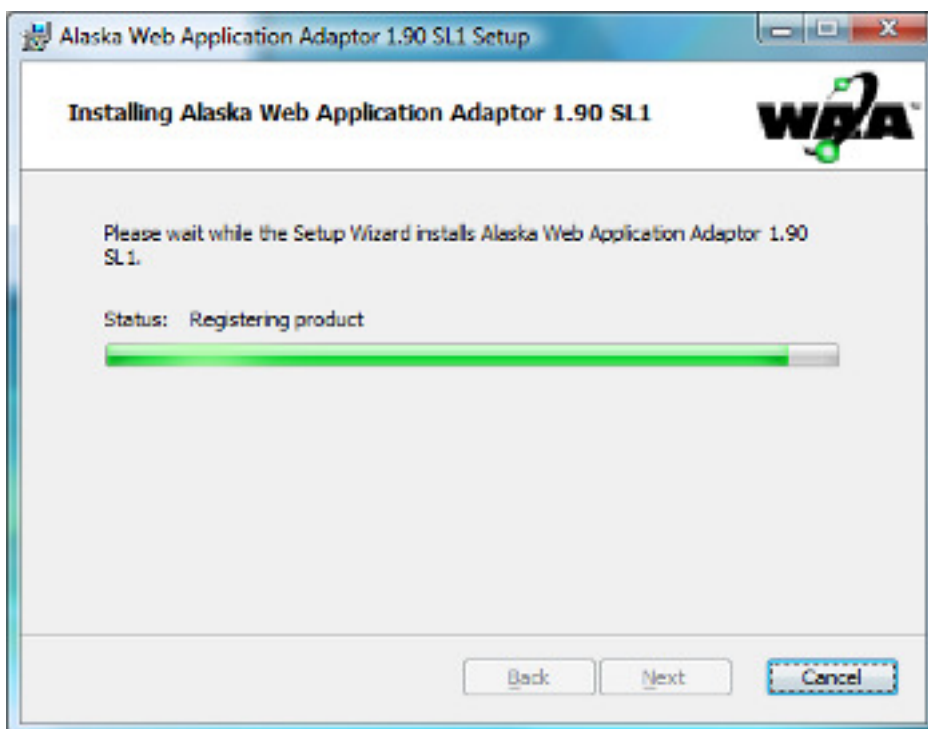
- On the dialog Choose Setup Type click on the button *Complete*



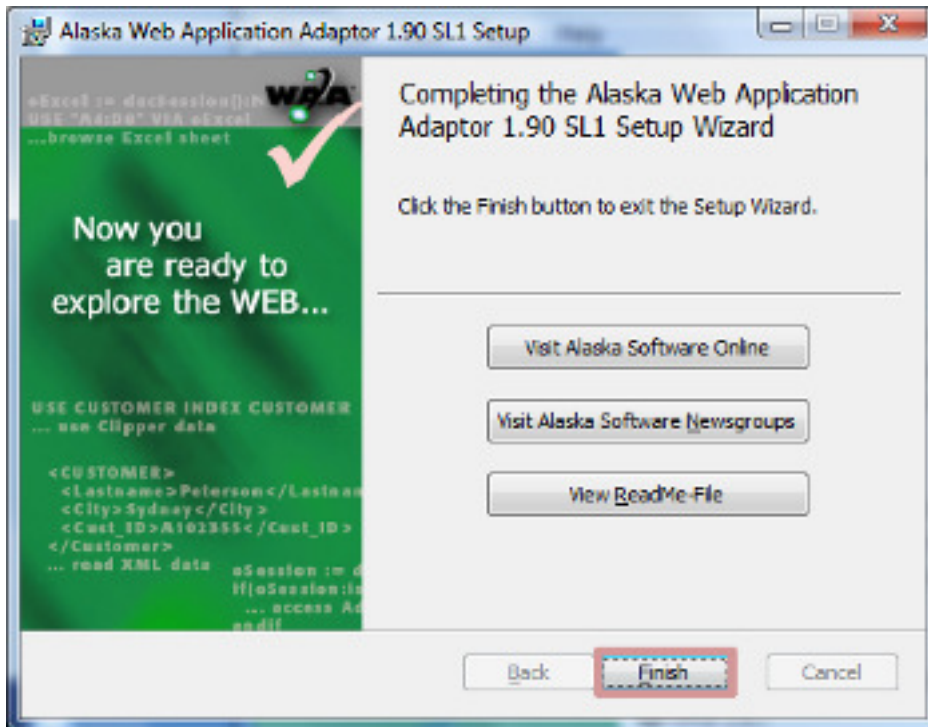
- On the dialog *Ready to Install* click on *Install*



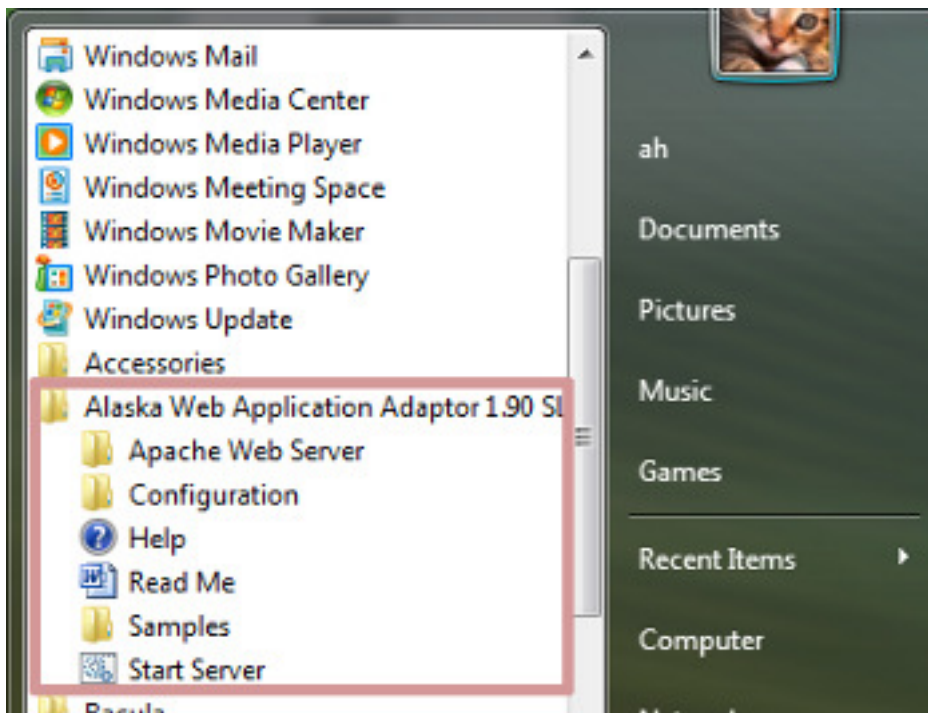
- On the dialog *User Account Control* click on *Allow*
- The WAA package will be installed (shown on next picture)



- After the installation has been completed click on *Finish*

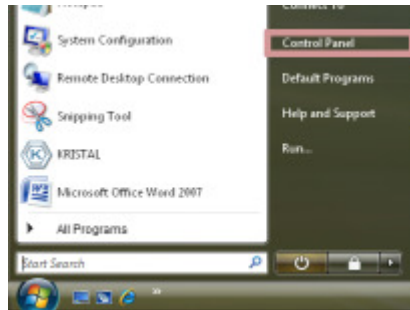


- A new item in the Windows Start menu has been created

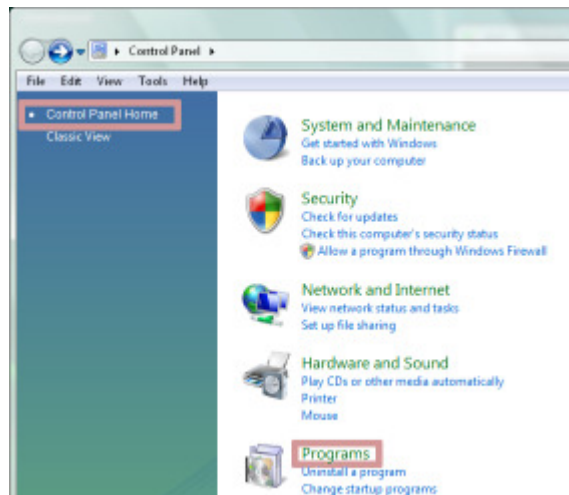


2 Enable the feature Internet Information Service 7 (IIS7)

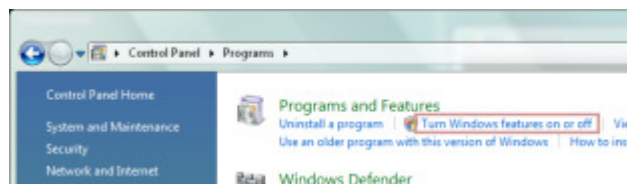
- In the Windows Start Menu click on *Control Panel* (marked on the picture below)



- Select *Control Panel Home* (marked on the picture below)
- Click on *Programs* (marked on the picture below)

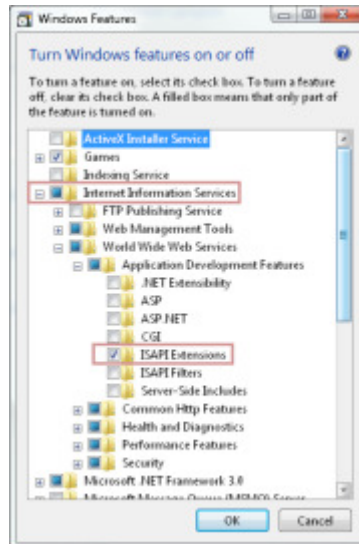


- In the section *Programs and Features* click on *Turn Windows features on or off*



- On the dialog *User Account Control* click the button *Continue*

- The *Windows Features* dialog will appear whereby the features box gets populated
- Ensure that *Internet Information Service* is checked (marked on the picture below)
- Successively unfold following items so that the tree view matches the next picture:
 - *Internet Information Service*
 - *World Wide Web Services*
 - *Application Development Features*
- Check *ISAPI Extensions* (marked on the picture below)



- On the dialog *Windows Features* click the *OK* button
- A message box pops up with the message *Please wait while the features are configured* and *This might take several minutes*. After a while the progress bar on this dialog will show the progress of the activity. When the operation has finished then this message box will be closed automatically.
- Close the dialog *Control Panel*

3 Verify availability of IIS7

- In the Windows Start Menu enter <http://localhost> in the *Start Search* text box (marked in next picture)



- The Internet Explorer will show the IIS7 welcome page (shown on next picture)
- Notice that there might appear a yellow bar saying “*Intranet settings are now turned off...*”. We can ignore this message for the purpose of this tutorial.

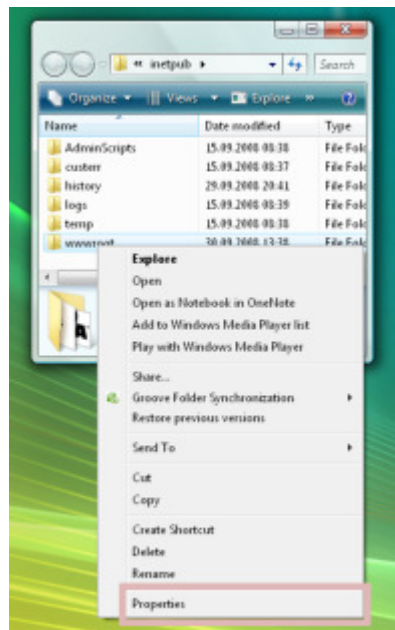


4 Enable write permissions on wwwroot for IUSR and IIS_IUSRS

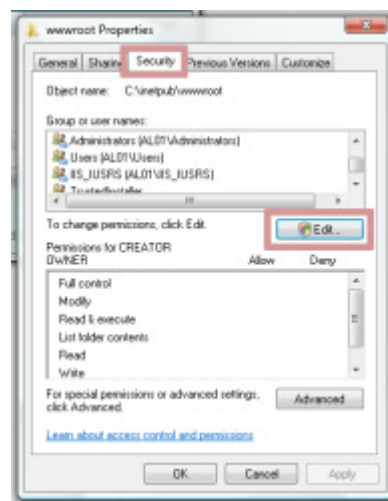
- In the Windows Start Menu enter `c:\inetpub` in the *Start Search* text box (marked in next picture)



- Open the context menu for the folder *wwwroot* with the right mouse button (the context menu is shown in next picture)
- Click the menu item *Properties* (shown in next picture)

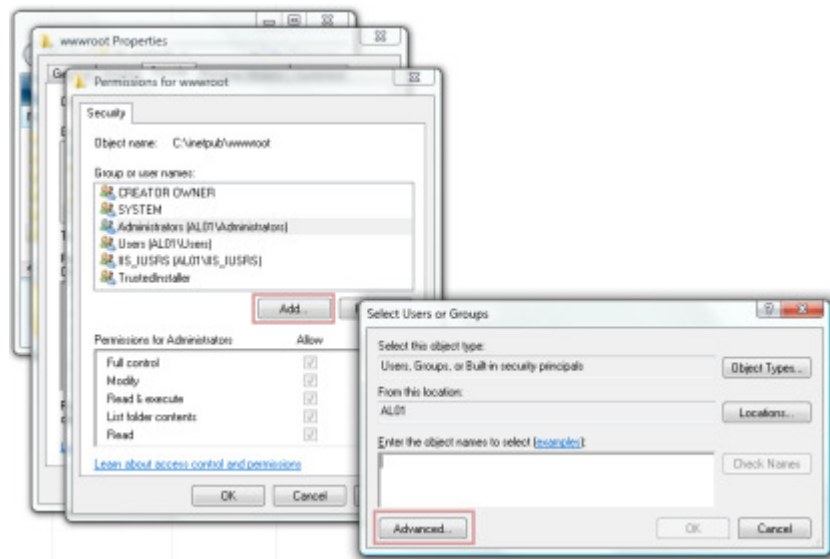


- On the dialog *wwwroot Properties* select the tab *Security* (shown in next picture)
- Click on the button *Edit* (shown in next picture)

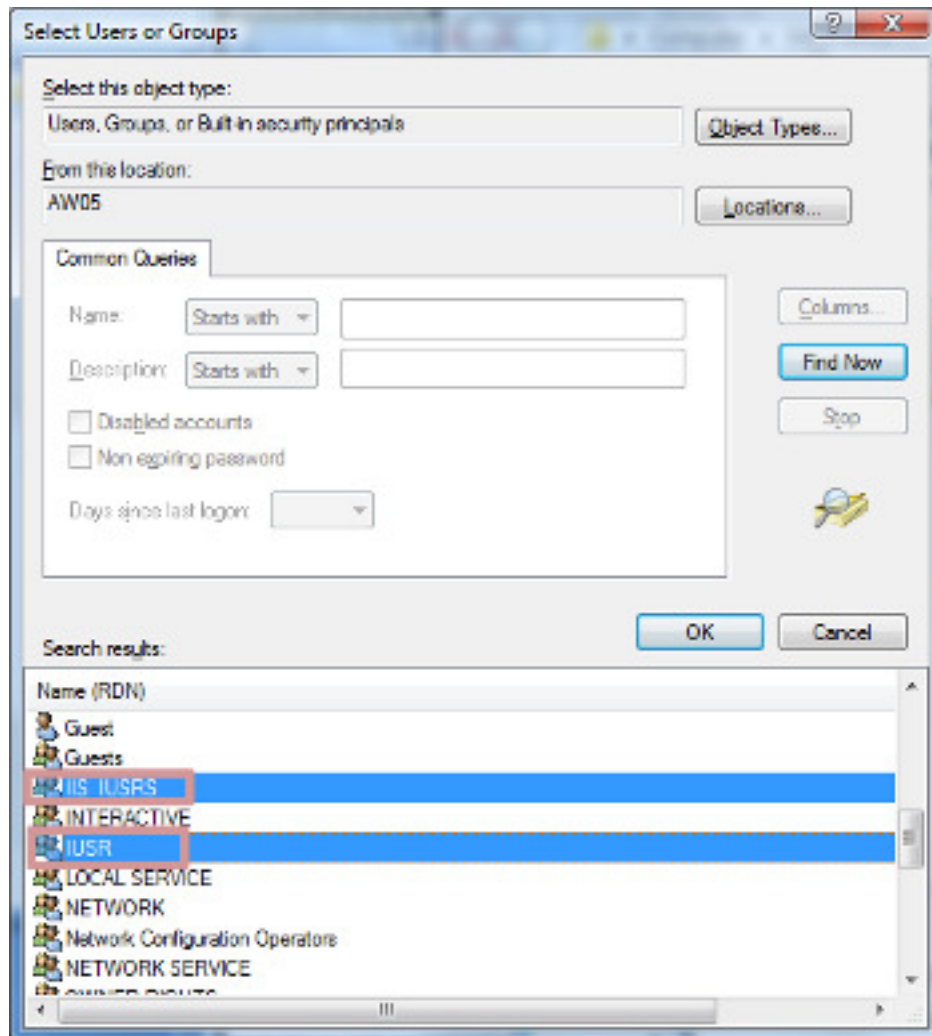


- On the dialog *User Account Control* click the button *Continue*

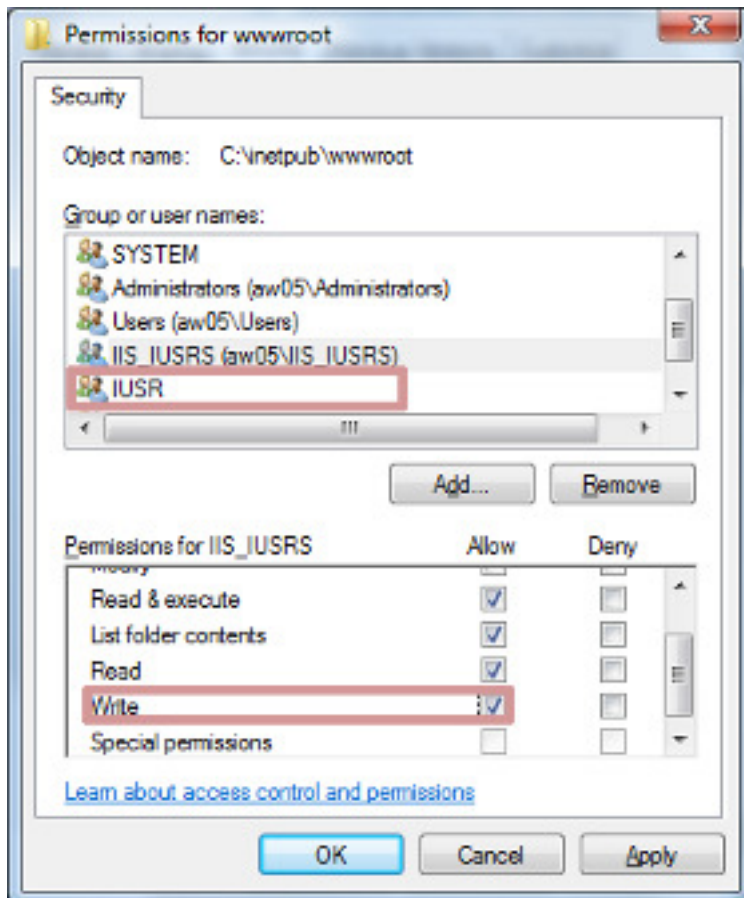
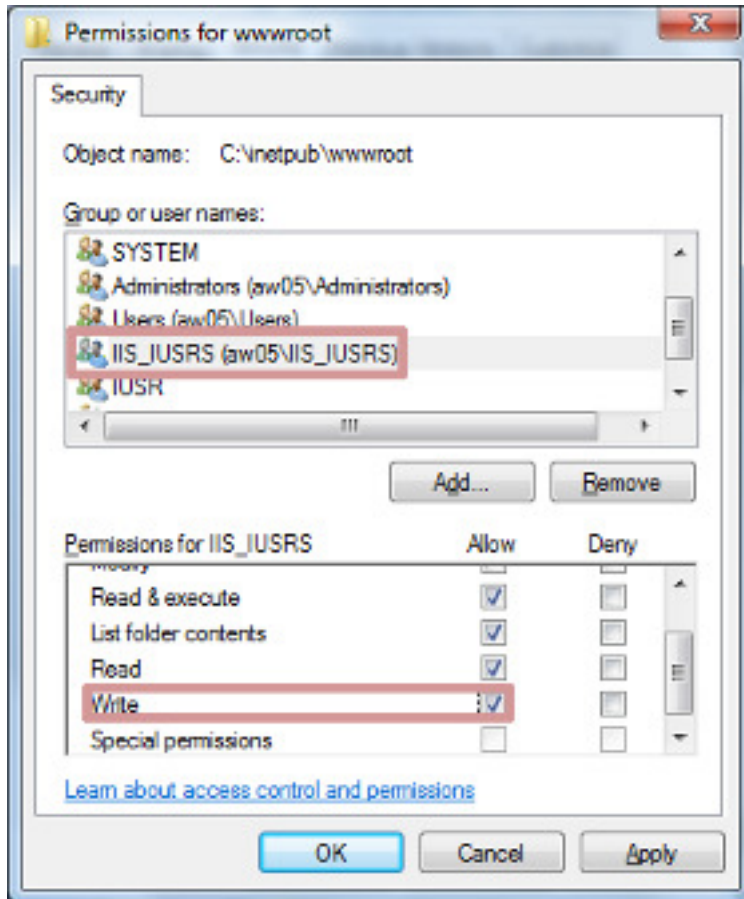
- On the dialog *Permissions for wwwroot* click the button *Add...* (shown in next picture)
- On the dialog *Select Users or Groups* click the button *Advanced* (shown in next picture)



- On the dialog *Select Users or Groups* click the button "Find Now". (shown below)
- The list box *Search results* will be populated.
- Select the IUSR and IIS_IUSRS
- Click the button OK (shown in next picture)



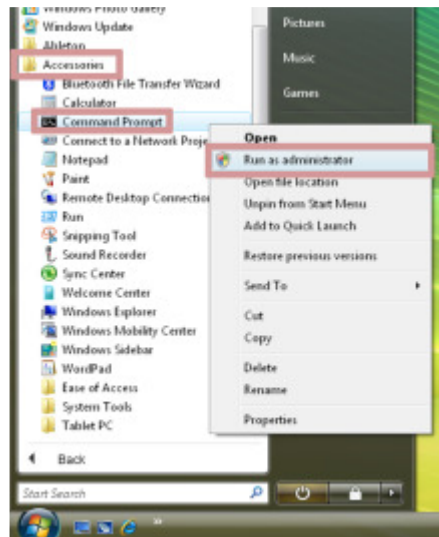
- On the dialog *Select Users or Groups* click the button OK
- On the dialog *Permissions for wwwroot* successively select the user *IIS_IUSRS* and *IUSR* in the list of *Group or user names* (shown on the next two pictures)
- In the list *Permissions for IIS_IUSRS* and *IUSR* checkmark Write on the Column Allow (shown on the next two pictures)



- Click the *OK* button
- On the dialog *wwwroot Properties* click the *OK* button

5 Deploy and configure the WAA Gateway

- Start a command shell with Administrator privileges following these steps:
 - Open the windows start menu
 - Click on *All Programs*
 - Click on *Accessories* (marked on the picture below)
 - Open the context menu for *Command Prompt* with the right mouse button (marked on the picture below)
 - Select *Run as Administrator* (marked on the picture below)



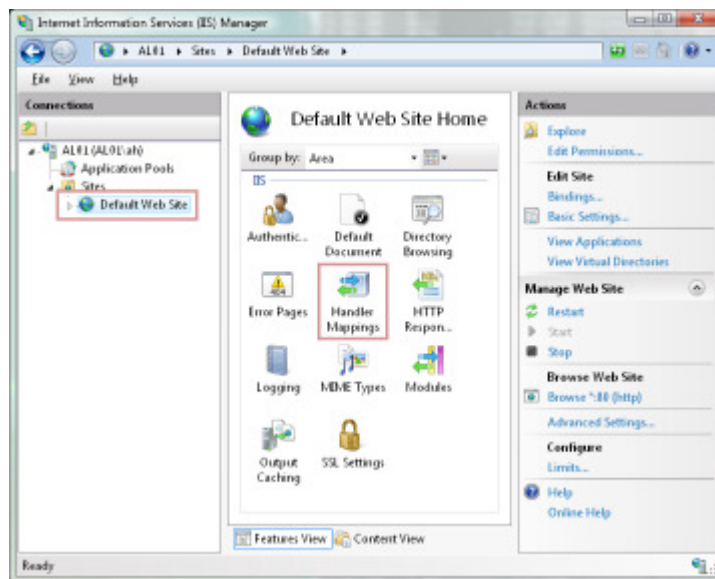
- On the dialog *User Account Control* click the button *Continue*
- With the Administrator command prompt change to the WAA installation directory which is *c:\Program Files* on 32 bit operating systems. On 64 bit operating systems this directory is *c:\Program Files(x86)*
 - `cd "c:\Program Files"`
- or
 - `cd "c:\Program Files (x86)"`
- Then change to the directory where the isapi gateway is installed to
 - `cd Alaska\waa1w32\gateway\isapi`
- Copy the WAA ISAPI Gateway by entering following command
 - `copy waalgate.dll c:\windows\system32\inetsrv`
- Copy the WAA Gateway's configuration file by entering following command
 - `copy waalgate.cfg c:\windows\system32\inetsrv`

6 Add Script Map /scripts/waa1gate.dll to WAA Gateway

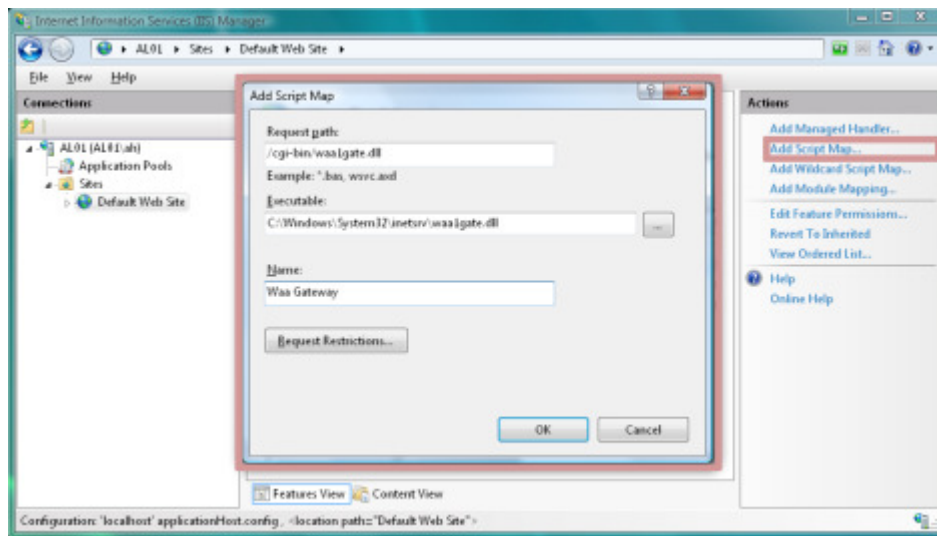
- In the Windows Start Menu enter `inetmgr` in the *Start Search* text box (marked in next picture)



- On the dialog *User Account Control* click the button *Continue*
- The *Internet Information Services (IIS) Manager* will be started. This dialog is separated in three parts. The *Connections* pane at the left side, the *Actions* pane at the right side and a context specific area in the middle.
- Unfold the tree in the *Connections* pane to the level of *Default Web Site* as shown in next picture.
- Click on *Default Web Site* item (shown on next picture). The context specific area in the middle pane and the *Actions* pane will be populated with items as shown on the next picture.
- In the pane *Default Web Site Home* double Click on *Handler Mappings* (shown in next picture)



- On the *Actions* pane click on *Add Script Map...* (shown on next picture)
- The *Add Script Map* dialog pops up. (shown in next picture)



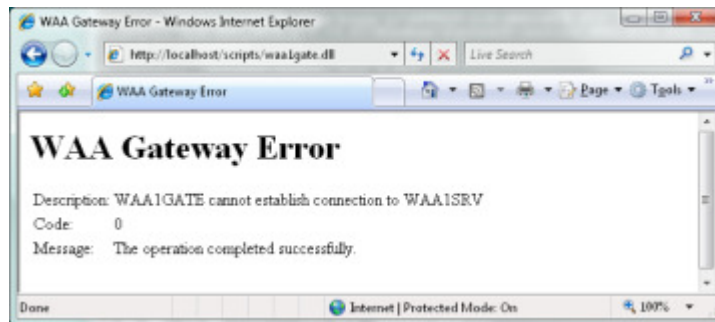
- Insert the following information:
 - Request path: /scripts/waalgate.dll
 - Executable: C:\Windows\System32\inetsrv\waalgate.dll
 - Name: Waa Gateway
- Click the button *OK*
- On the dialog *Add Script Map* click the button *Yes*.



- Close the dialog *Internet Information Service (IIS) Manager*
- In the Windows Start Menu enter <http://localhost/scripts/waalgate.dll> in the *Start Search* text box (marked in next picture)



- The Internet Explorer will then display a *WAA Gateway Error* message as shown in next picture.

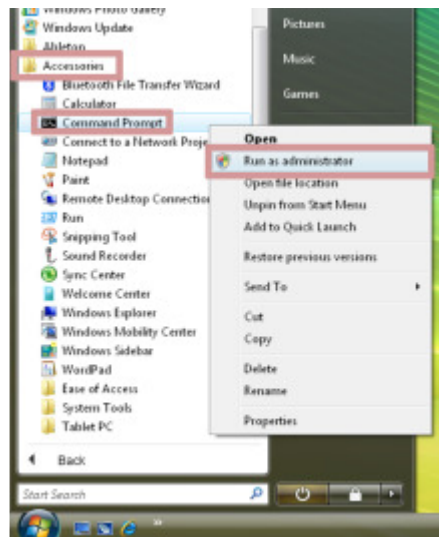


- The WAA Gateway is now properly configured and can be used by the IIS7

7 Prepare wwwroot for Alaska WAA samples

In order to use the samples from the WAA Server installation it is required to copy the samples' start page (index page) to the IIS7 root directory. The WAA samples contain three index pages in the directory ALASKA\WAA1W32\SOURCE\Samples\WAA, namely *indexDLL.htm*, *indexEXE.htm* and *indexISA.htm*. In this tutorial we use *indexDLL.htm*. Furthermore a directory *temp* must be created in the IIS7 root directory.

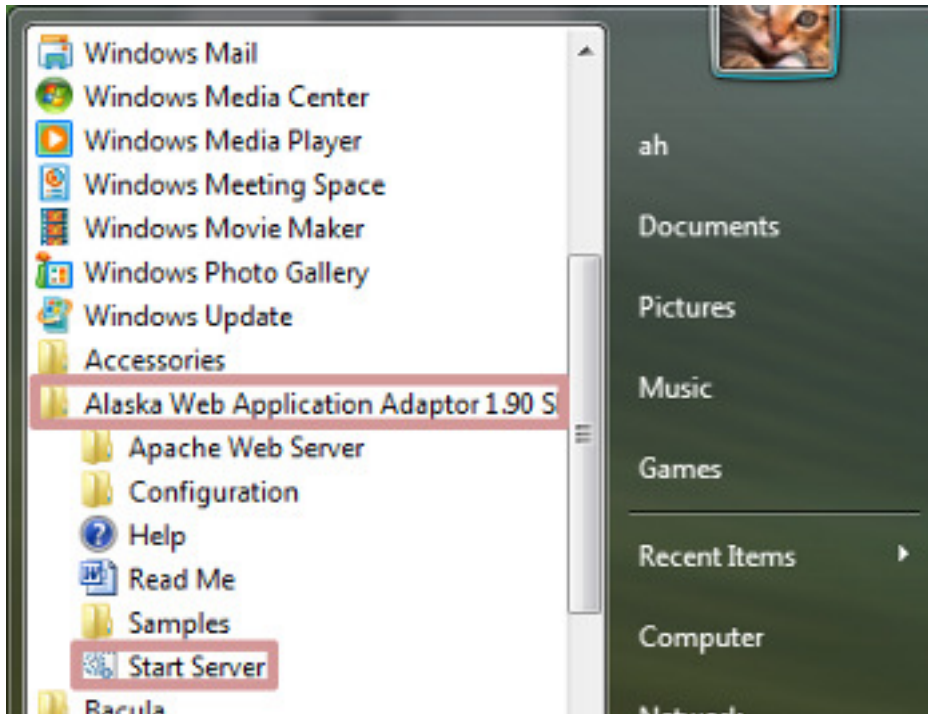
- Start a command shell with Administrator privileges following these steps:
 - Open the windows start menu
 - Click on *All Programs*
 - Click on *Accessories* (marked on the picture below)
 - Open the context menu for *Command Prompt* with the right mouse button (marked on the picture below)
 - Select *Run as Administrator* (marked on the picture below)



- On the dialog *User Account Control* click the button *Continue*
- With the Administrator command prompt change to the directory where the WAA sample collection is installed to
 - `c:\users\\documents\alaska web application adaptor\samples`
- Copy *indexDLL.htm* to the IIS7 root directory and change its name to *index.htm* with following command
 - `copy indexDLL.htm c:\inetpub\wwwroot\index.htm`
- Create the directory *temp* with following command
 - `mkdir c:\inetpub\wwwroot\temp`

8 Run the WAA samples

- In the Windows Start Menu select *All Programs*, unfold the item *Alaska Web Application Adaptor 1.90 SL1* and select the item *Start server*



- In the Windows Start Menu enter <http://localhost/index.htm> (marked in next picture).



- The index page of the WAA samples will be displayed (see next picture)

Alaska Web Application Adaptor for Xbase⁺⁺

Examples for Web Applications

This is a simple Web application demonstrating the basic mechanism for establishing a communication between WAA and a remote Web browser.	My First HTML Page
Here is a page demonstrating the usage of the Standard Package DLL included in the WAA server kit. It allows for accessing arbitrary DBF tables via the Web.	The Standard Package DLL
The possibility to send E mails from a Web application is subject of this example.	Sending an E mail
This sample makes use of the HTML3 class which assembles the HTML formatted response of a Web application to the remote browser. A variety of methods are available to include input controls easily in an HTML page.	The HTML object
This sample shows an Electronic Warehouse where you can order computers. Different programming techniques cover how to include image files in your HTML pages, how to establish a persistent session on the Web, and how to receive customer data from a remote browser and store it in a database on the server side.	A Computer Shop
You can inherit from the HTML3 class and program your own user-defined HTML3 class. This sample shows "How to" and uses a FrameSet class as an example.	Simple Frameset
	Nested Frames
	Rollover Menu
This sample shows how to upload files to the WAA server. You can select any file. The WAA package then returns the name and the size of the file.	<input type="text"/> <input type="button" value="Durchsuchen..."/> <input type="button" value="Show name and size"/>

Any click on a link or on a button on the right hand side of the index page will create a request which is sent from the IIS7 web server through the WAA Gateway to the WAA server. The sample packages will create a response returning to the IIS7 web server via the WAA Gateway. Please be referred to the WAA documentation for further information.