AirZip® Accelerator for Microsoft Internet Information Server

Release 4.0

Installation and Configuration Manual

AirZip, Inc. reserves the right to make changes to this document and to the product described herein without notice. The software described in this manual is furnished under the terms and conditions of the AirZip License and Software Maintenance and Support Agreements and may be used or copied only in accordance with the terms of the agreement.

For information about your legal rights concerning the use of the AirZip Accelerator for IIS, please refer to the AirZip License agreements.

© Copyright 2002-2006 AirZip Incorporated, All Rights Reserved.

AirZip is a registered trademark and Accelerator is a trademark of AirZip, Inc. Unauthorized use prohibited. Windows and Windows NT are registered trademarks of Microsoft Corporation in the United States and/or other countries. All other trademarks are property of their respective owners.

Revision 07/06

Contents

AIRZIP® ACCELERATOR FOR MICROSOFT INTERNET INFORMATION SERVER I

RELEASE 4.0 I

INSTALLATION AND CONFIGURATION MANUAL I

INSTALLATION AND CONFIGURATION MANUAL I

1 INTRODUCTION 1

1.1 Server Requirements 1

2 CAPABILITIES 2

2.1 Image Optimization 2

2.2 Dynamic Control of Quality and Performance 2

2.3 Optimization with Standard Browsers (Clientless operation) 3

2.4 Enhanced Optimization with AirZip Internet Explorer Plug-in 3

2.5 Selectable Accelerator Options by image source 3

2.6 Performance Monitoring 3

2.7 Interoperability 3

3 INSTALLING AIRZIP ACCELERATOR 4

3.1 Software Installation 4

3.2 Software Licensing 7
3.2.1 Licensing Procedures 7
3.2.2 Evaluation, Temporary and Permanent Licenses 8
3.2.3 Checking Your License 8

3.3 Verifying Local Operation 9

3.4 Verifying Operation with web content 10

3.5 Installation Troubleshooting 11

3.6 Uninstall process 17

4 USING BUILT IN PERFORMANCE SELECTION OPTIONS 19

4.1 Using the Integrated AirZip Performance Option Page 19

4.2 Using Performance Codes 20

5 CUSTOMIZING YOUR WEB SITE TO GET THE MOST FROM AIRZIP 22

5.1 Automatically downloading the AirZip Plug-in 22

5.2 Simplifying access to Performance Options Pages 23

5.3 Customizing Performance Options Page 23

5.4 Using Performance Option Links 25

6 CHANGING ACCELERATOR PARAMETERS AND MONITORING ITS PERFORMANCE 26

6.1 Reviewing your license information 26

6.2 Changing the default Accelerator Option 27

6.3 Changing the default Accelerator parameters 29

6.4 Applying specific Accelerator Option to a specific image directory 29

6.5 Monitoring Accelerator Performance 31

6.6 Confirming AirZip Secure Release information 31

7 ENABLING HTTP COMPRESSION 33

7.1 Activating HTTP Compression for Basic File Types 33

7.2 Activating HTTP Compression for Other File Types 39

8 OPERATION WITH APPLICATIONS SERVERS 40

8.1 Operation with ESRI ArcIMS Server 40

8.2 Operation with BEA WebLogic Server 40

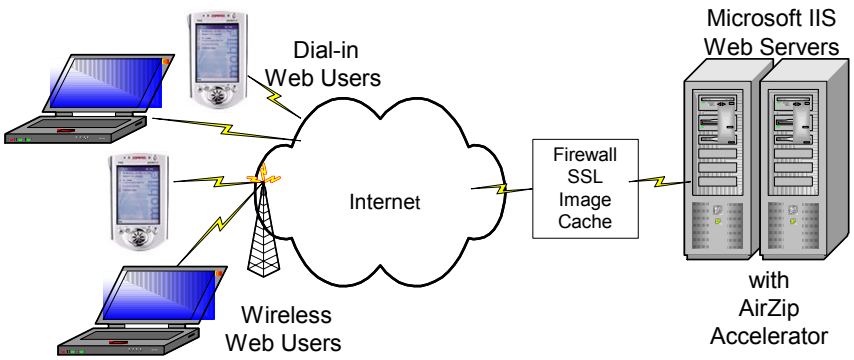
8.3 Operation with Oracle Application Server 41

8.4 Operation with IBM WebSphere Application Server 41

9 CONTACT INFORMATION 42

1 Introduction

AirZip Accelerator for Microsoft's Internet Information Server (IIS) provides high performance, real-time web image optimization, reducing the time to download image content up to 400% over limited bandwidth dialup and wireless connections without the need to modify web content. AirZip Accelerator automatically recognizes the different capabilities of the various browsers and user quality settings to instantly provide the best possible combination of quality and speed.



1.1 Server Requirements

The AirZip Accelerator for IIS is designed to function with Windows 2000 IIS Version 5 and Windows 2003 with IIS Version 6.

Note: AirZip Accelerator for IIS may increase CPU usage by between 5% and 10% for typical web pages.

2 Capabilities

The AirZip Accelerator for IIS is an advanced ISAPI filter function designed to speed the delivery of web pages from web servers to web clients over dialup or wireless connections primarily through image optimization. Images information constitutes two-thirds of the data that must be downloaded to display typical web pages. When installed on a Microsoft Internet Information Server (IIS) 5.0 or later server, the AirZip Accelerator intercepts incoming http image requests from web clients, retrieves the requested images, and returns an optimized image to the web client. Optimized images are normally much smaller than the originals. They arrive quicker and on AirZip-enabled web clients they render much faster.

2.1 Image Optimization

The AirZip Accelerator incorporates AirZip Image Compression software that leverages AirZip's patented image processing software to produce superior image delivery speed. AirZip Compression provides rapid conversion of GIF, PNG, JPEG, and BMP files to the smallest representation possible at any given quality setting.

AirZip Compression uses several techniques to optimize image size and delivery speed including:

- Converting GIF, PNG, JPEG, and BMP images to AirZip formats where browsers such as Microsoft Internet Explorer are able to present AirZip images.
- Converting GIF, PNG and BMP images to PNG format.
- Reducing the quality of JPEG images for clients.
- Reducing image color content to levels that match specific types of devices
- Presenting animated images as static images (as a selectable option).
- Optimizing image quality based on user quality settings.

AirZip Compression generally results in more vibrantly colored images than other compression techniques.

AirZip image optimization is determined by the capability of the browser requesting the image and the quality of images requested by the user. Image filtering is table driven and can be tailored to a specific quality level and with a specific output file format restriction.

AirZip Compression returns the smallest representation of an image to reduce the download time. If the client is not capable of displaying AirZip's AZV file format, then standard image formats will be returned.

Unless the user settings specify perfect reproduction, image optimization results in image quality reduction. More or less information is removed from the original images depending on the quality selections set by the user.

2.2 Dynamic Control of Quality and Performance

The AirZip Accelerator for IIS allows user control over image quality and delivery performance using standard Internet cookies, which are supported by most browsers. The Web site home page can easily present options for the user to select or change quality/performance setting for their browsing session. The user can also easily access a virtual page for selecting quality settings. The AirZip Accelerator provides five quality/performance settings:

Pass-through – Images are not optimized to avoid delays when using high-speed connections.

Basic acceleration – Images are optimized for download and rendering speed but match original image quality
More acceleration – Images are optimized for download and rendering speed with an emphasis on nearly matching original image quality.
Still More acceleration – Images are optimized for download and rendering speed and good image quality.
Maximum acceleration – Images are optimized in favor of download and rendering speed over image quality.

If the user selected Maximum acceleration, they would receive the most compressed images so their session would work reasonably fast, especially over narrowband wireless connections. If a user were connecting over an ISP with Ethernet speeds, they would select "no optimization" when there was no need for compression at all.

2.3 Optimization with Standard Browsers (Clientless operation)

Image optimization is determined by the capability of the browser requesting the image and the quality of images requested by the user. The AirZip Accelerator rapidly converts GIF, PNG, JPEG, and BMP files to deliver image information as much as five times faster to any standard browser. AirZip Accelerator recognizes image requests and quality settings, retrieves the requested image, automatically converts the image to the smallest representation and then sends the optimized image to the user.

2.4 Enhanced Optimization with AirZip Internet Explorer Plug-in

To achieve even greater download performance, Windows Internet Explorer (IE) users can download the AirZip Internet Explorer plug-in a few seconds. When the user has the AirZip Internet Explorer plug-in, the AirZip Accelerator for IIS automatically takes advantage of AirZip's patented compression technology to product the world's best image optimization for a larger portion of web images. With the AirZip IE Plug-in image delivery can be as much as ten times faster for Windows 98 SE, Windows 98, Windows ME, Windows 2000, Windows XP, Windows 2003 and Windows NT users.

2.5 Selectable Accelerator Options by image source

The AirZip Accelerator allows Accelerator Options to be based on the directory in which images are located. With this feature, certain images will always be converted to graphical formats such as PNG or AZV while other images will always remain in their original format – say JPEG.

2.6 Performance Monitoring

The AirZip Accelerator also permits the monitoring of the level of acceleration being gained. The Performance Information tab of the AirZip Accelerator Control Panel displays the total size of the image files processed and the size of the resulting optimized files.

2.7 Interoperability

The AirZip Accelerator for IIS installs in minutes and operates with HTTP and HTTPS sites.

It can be used in conjunction with the IIS utilities for streaming compression of HTML data using GZIP to provide even greater overall performance. ·

However, the AirZip Accelerator for IIS is not designed for use with Server side caching. Such cache storage defeats the Accelerator's ability to deliver images optimized for particular users.

3 Installing AirZip Accelerator

Installing AirZip Accelerator for IIS requires the following steps:

1. Install the Software
2. Registering your installation
3. Verifying Local Operation
4. Verifying Operation with web content

Procedures for each of these steps are provided below along with installation troubleshooting hints.

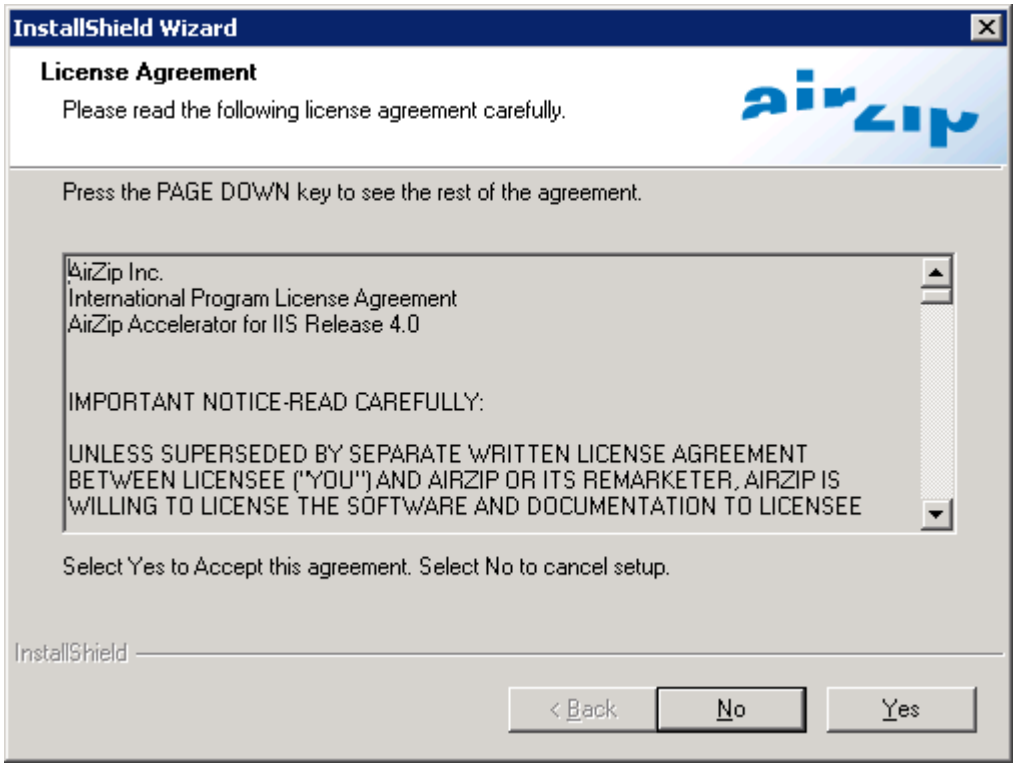
3.1 Software Installation

To install AirZip Accelerator for IIS, login as an Administrator for the Windows 2000 or Windows 2003 server machine on which the software is to be installed.

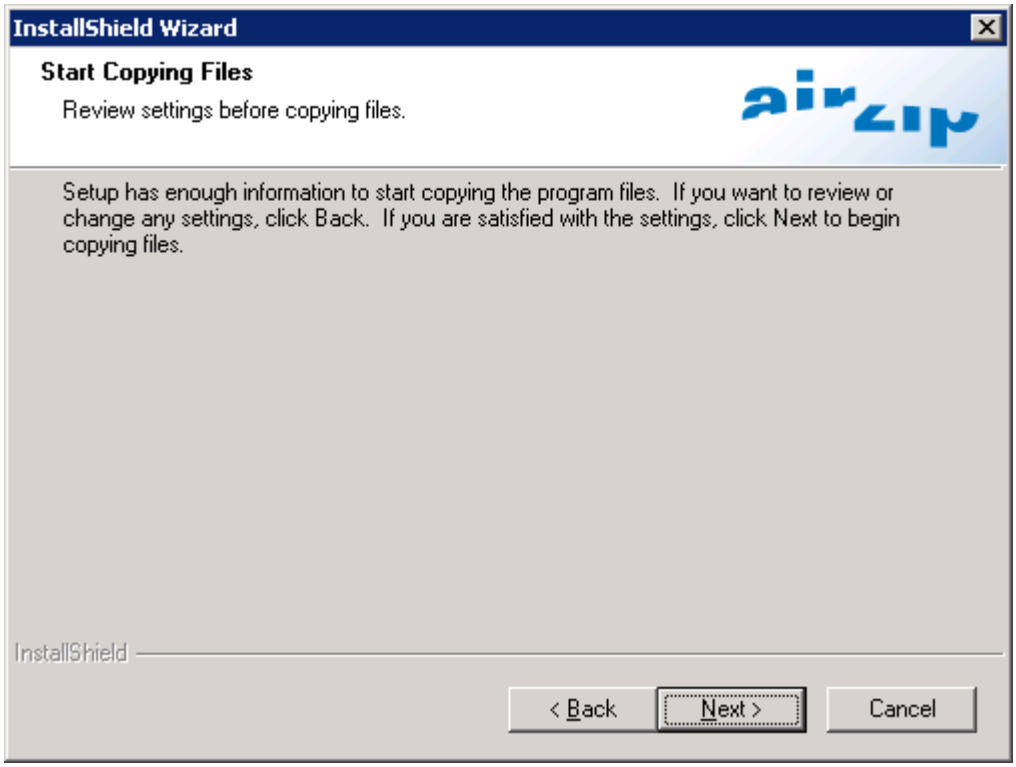
Locate the **AirZip Accelerator IIS 4.0_Install.exe** install program and follow these steps:

(a) Double-click the file **AirZip Accelerator IIS 4.0_Install.exe** to launch the InstallShield Wizard.

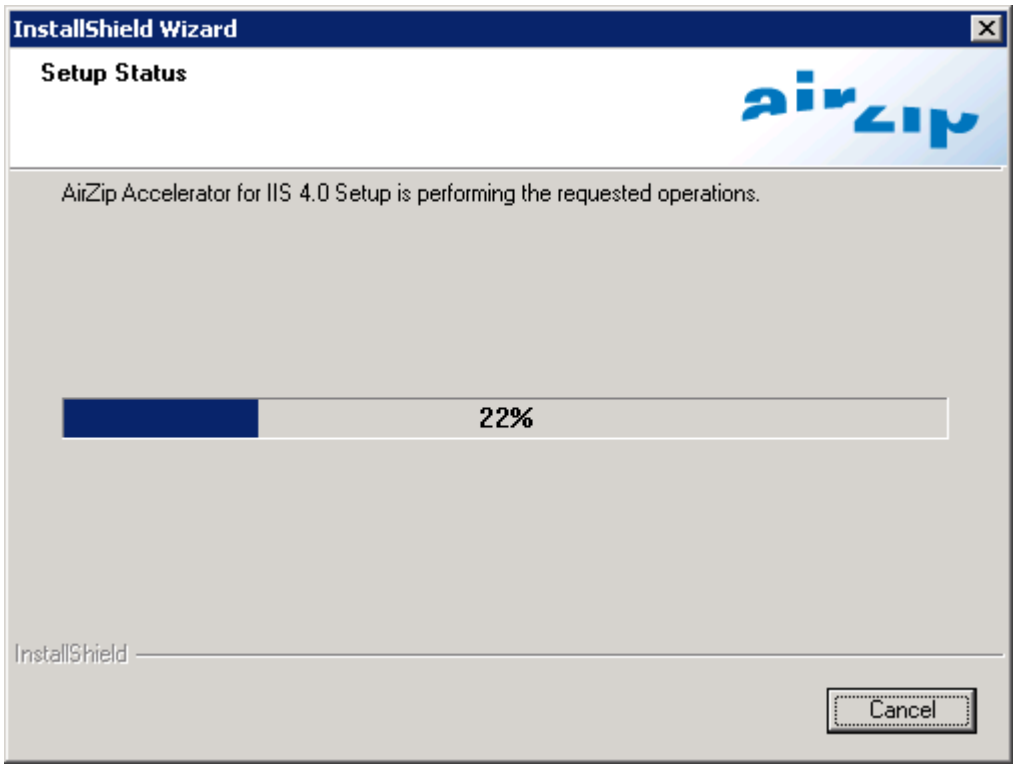
(b) When the License Agreement window appears, read the license agreement carefully. If you accept the license, click Yes to continue with the installation.



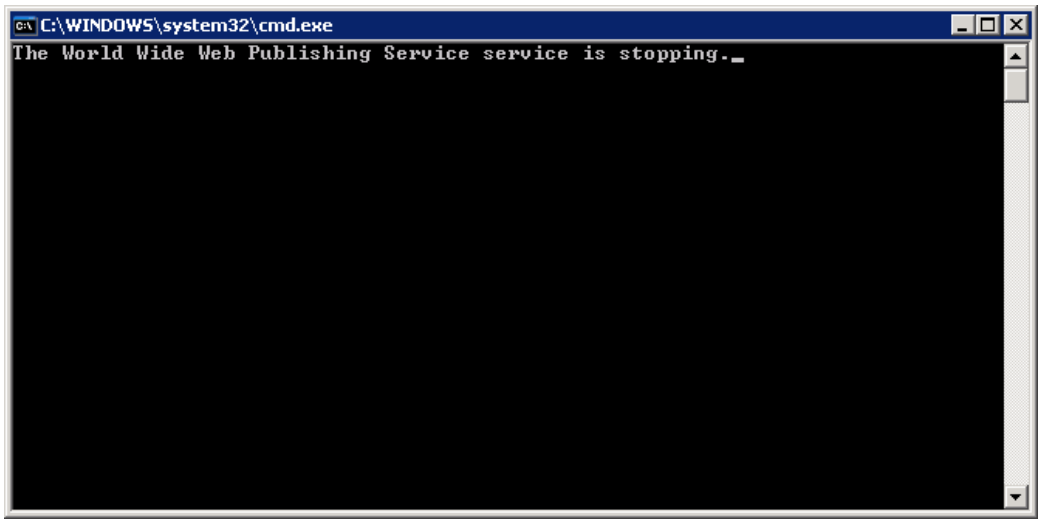
(c) At the next screen, if you are ready to install the program files, click **Next**.

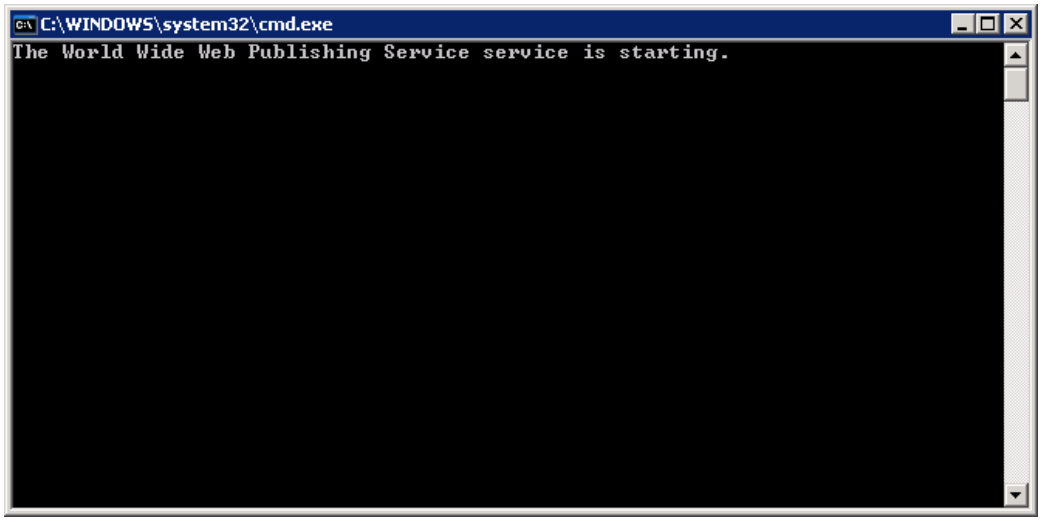


(d) The program files are then installed.

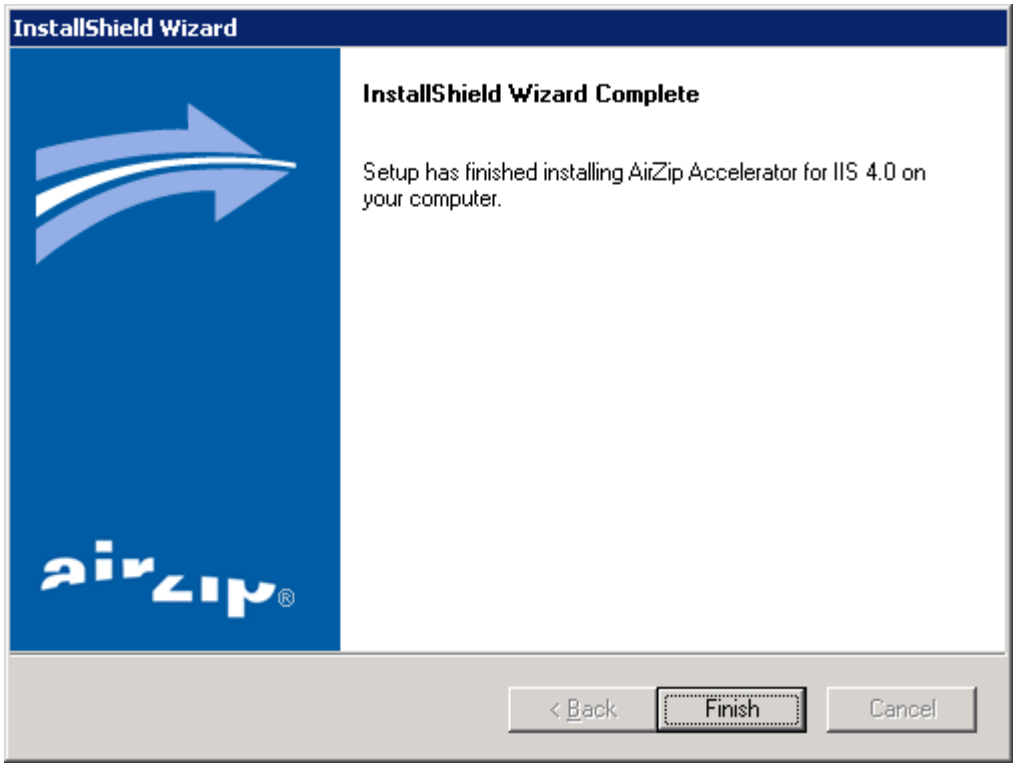


(e) The screens below will appear momentarily indicating that the World Wide Web Publishing Service (IIS) is stopping and restarting as part of the installation process.





(f) When the screen below appears, all files have been installed. Click **Finish**.



3.2 Software Licensing

AirZip Accelerator is nodelocked to a specific machine using licensing technology. Before you can run the software, you must first install a license key.

For existing users who are upgrading, AirZip has discontinued the use of the serial number based registration that was used in versions prior to 4.0. As of version 4.0, you will need to obtain a new license key before using the software.

3.2.1 Licensing Procedures

Once you have installed the software, please contact AirZip (email: support@airzip.com) for a license key. To receive a license key, you must send us the following information:

a. Your name;

b. Company name;

c. Company mailing address;

d. Your telephone number;

e. Your email address;

f. Your Proof of Entitlement ID that came with your software (not required for evaluation licenses);

g. The output from the "Program Files\AirZip\IIS Accelerator\hostinfo.exe" command-line utility.

When you receive the license key, you must file transfer it as BINARY to your system, preserving the name. The license file name is "azaccel.key". If you are receiving several license keys, they may be named differently so that you are able to determine which license matches each machine. In this case, each license key must be renamed to "azaccel.key" on

its target machine.

The license key must be placed in the "Program Files\AirZip\IIS Accelerator\" directory before you can start AirZip Accelerator.

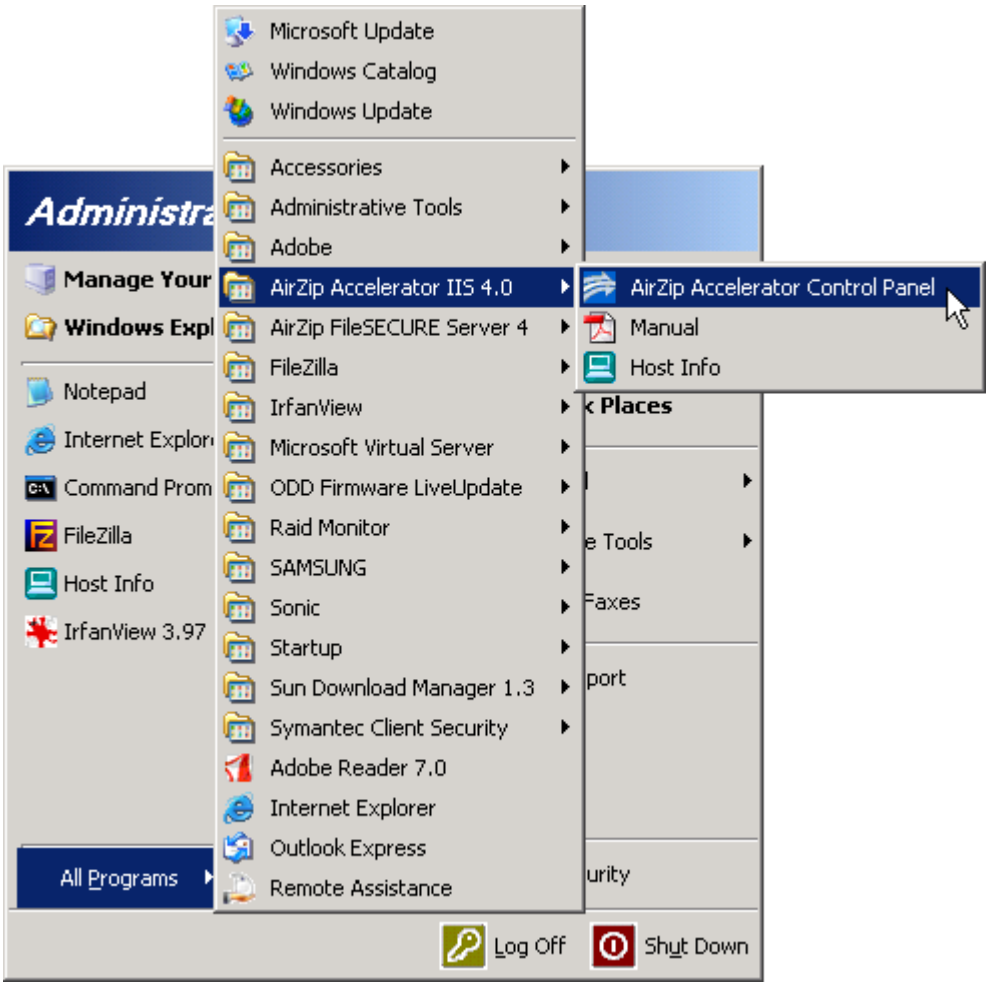
If your license expires, you will no longer be able to run AirZip Accelerator. Contact AirZip for a new license. As soon as a valid license is installed, AirZip Accelerator will again be fully operational. You do not have to reinstall the software or recreate your settings.

3.2.2 Evaluation, Temporary and Permanent Licenses

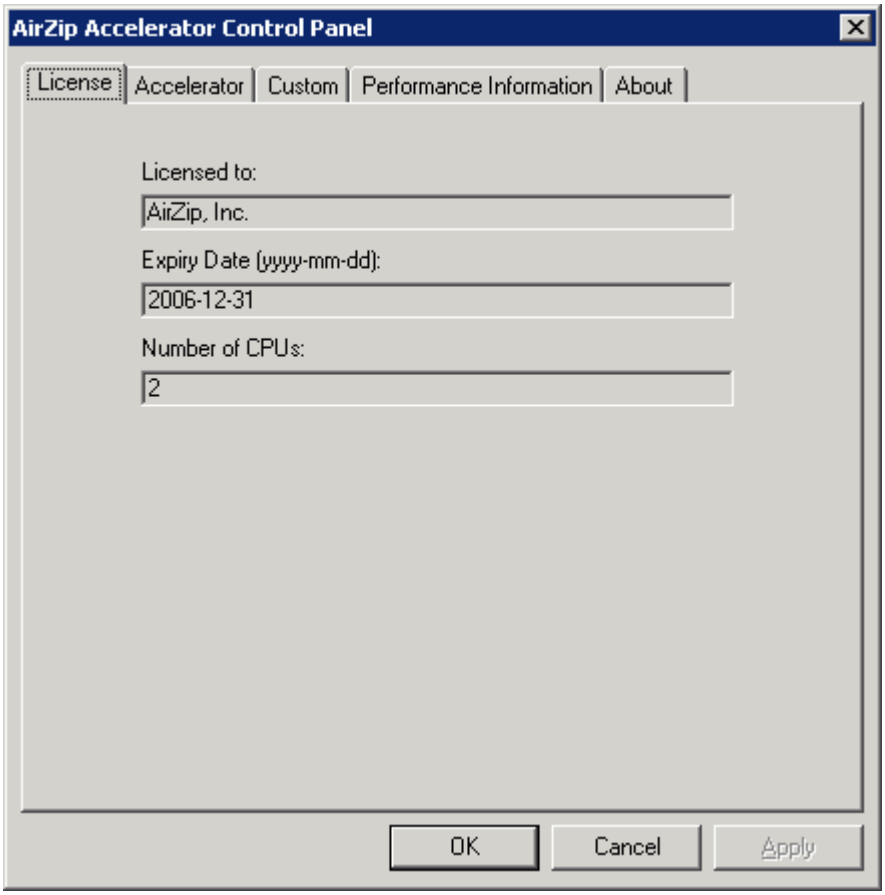
- Evaluation Licenses are issued to allow customer to evaluate the product. These licenses allow full use of the product until they expire. They are valid for up to 30 days from date of issue. May be renewed upon special request.
- Temporary Licenses are issued to customers who have purchased the product but have not yet paid for it. Valid for 60 days from date of issue.
- Permanent Licenses do not expire, and are issued once the software has been paid for.

3.2.3 Checking Your License

You may check the validity of your license by opening the AirZip Accelerator Control Panel (**Start->Settings->Control Panels-> AirZip Accelerator)**.



The License tab of the Control Panel will indicate to whom the software is registered, the date the software expires (if not a permanent license), and the number of CPUs licensed for this machine.



3.3 Verifying Local Operation

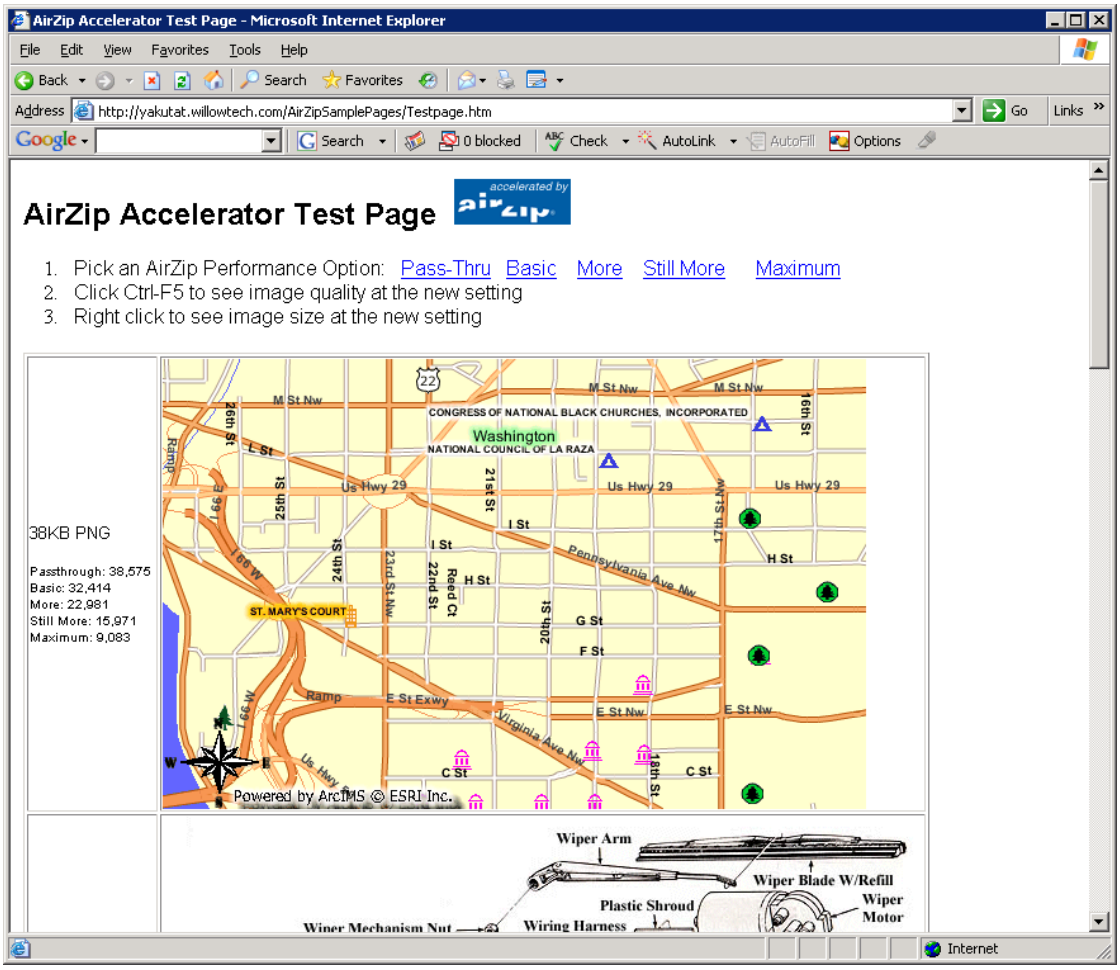
To verify proper operation

(a) Open Internet Explorer and visit the web page at http://localhost/AirZipSamplePages/default.htm and select the AirZip Test Page link.

(b) If your server is on the Internet, this page will automatically offer the option of downloading the AirZip Internet Plug-in.

(c) With or without the AirZip plug-in, select a desired Performance Option and refresh the page using Control F5 to view the test images at the different Performance Levels.

(d) Right click the test images and select properties to view the type of image you are receiving and the size changes from the original. Test image appearance should change somewhat at each performance level and be smaller at more aggressive performance settings.



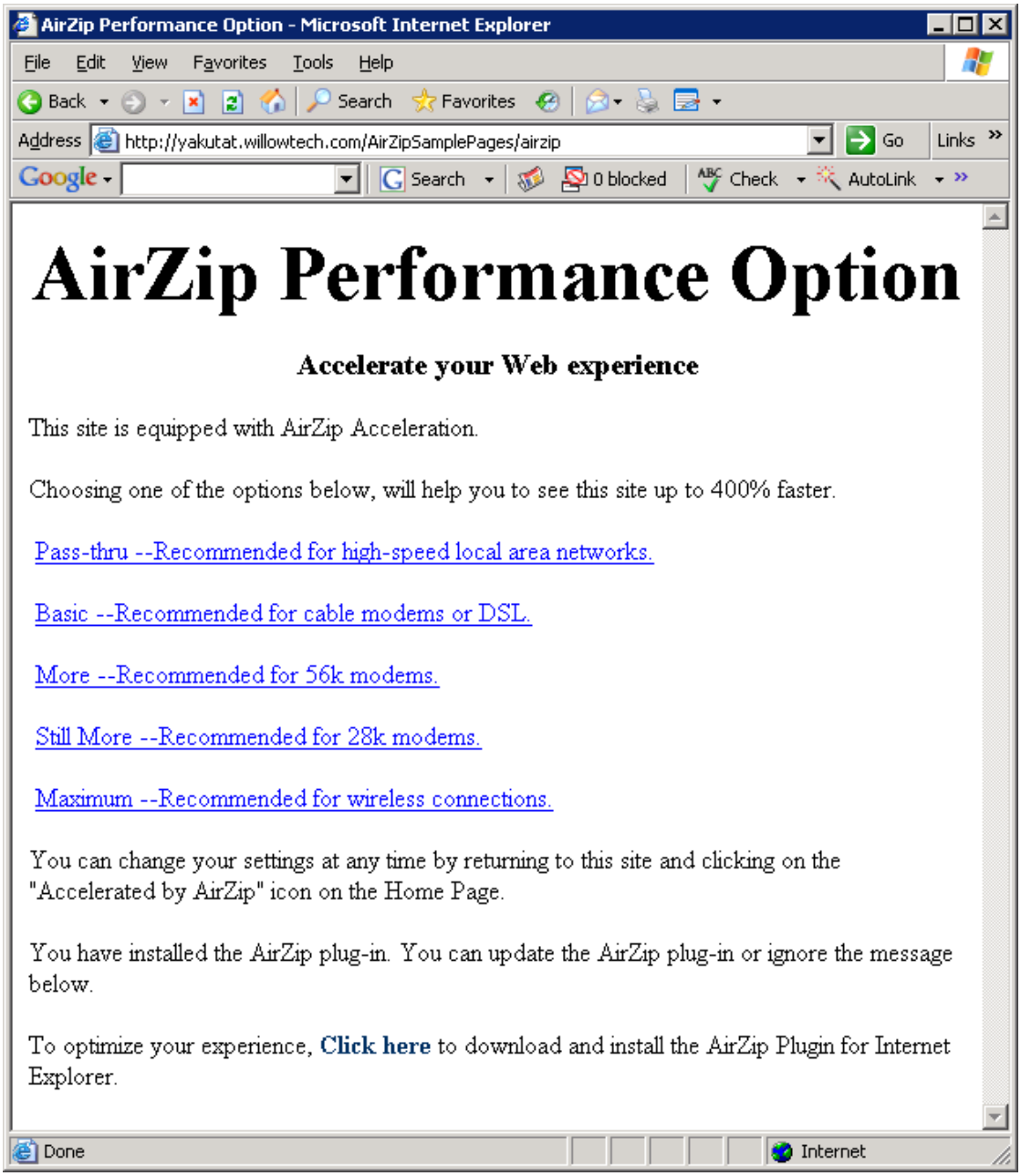
3.4 Verifying Operation with web content

To verify proper operation

(a) Open Internet Explorer visit http://www.airzip.com/downloadreg.htm and download the AirZip Plugin for Internet Explorer.

(b) Next visit a web page on the IIS server where the AirZip Acceleration software is installed.

(c) Add "/airzip" at the end of the URL and click **go** to access the AirZip Performance Option page.



(d) Select a different quality setting and press your browser back button if necessary to return to the previous web page.

(e) Press CTRL+F5 to reload and view the page with the new setting. Note the browser reload button reloads the page from cache and will NOT show the pages at the new settings.

(f) Right click on images then select Properties to determine impact on image size and image formats.

(g) Repeat steps (c) thru (f) at different quality settings.

3.5 Installation Troubleshooting

If the AirZip Accelerator for IIS does not immediately function, follow these procedures to

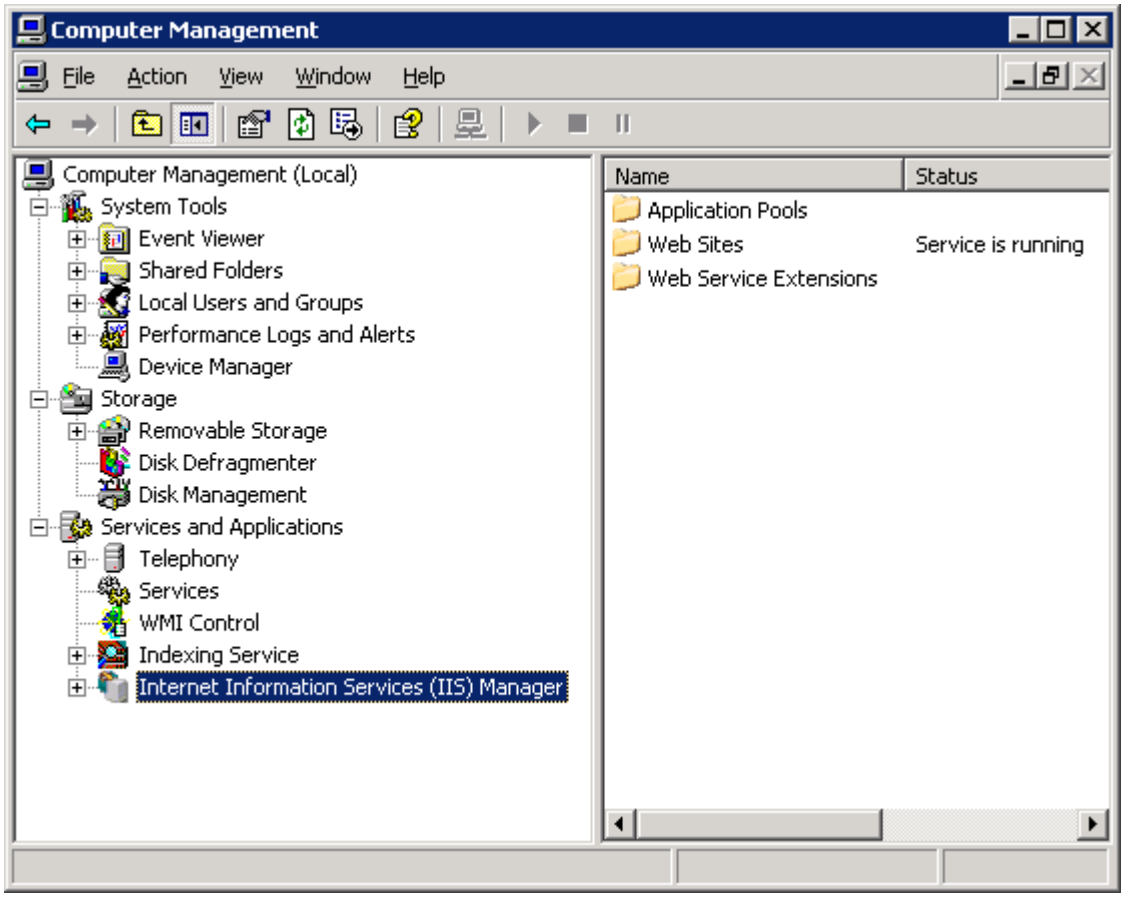
confirm that the software has been correctly installed:

First, verify that the AirZipFilter.dll file is installed in c:\WINNT\SYSTEM32 or c:\WINDOWS\SYSTEM32 directory. If the AirZipFilter.dll file is missing repeat the above installation process.

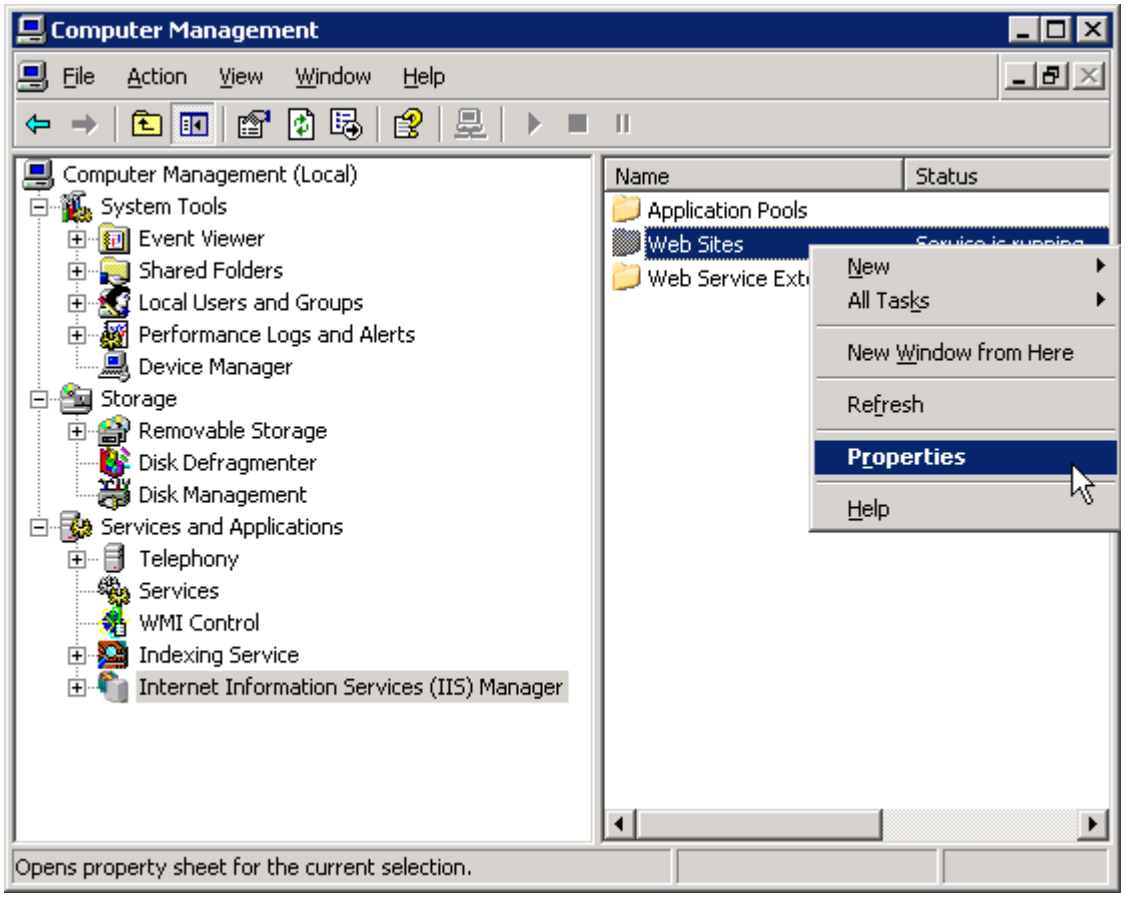
Next follow the steps below to confirm that the AirZipFilter is correctly installed as an ISAPI Filter:

(a) Start the Computer Management control. Computer Management can be found either under:
Start ->Settings -> **Control Panel** -> **Administrative Tools** -> **Computer Management**
or
Start -> All Programs -> Administrative Tools -> Computer Management

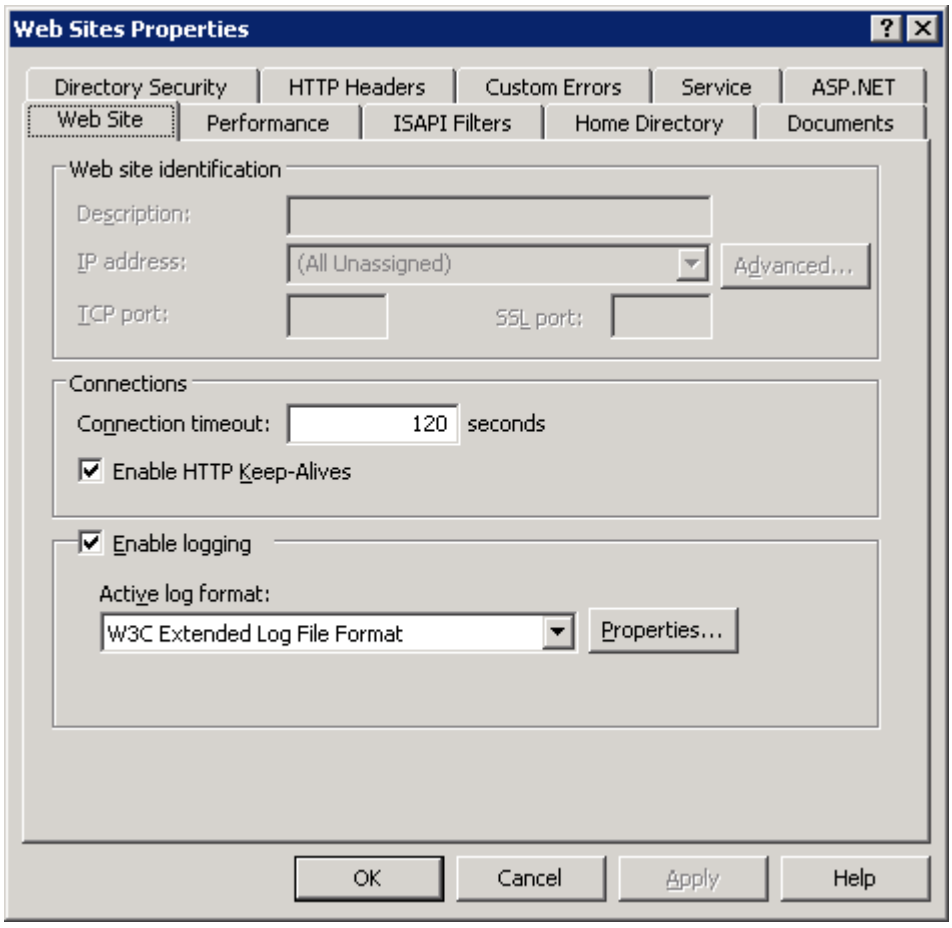
Open Computer Management then Services and Applications to expose Internet Information Services as shown below.



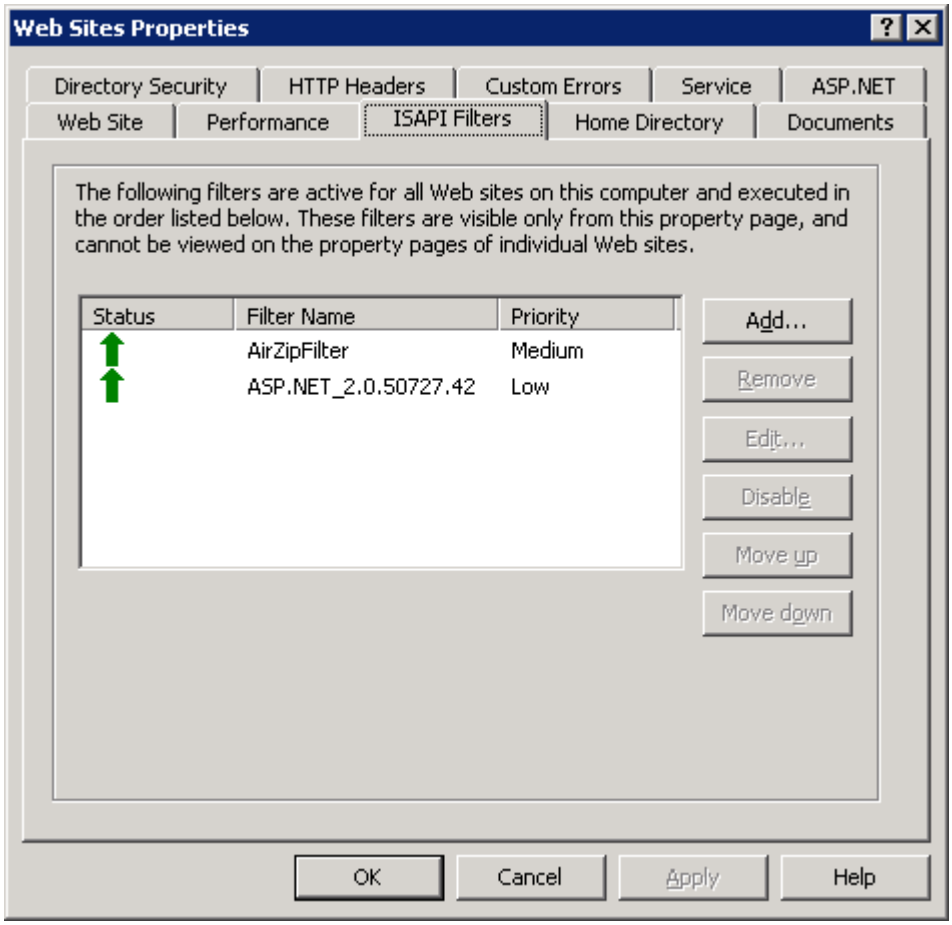
(b) Right click on **Internet Information Services (IIS) Manager**, then on **Web Sites** and choose **Properties**.


Computer Management
File Action View Window Help
Computer Management (Local)
System Tools
Event Viewer
Shared Folders
Local Users and Groups
Performance Logs and Alerts
Device Manager
Storage
Removable Storage
Disk Defragmenter
Disk Management
Services and Applications
Telephony
Services
WMI Control
Indexing Service
Internet Information Services (IIS) Manager
Name
Status
Application Pools
Web Sites
Web Service Ext
New
All Tasks
New Window from Here
Refresh
Properties
Help
Opens property sheet for the current selection.

(c) The **Web Sites Properties** dialog (shown below) will be displayed.

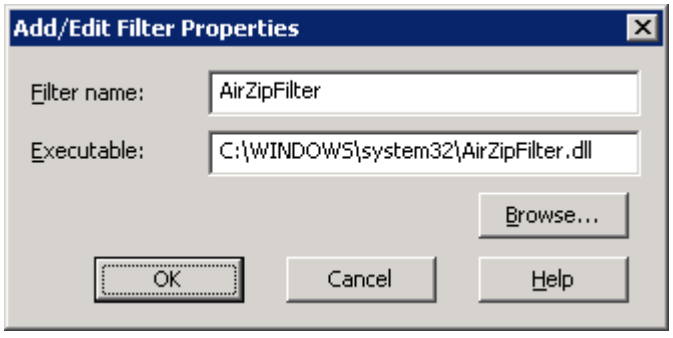


(d) Click **ISAPI Filters** tab.



(e) Confirm that the AirZipFilter is listed, that its status shows a green up arrow, and that it is configured with Medium Priority. If the AirZipFilter is not listed as shown above, click the **Add…** button in ISAPI Filter and follow the steps below to install the AirZipFilter manually.

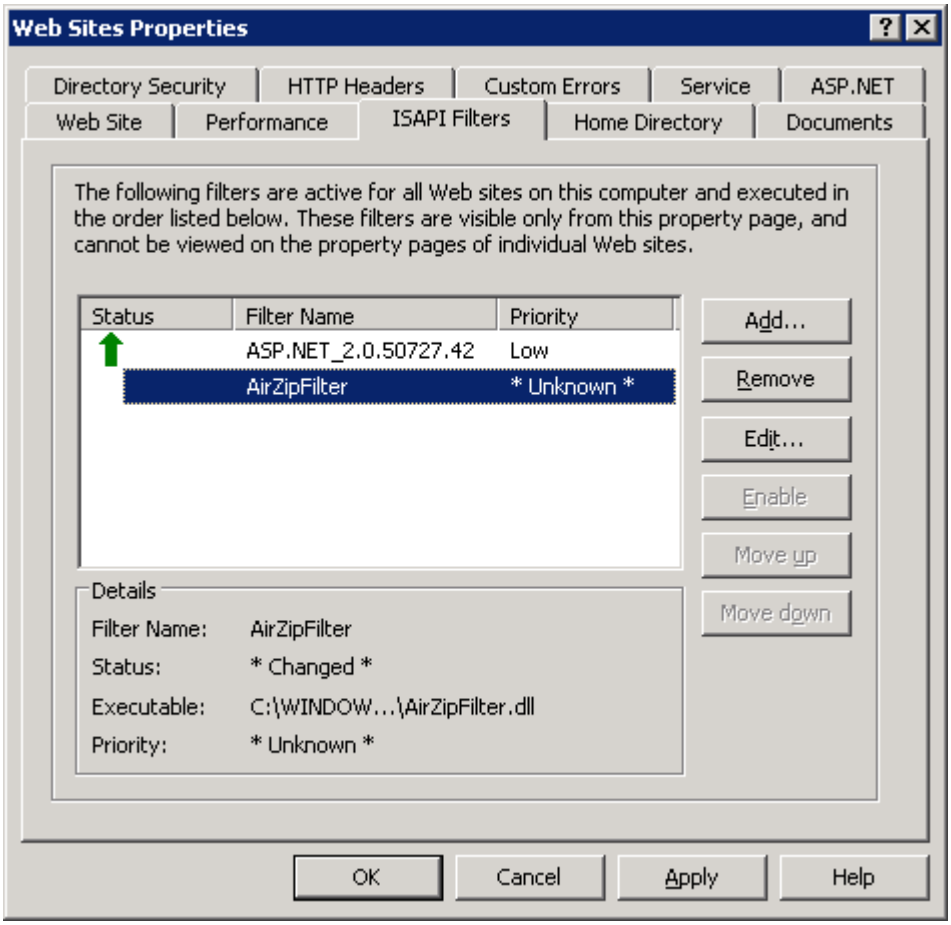
Clicking the Add… button exposes the following dialog box:



(f) Put AirZipFilter in the File Name.

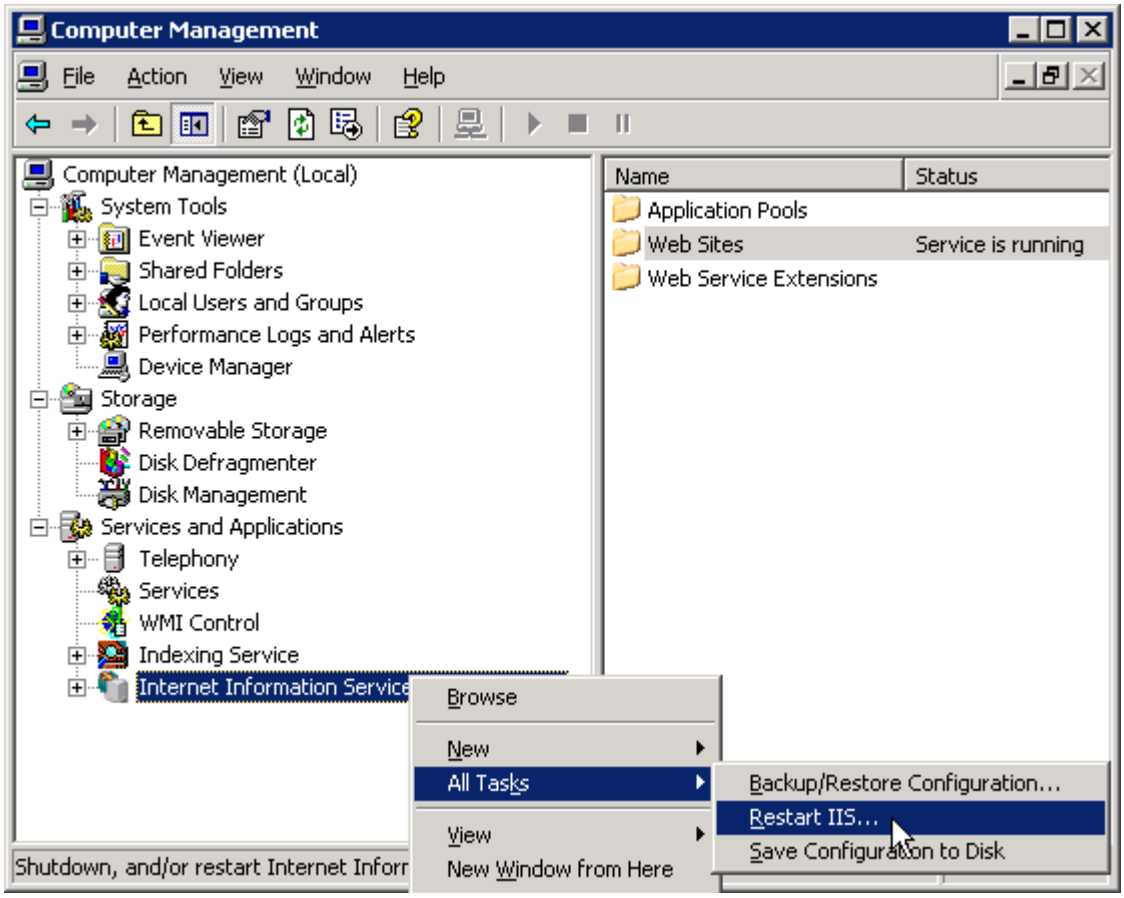
Put C:\WINNT\system32\AirZipFilter.dll in the Executable.

(g) Click **OK** button on the Filter Properties.



(h) Click the **Apply** button followed by the **OK** button.

(i) Right click **Internet Information Services (IIS) Manager -> All Tasks -> Restart IIS…**



(j) Choose **Restart Internet Services on <hostname>**

(k) Click **OK** button and wait for a while to restart IIS Server.

(l) Repeat the steps in 3.5 to check the status of the AirZipFilter.

3.6 Uninstall process

To uninstall the AirZip Accelerator, follow these steps:

1. Click the Start menu then **Settings>Control Panel>Add and Remove Programs**
2. Locate the AirZip Accelerator for IIS and press **Change**.
3. InstallShield will start. Click **Next**
4. Choose the **Remove** radio button and press **Next**
5. Click **Remove.**
6. Click **Finished.**

4 Using built in Performance Selection options

AirZip Accelerator for IIS provides two ways for users to control image quality and delivery performance. Web Site visitors can:

1. Select a performance option by visiting the **Integrated AirZip Performance Option Page**,
2. Select a performance option by entering special **Performance Code**, or

4.1 Using the Integrated AirZip Performance Option Page

The AirZip Accelerator for IIS provides web site users five performance options to optimize performance in order to match connection needs as well as user quality preferences:

Pass-thru – Images are not optimized to avoid delays when using high-speed connections. This option is an appropriate choice for users of a high performance internet connection.
Basic acceleration – Images are optimized for download and rendering speed but matching original image quality This option is an appropriate choice for users of DSL or cable modems. (It provides acceleration without altering the appearance of web pages in any way.)
More acceleration – Images are optimized for download and rendering speed with an emphasis on matching original image quality. This option is an appropriate choice for users of quality dial up modems. (It provides acceleration with minor change to some images).
Still more acceleration – Images are optimized for download and rendering speed and image quality. This option is an appropriate choice for users of a medium speed modem (More compression)
Maximum acceleration – Images are optimized in favor of download and rendering speed over image quality. This option is an appropriate choice for users of limited speed wireless modems (It provides the most acceleration.)

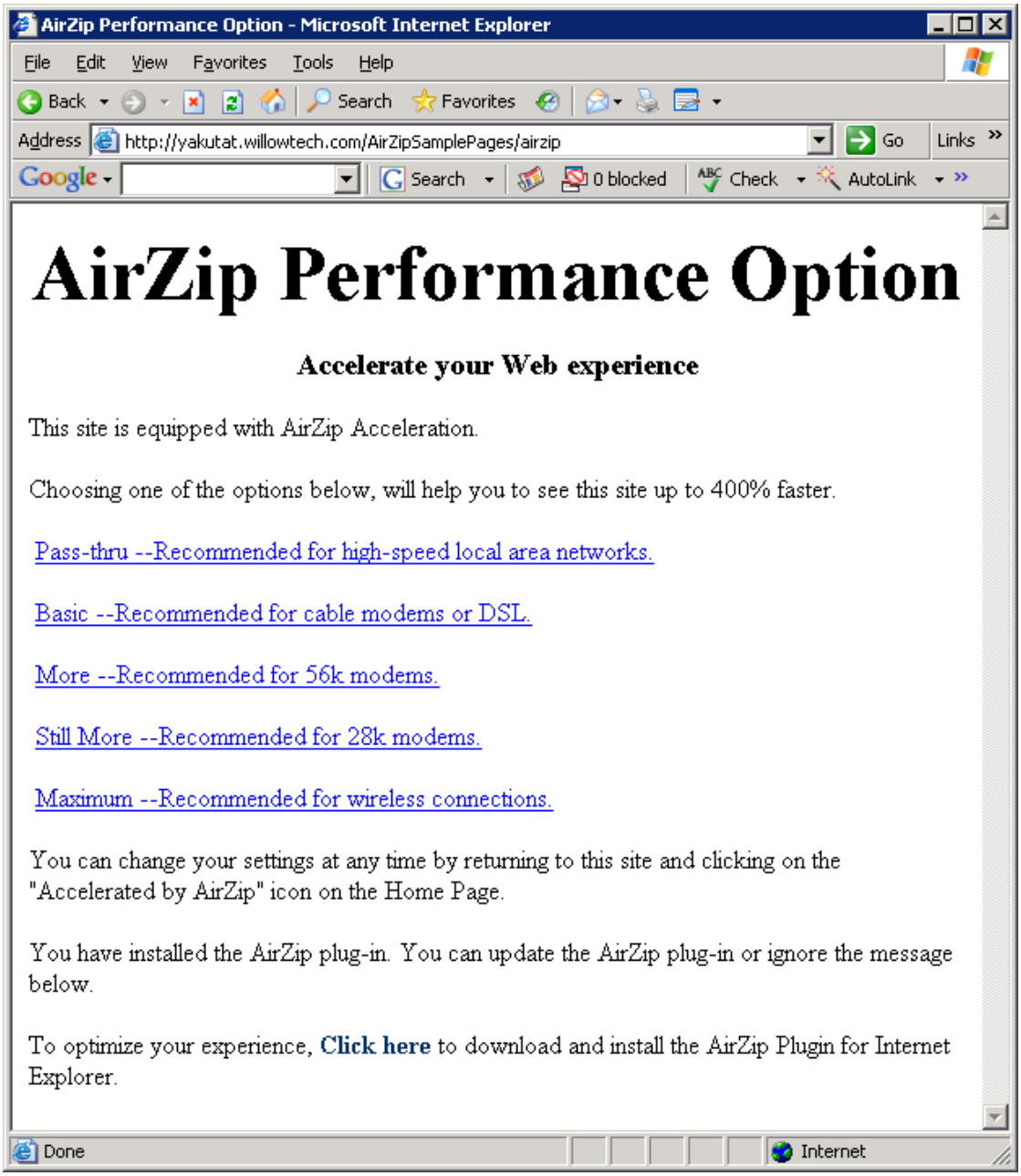
Users can change their performance option at any time. Independent of the way a user selects a particular performance option, a cookie is written to that users computer so that each time the user returns to the web site they experience the same performance option.

AirZip Accelerator for IIS provides an integrated **AirZip Performance Option Page** that allows users to change their preference settings at any time.

Users access this web page by appending **"/AirZip**" or **"/airzip"** to the URL of the page that they are accessing on the AirZip Accelerator for IIS-enabled web site. For example, if the user where accessing the www.AirZip.com web site, users could access the Quality Selection Web Page by entering:

http://www.airzip.com/airzip

The integrated Performance Option page is shown below:



Once on this page, the user can select a performance option that meets their needs by simply clicking one of the five options listed. When the user makes a selection, AirZip for IIS places a Cookie on the users computer so they automatically return to this setting when they return to this web site.

4.2 Using Performance Codes

Expert users can select alternative client and quality preferences by appending **"/AirZip=<client preference><quality preference>**" or **/airzip=<client preference><quality preference>**" to the URL of the page that they are viewing at any time. For example, if the user where accessing the www.AirZip.com web site and wanted to select the "More Acceleration" option for there non-AirZip enabled browser, they could select:

http://www.airzip.com/airzip=D1

Building a simple link with the above URL will accomplish the same result. In fact, this is what has been done on the Customized Performance Option Web Page described below.

Site users have two choices of client preferences:

A	This option indicates to the IIS server that the user prefers images that are encoded in AirZip's proprietary format where appropriate. This is preferred where the user has installed an AirZip-enabled browser and wants to always get the best download speeds
D	This option indicates to the IIS server that the user prefers to use the server default setting which normally means that images are automatically optimized based on their browsers capabilities.

Likewise, web site users have five choices for Image Quality:

0	Basic acceleration – Images are optimized for download and rendering speed but matching original image quality This option is an appropriate choice for users of DSL or cable modems. (It provides acceleration without altering the appearance of web pages in any way.)
1	More acceleration – Images are optimized for download and rendering speed with an emphasis on matching original image quality. This option is an appropriate choice for users of quality dial up modems. (It provides acceleration with minor change to some images).
2	Still more acceleration – Images are optimized for download and rendering speed and image quality. This option is an appropriate choice for users of a medium speed modem (More compression)
3	Maximum acceleration – Images are optimized in favor of download and rendering speed over image quality. This option is an appropriate choice for users of limited speed wireless modems (It provides the most acceleration.)
X	Pass-thru – Images are not optimized to avoid delays when using high-speed connections. This option is an appropriate choice for users of a high performance internet connection.

The following combinations of codes are supported:

DX for Pass-Thru

A0 or **D0** for Basic acceleration

A1 or **D1** for More acceleration

A2 or **D2** for Still More acceleration

A3 or **D3** for Maximum acceleration

5 Customizing your Web Site to Get the Most from AirZip

There are a number of ways to provide even more benefits to your website users. They include

1. Automatically download the AirZip Internet Explorer Plug-in to web site
2. Providing an icon on your home page that invites web site users to visit a "Performance Options" page
3. Customizing download and performance options pages tailored for your particular web site.
4. Providing performance Links on key web pages

Procedures for the each are provided here. Sample web pages and related images are automatically installed in the following folder:

<Your Default Drive>:\Inetpub\wwwroot\AirZipSamplePages

5.1 Automatically downloading the AirZip Plug-in

Your home page can be configured to automatically download the AirZip Internet Explorer Plug-in to Microsoft Windows users of Internet Explorer. This is accomplished by simply serving an AirZip image using a special html OBJECT tag. Below is sample HTML that serves two images to the user. One is an AZV "Experience this site up to 400% faster" image served with an Object tag and the other is the standard non-animated performance option image with a link to the options page. The image served with the Object tag causes the AirZip IE plug-in to be automatically offered to web site users and actually appears only after the plug-in has downloaded and installed. It will not appear if the user accesses the web site using other types of browsers. The link associated with the "Accelerated" image takes the user to the normal Performance pages described above.

In the HTML sample below, the images must be in the /AirZipSamplePages/images/ folder on the site that the src tag references.):

```
<table border="1" width="43%">
<tr>
<td width="40%">
<object id="AirZipLogo"
codeBase="http://www.airzip.com/download/AzpCtl.CAB#version=2,2,0,0"
type="application/x-Azv" height="136" width="423"
classid="CLSID:E39EB9E7-BF7C-45FE-903F-5AF938F56181">
<param NAME="SRC" VALUE="images/azLogo.azv">
<param NAME="Href" VALUE>
</object>
</td>
<td width="100%">
<a href="/AirZipsamplepages/airzipoptions">
<img height="54" width="96" border="0"
src="images/AcceleratebyAirZip.gif"></a>
</td>
</tr>
</table>
```

A sample home page with this html is installed on your machine at the following location:

http://localhost/AirZipSamplePages/SampleHomePage.htm

Note: Microsoft recently lost a lawsuit to Eolas Technologies related to the patent "**Distributed hypermedia method for automatically invoking external application providing interaction and display of embedded objects within a hypermedia document**". This affects the automatic display of certain embedded objects, ActiveX controls, etc. As a result, Microsoft has recently updated Internet Explorer to avoid the patent and IE now requires user input to display and activate these objects. Where this is in effect, you will see the message "**Please click to activate and use this control**" when moving the mouse over the control or image. Microsoft has published a paper on a solution to the problem at: http://msdn.microsoft.com/library/?url=/workshop/author/dhtml/overview/activating_activex.asp

The AirZip sample pages that load the AirZip IE Plugin have been updated based on this method. You should refer to the html source for the SampleHomePage.htm, plugin.htm and TestPage.htm pages as well as the Javascript file, AirZipPlugin.js file all located in the AirZipSamplePages directory when implementing the AiZip Accelerator in your web site.

5.2 Simplifying access to Performance Options Pages

AirZip recommends the inclusion of an icon on your home page that invites web site users to visit a "Performance Options" page that allows them to select options appropriate to their connections.

AirZip provides two custom icons for this purpose:

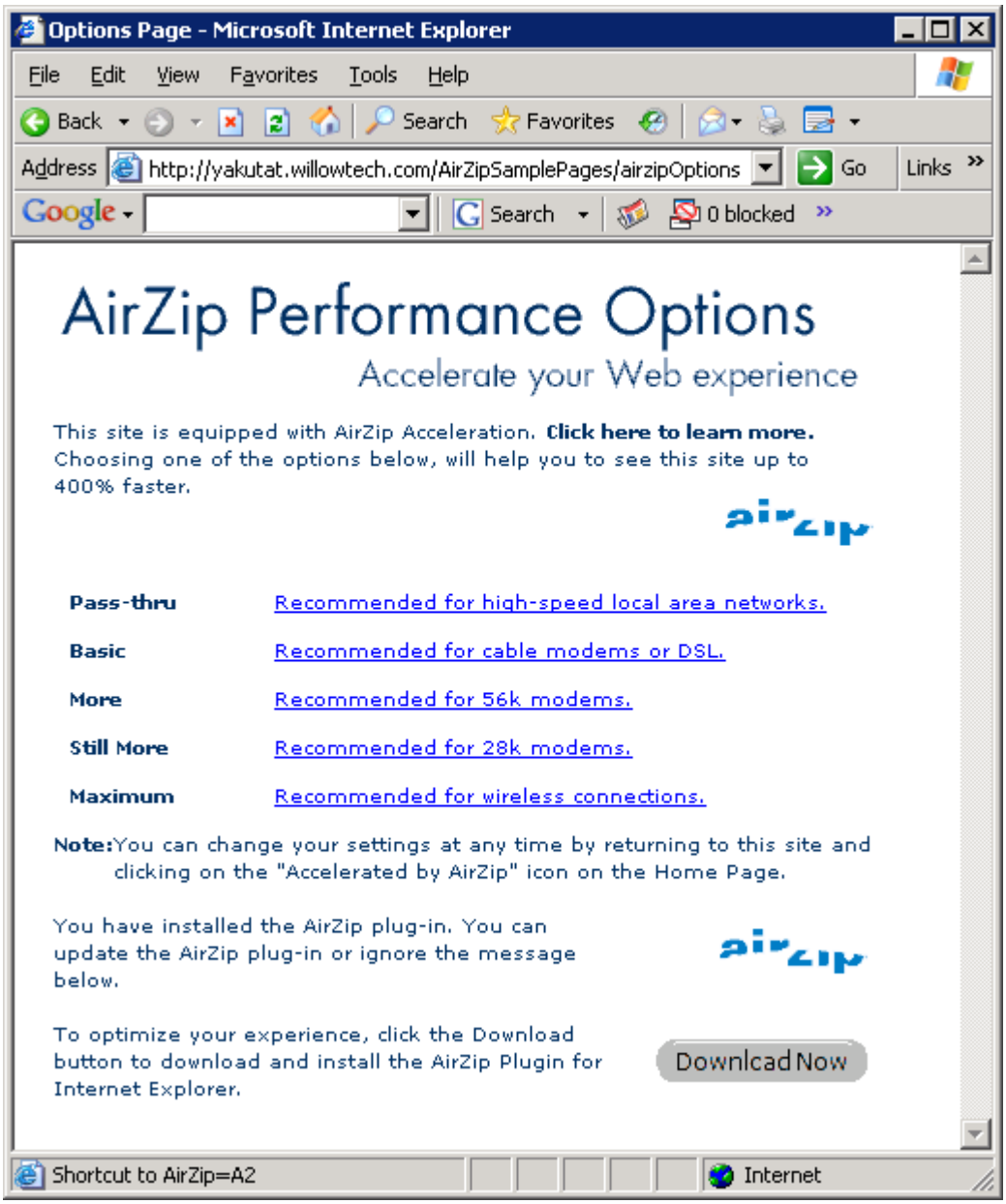
Animated Version

Non Animated version

5.3 Customizing Performance Options Page

The sample performance options page is shown below. Users can click the option that best matches their performance needs. When they do they are automatically returned to the website home page with the new performance setting. Essentially each performance setting is a link in the form of

www.website.com/airzip =<**performance code** as described in Section 4>



The “download now” option appears only if the user is using Internet Explorer and has yet to install the AirZip Plug in for Internet Explorer. If the user clicks download now icon, the AirZip Plug-in for Internet Explore will be taken to a web page where they can download the plug-in.

If the user selects “Click here to learn more”, they are taken to a sample frequently asked questions pages.

The Information Page can also be customized to provide instructions specific to your website.

5.4 Using Performance Option Links

Performance options can be added to any page by adding html links in the following form:

Pass-thru

 Basic

 Maximum

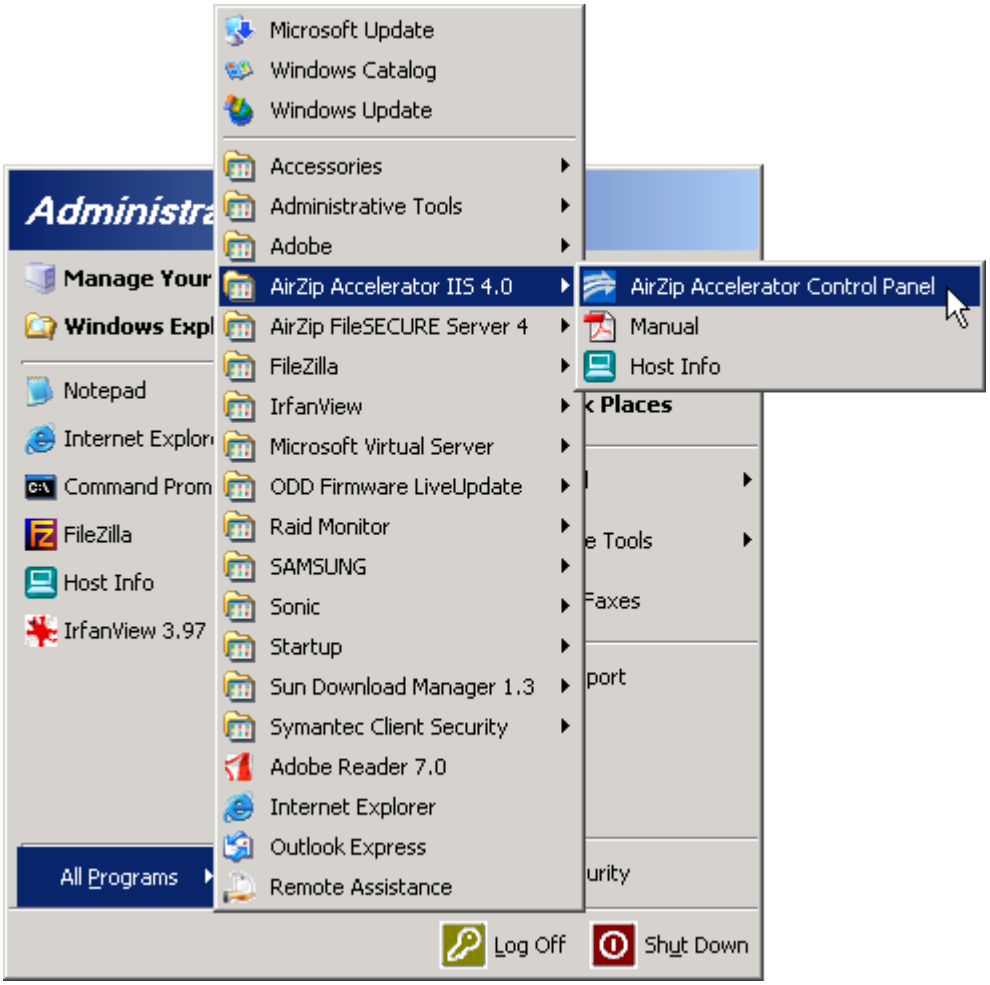
The performance option is set when the user selects the link but does not have an effect unless the user refreshes the current page with Control-F5 with Internet Explorer or surfs to a different page.

This can be as simple as adding the following types of links to key web pages:

Change your AirZip Settings Pass-thru Basic More Still More Maximum

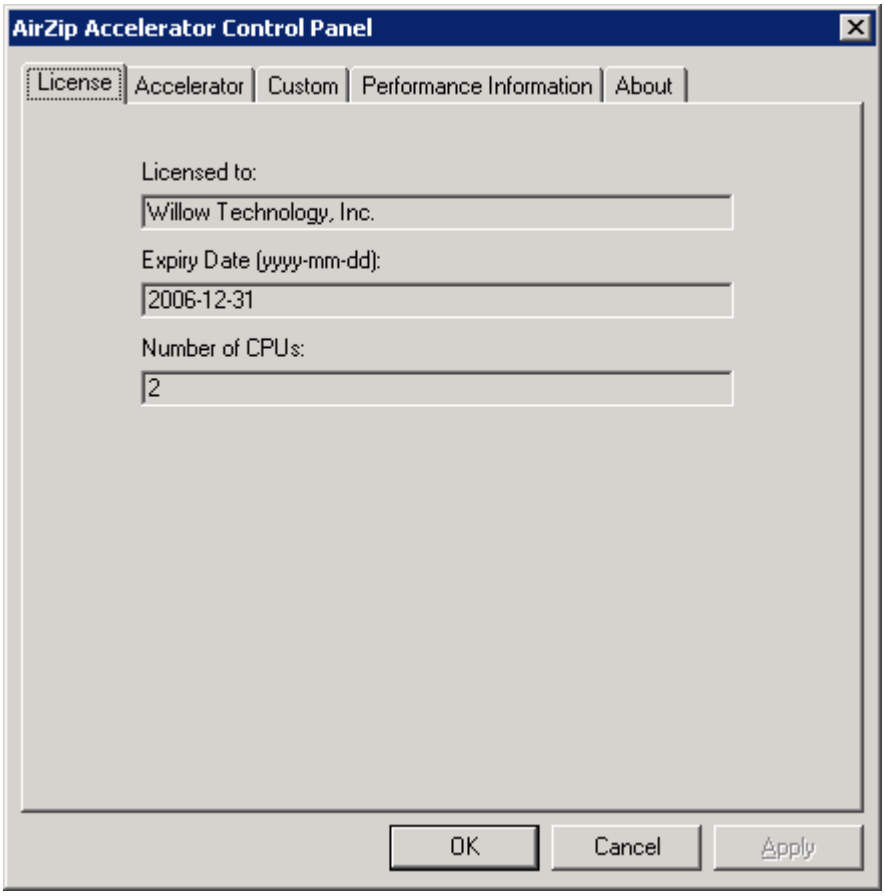
6 Changing Accelerator parameters and monitoring its performance

The AirZip Accelerator for IIS Control Panel enables the AirZip Accelerator for IIS to be configured for optimal performance. The control panel can be accessed from the Start button as shown below or from using **Start->Settings->Control Panels-> AirZip Accelerator**.



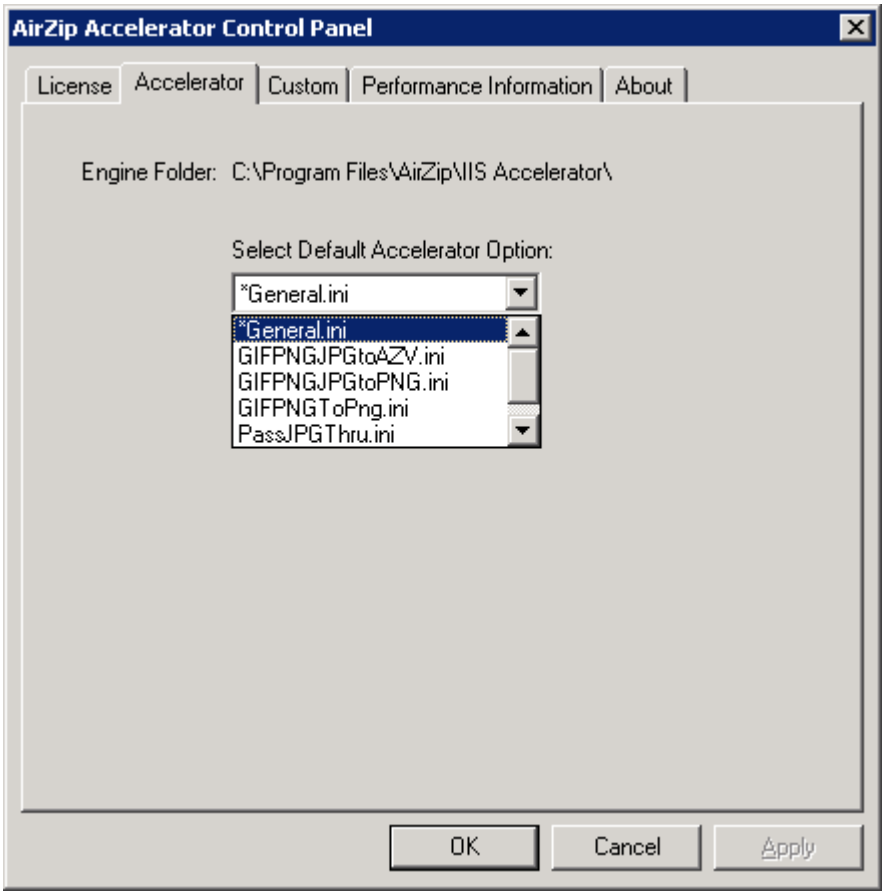
6.1 Reviewing your license information

To review your license information, select the **License** tab from the AirZip Accelerator Control Panel. The information will include the name of the company to which the software is licensed, the expiry date of the license (if it is an evaluation or temporary license), and the number of CPUs on which the software is licensed to run.



6.2 Changing the default Accelerator Option

AirZip Accelerator Option is a set of parameters that determine how the AirZip Accelerator processes different images at different quality settings. These parameters are contained in an .ini file. When the AirZip Accelerator is installed the default Accelerator Option is General.ini. To alter the default Accelerator Option, use the top pull down list on the **Accelerator** tab on the AirZip Accelerator Control Panel to select the desired option then press the Apply button. The new Accelerator Option will not take affect until IIS is restarted.

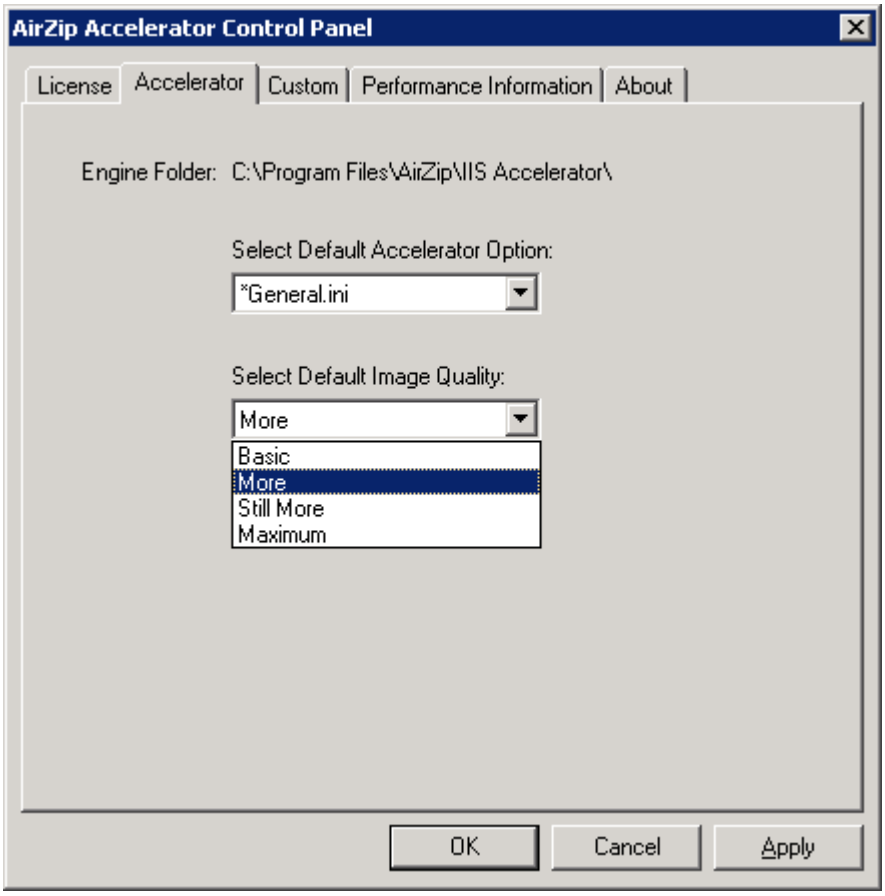


The following Accelerator Option files are provided with the AirZip Accelerator for IIS:

General.ini	Recommended Accelerator Option. Works well with a large variety of images.
GIFPNGJPGtoAZV.ini	Converts all images to AirZip's AZV images at the same Performance Option settings as General.ini.
GIFPNGJPGtoPNG.ini	Converts all images to PNG images at the same Performance Option settings as General.ini
GIFPNGtoPNG.ini	Converts all images to GIF and PNG to PNG images at the same Performance Option settings as General.ini
Passthru.ini	Applies not image processing whatever at any quality setting. Useful where only select images will be accelerated using custom Accelerator Options for specific Directory. See following sections.
PassJPEGThru.ini	Same as General.ini except JPEG images are not optimized at any Performance Option setting.

6.3 Changing the default Accelerator parameters

When the AirZip Accelerator is installed the default Image Quality for any user accessing the site is More (D0). To change the default setting Basic, More, Still More or Maximum acceleration, use the second pull down list on the **Accelerator** tab on the AirZip Accelerator Control Panel to select the desired option then press the Apply button. The new default Image Quality will not take affect until IIS is restarted.

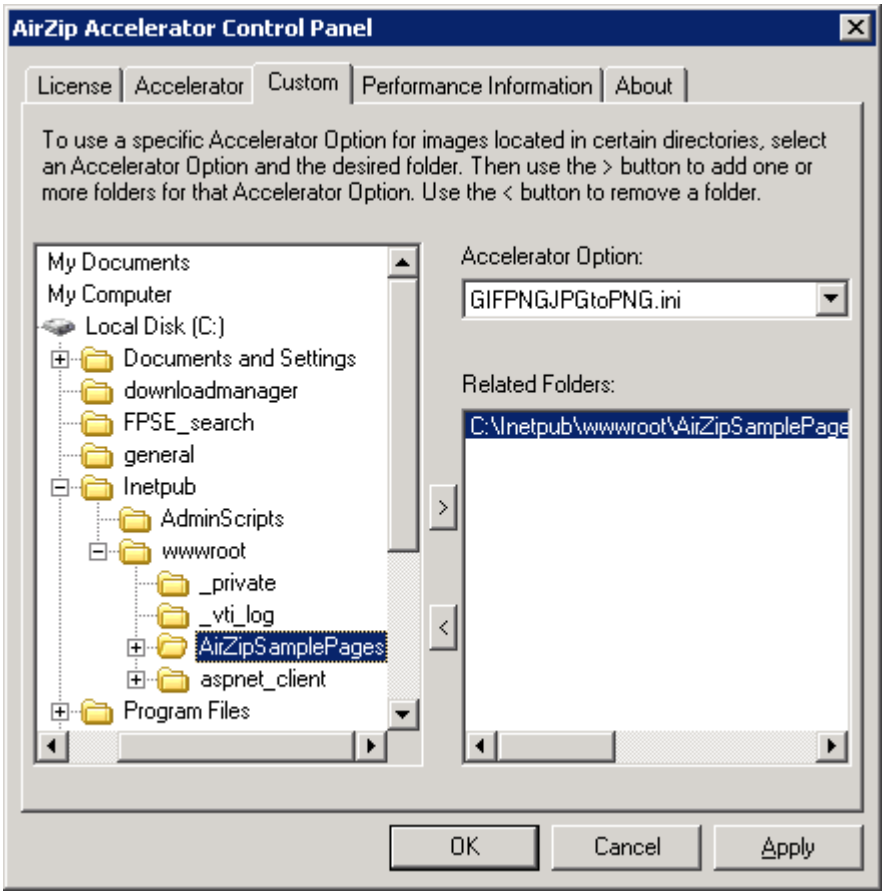


6.4 Applying specific Accelerator Option to a specific image directory

To override the default Accelerator Option and apply a specific AirZip Accelerator Option only to a specify type of image, follow these steps:

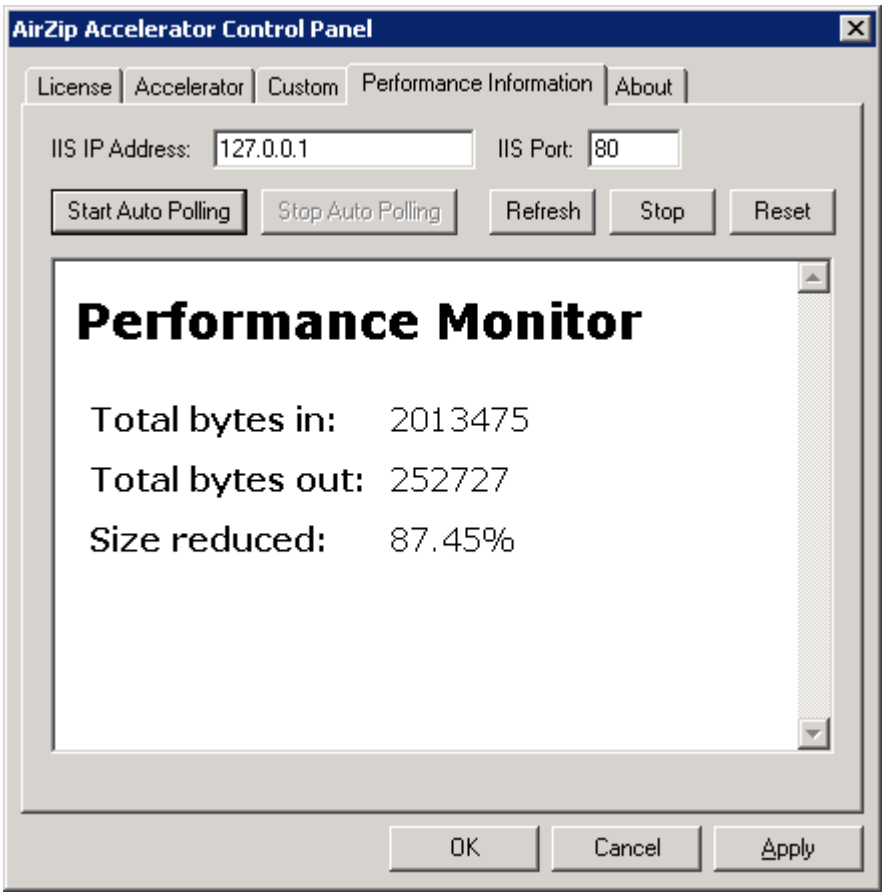
1. Click the **Custom** tab on the AirZip Accelerator Control Panel,
2. Select the Accelerator Option to be applied using the pull down list on the right of this tab,
3. Locate and Click on the Directory where those images are located using the explorer window on the left of the tab.
4. Use the arrow buttons to add or remove directories from the list on the right of the tab window.
5. Click the Apply button.

Changes will not take affect until IIS is restarted.


AirZip Accelerator Control Panel
License
Accelerator
Custom
Performance Information
About
To use a specific Accelerator Option for images located in certain directories, select an Accelerator Option and the desired folder. Then use the > button to add one or more folders for that Accelerator Option. Use the < button to remove a folder.
My Documents
My Computer
Local Disk (C:)
Documents and Settings
downloadmanager
FPSE_search
general
Inetpub
AdminScripts
wwwroot
_private
_vti_log
AirZipSamplePages
aspnet_client
Program Files
Accelerator Option:
GIFPNGJPGtoPNG.ini
Related Folders:
C:\Inetpub\wwwroot\AirZipSamplePage
OK
Cancel
Apply

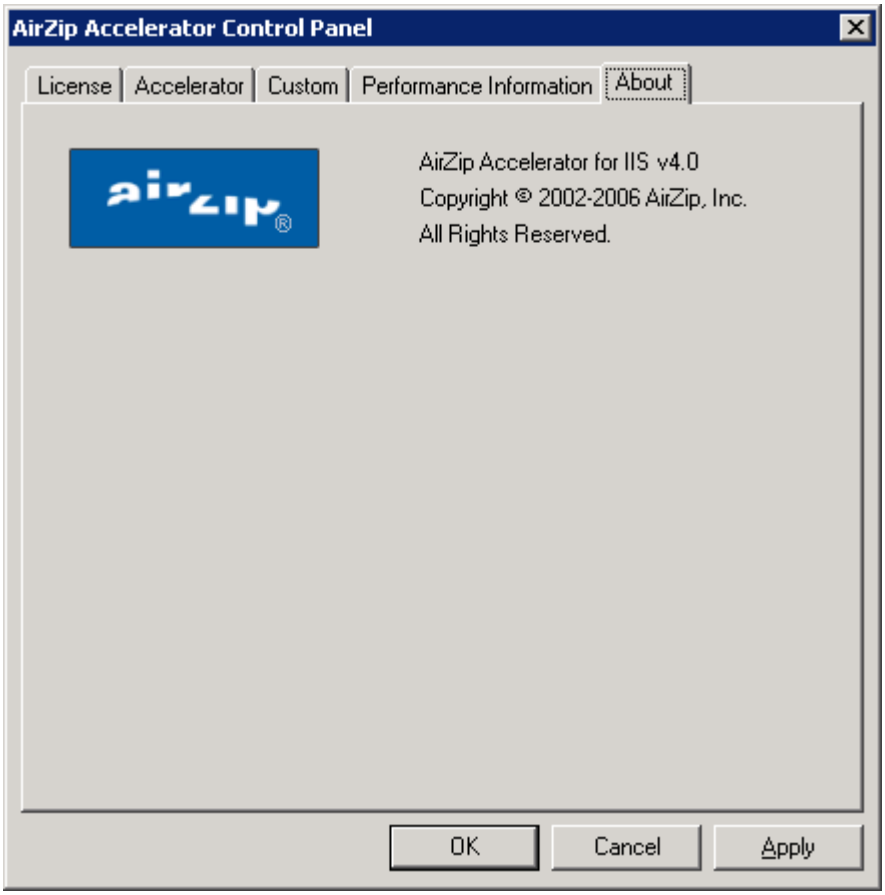
6.5 Monitoring Accelerator Performance

The AirZip Accelerator for IIS automatically gathers statistics regarding its compression results and makes them available via the **Performance Information** tab on the AirZip Accelerator Control Panel. The performance statistics are based on the amount of data processed since the last time IIS was restarted or the performance monitor reset. The Performance tab can be used in real time to monitor performance (in Auto Polling Mode) or static mode with an option to refresh as required.



6.6 Confirming AirZip Secure Release information

Click the **About** tab on the AirZip Accelerator Control Panel to view the Accelerator release information.


AirZip Accelerator Control Panel
License
Accelerator
Custom
Performance Information
About
AirZip Accelerator for IIS v4.0
Copyright © 2002-2006 AirZip, Inc.
All Rights Reserved.
OK
Cancel
Apply

7 Enabling HTTP Compression

Microsoft Internet Information Services (IIS) version 6.0 can be easily configured to use the GZIP and Deflate HTTP compression methods. While not impacting image information, GZIP and Deflate HTTP are very effective at compressing HTML text data, Java Script files (frequently used in ESRI ArcIMS sites and other applications) and are helpful for optimizing overall page download time.

HTTP compression is a sub-service of IIS, which is handled through an ISAPI filter. Because this filter is installed at the WWW Service level, compression must be configured for the entire Web server. It cannot be configured for a specific Web site.

7.1 Activating HTTP Compression for Basic File Types

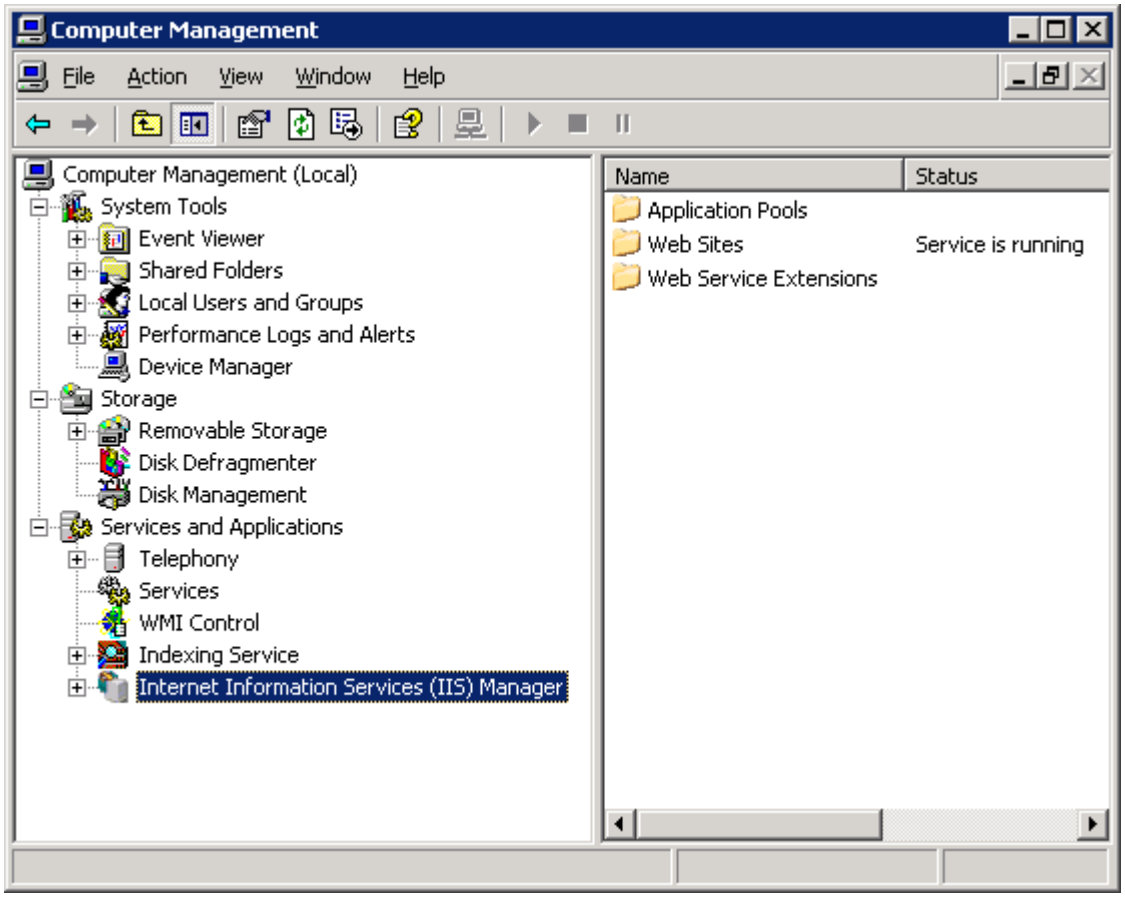
To activate HTTP Compression in conjunction with the AirZip IIS Accelerator, follow these steps:

(a) Start the Computer Management control. Computer Management can be found either under:
Start ->Settings -> **Control Panel** -> **Administrative Tools** -> **Computer Management**
or
Start -> All Programs -> Administrative Tools -> Computer Management

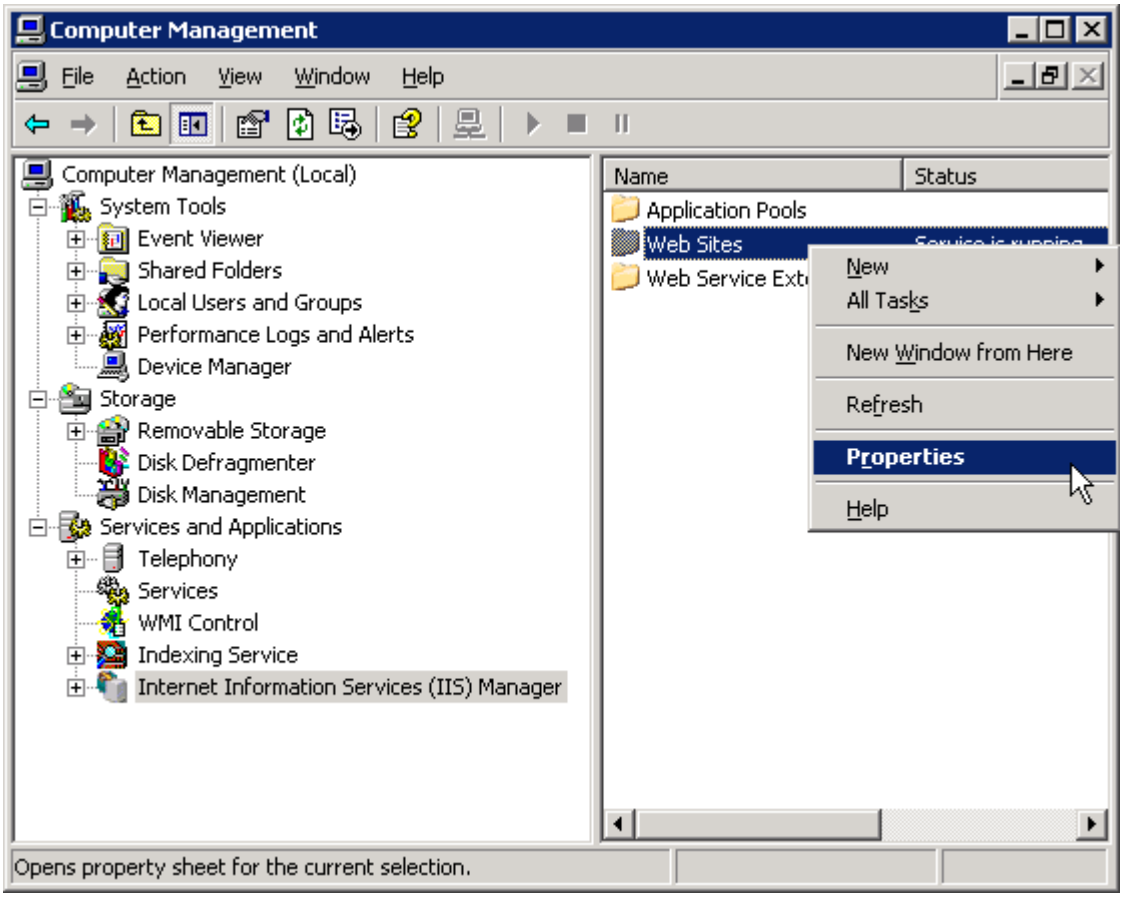
Open Computer Management then Services and Applications to expose Internet Information Services as shown below.

a) Start the Computer Management control. Computer Management can be found either under:
Start ->Settings -> **Control Panel** -> **Administrative Tools** -> **Computer Management**
or
Start -> All Programs -> Administrative Tools -> Computer Management

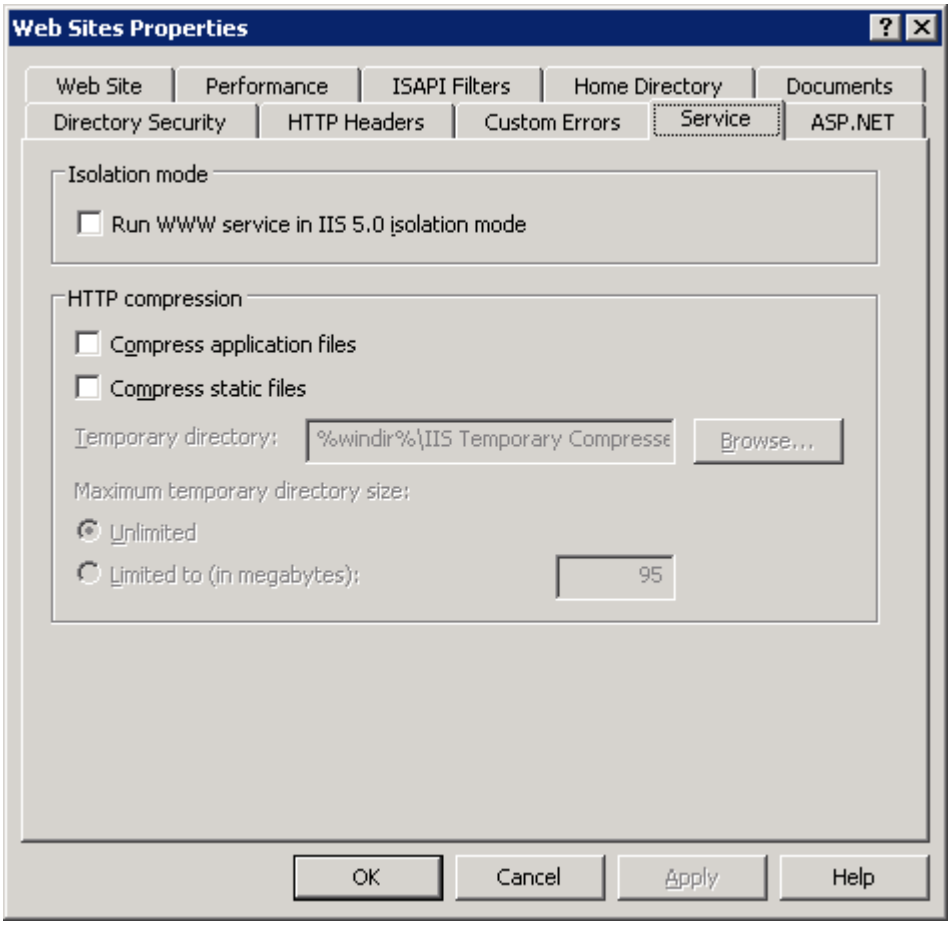
Open Computer Management then Services and Applications to expose Internet Information Services as shown below.



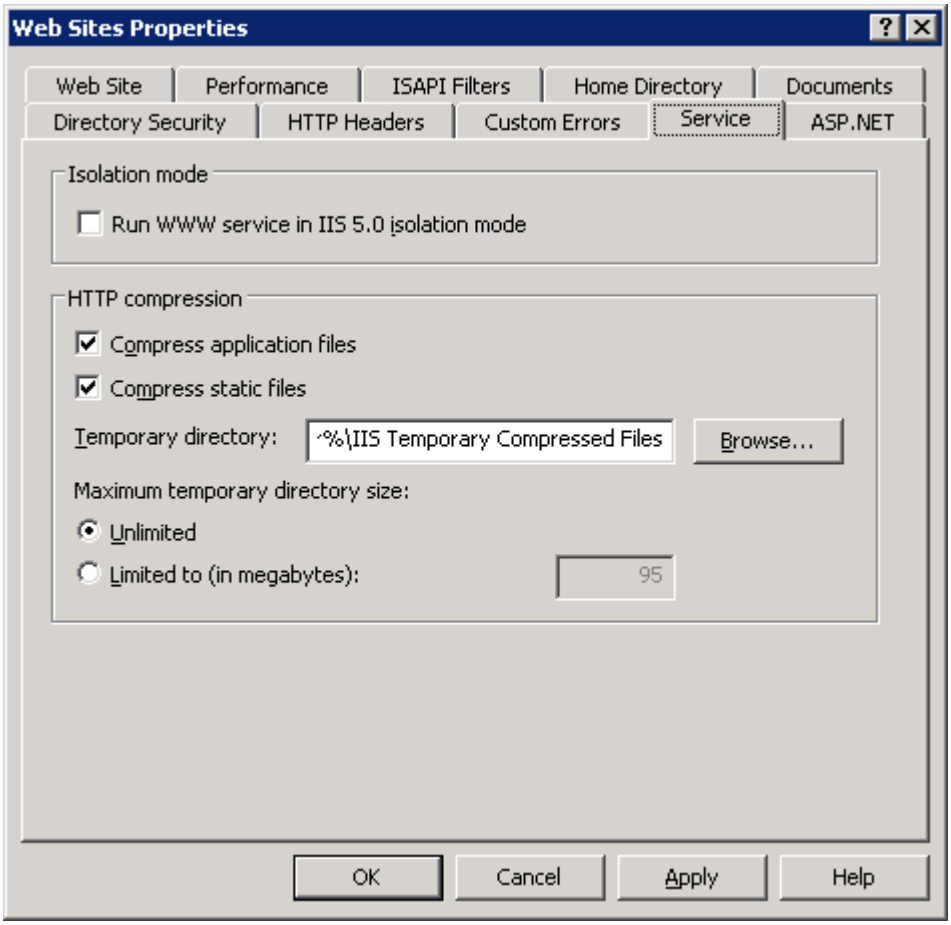
(b) Right click on **Internet Information Services (IIS) Manager** and select **Properties** to open the IIS Properties sheet.



(c) Click the **Service** tab to select the HTTP Compression properties.

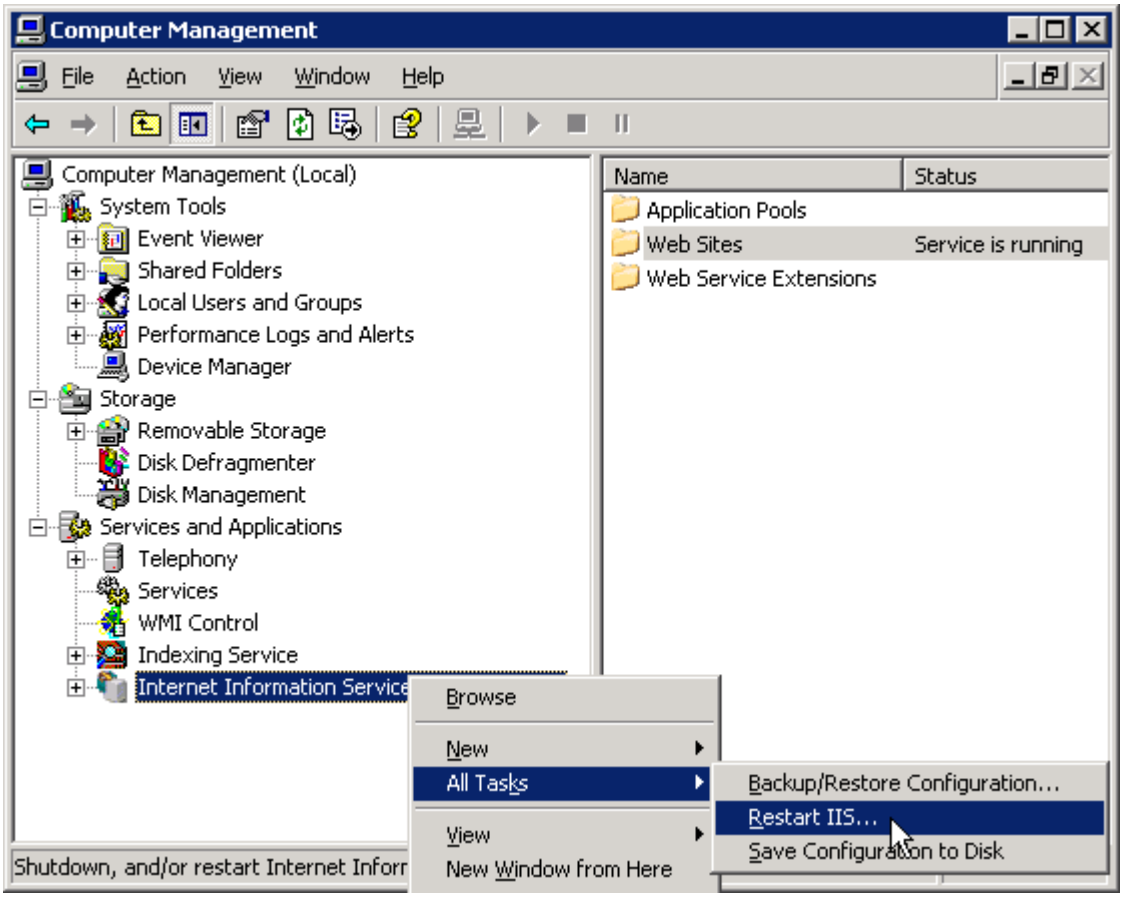


(d) Under the **HTTP Compression** section, check in the box to the left of the **Compress applications files** and **Compress static files**



Click OK again to exit the **Web Sites Properties** window.

(e) At this point you should be returned to the **Computer Management** window shown below. At this window, right click on the **Internet Information Services (IIS) Manager**, select **All Tasks** and **Restart IIS**… and click.



(f) Wait for the IIS Service to finish restarting.

(g) Close the **Computer Management** window.

7.2 Activating HTTP Compression for Other File Types

By default, HTTP compression only compresses files with a file name extension of "htm," "html," and "txt."

To add other document types such as Java Scripts ("js"), Microsoft Word ("doc"), Microsoft PowerPoint ("ppt"), Microsoft Excel ("xls"), PostScript ("ps") to the default list of documents, follow these steps:

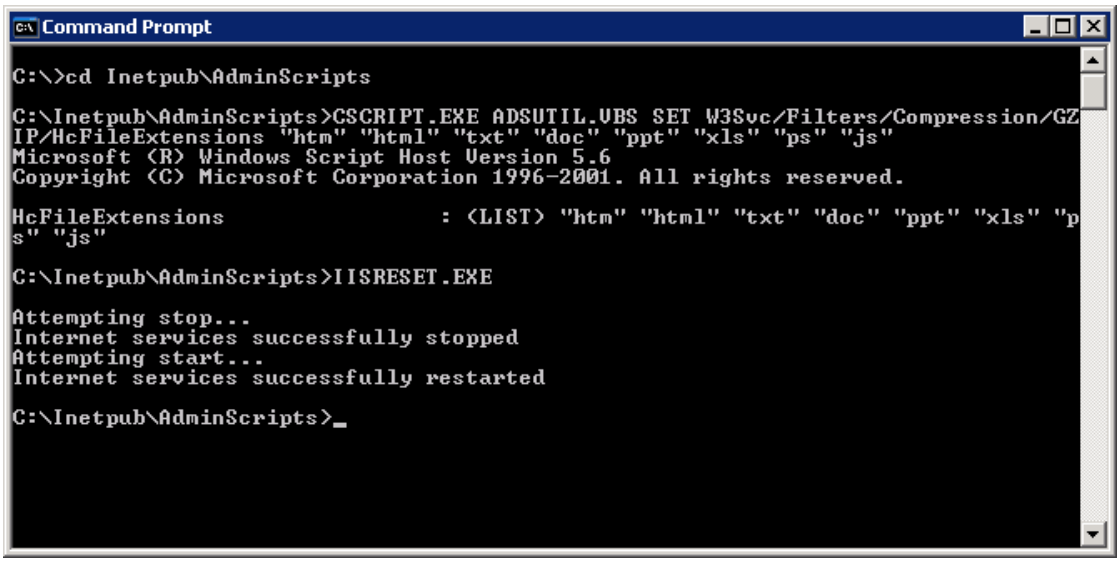
NOTE: The commands in step 3 replace the previously defined file extensions. It does not append them to the existing file extensions.

1. Open a command prompt session. To do this, click Start, click Run, type CMD, and the click OK.
2. Change the directory to your \InetPub\AdminScripts folder. To do this, type CD Inetpub\AdminScripts, and then press ENTER.

   Type the following commands:

   ```
   CSCRIPT.EXE ADSUTIL.VBS SET W3Svc/Filters/Compression/GZIP/HcFileExtensions "htm" "html" "txt" "doc" "ppt" "xls" "ps" "js"
   ```

   ```
   IISRESET.EXE  (this will reset Web services)
   ```



3. Close the command prompt session.

8 Operation with Applications Servers

8.1 Operation with ESRI ArcIMS Server

The ESRI ArcIMS Server is a leading platform for distributing geographic information systems (GIS) and mapping services via the Internet. ArcIMS software allows users to integrate local data sources with Internet data sources for display, query, and analysis in an easy-to-use Web browser.

The AirZip Accelerator for IIS may be installed on an operating ESRI ArcIMS Server or installed prior to installing ArcIMS Server software.

Configuration recommendations:

(a) For best performance as well as map quality, ArcIMS should be configured to generate graphical (computer-created) map images in PNG format rather than JPEG.

(b) Photographic images such as satellite images should be encoded in JPEG format.

(c) If possible, make sure that important data is depicted in colors that are far apart in the spectrum from other colors. This helps on sites that allow user control of image quality.

(d) If possible, use solid colors to depict distinct map areas or features instead of texturing or dithering. Texturing will increase map size more than the use of solid colors.

If the predominate map images on an ArcIMS installation are graphical in nature and in JPEG format, AirZip Accelerator for IIS can be configured to automatically optimize such maps and improve their quality. This requires switching the General.ini file to one optimized for this purpose (refer to section 6.4).

8.2 Operation with BEA WebLogic Server

WebLogic Server is a leading application server for developing and deploying multi-tier distributed enterprise applications. The AirZip IIS Accelerator can be used with BEA WebLogic in both a single server and cluster configurations.

Follow the steps in the “BEA WebLogic Installing and Configuring the Microsoft Internet Information Server (IIS) Plug-In” to install and configure the WebLogic IIS plugin. This document can be found on

http://edocs.bea.com

The locations as of this writing are:

WebLogic Server 7.0: http://edocs.bea.com/wls/docs70/plugins/isapi.html

WebLogic Server 8.1: http://edocs.bea.com/wls/docs81/plugins/isapi.html

WebLogic Server 9.0: http://e-docs.bea.com/wls/docs90/plugins/isapi.html

WebLogic Server 9.1: http://e-docs.bea.com/wls/docs91/plugins/isapi.html

WebLogic Server 9.2: http://e-docs.bea.com/wls/docs92/plugins/isapi.html

Once the configuration is complete, restart IIS.

To verify the combined operation of the AirZip IIS Accelerator with BEA WebLogic follow these steps

1. On the IIS server use **Start -> Programs -> BEA Weblogic Platform <ver> -> Weblogic Server <ver>-> Server Tour and Examples -> Launch Pet Store** to

launch the PetStore example (where **<ver>** is the installed version of WebLogic).

2. Wait for WebLogic to initialize the PetStore application and present the application in a browser window. This can take a minute or two. The browser window will appear and show the following web page:

   http://Server:7001/petstore/index.jsp

3. Change the URL to http://Server/petstore/index.jsp/airzip by removing the port number "7001", and adding /airzip.

4. Click go and the AirZip Performance Option page should allow you to modify the AirZip performance options.

8.3 Operation with Oracle Application Server

Oracle Application Server is a leading J2EE application server providing built-in portal software, wireless and voice, Web page caching, and business intelligence features.

When used with the AirZip Accelerator for IIS, the resulting configuration can be thought of as a three-tiered architecture. The Microsoft Internet Information Server is the front tier, the Oracle PL/SQL Gateway (a Oracle9i AS component) is the middle tier, and Oracle Database is the backend tier. In the front tier, there are two IIS plug-ins: Oracle plug-in with low priority and AirZip plug-in with high priority for IIS.

Follow the Oracle procedures for installing the Oracle 9i or 10g Application Server. For example, the following are the steps used to install the Oracle9i Database (Enterprise Edition, v9.0.1.1.1), Oracle9i Application Server (Standard Edition v1.0.2.2.2) and Portal (v3.0.9.8.2):

1) Install the Oracle9i Database (Enterprise Edition, v9.0.1.1.1) by using "Oracle9i Database Installation Guide, Release 1 (9.0.1.1.1) for Windows, Part Number A90162-01."

2) Install the Oracle9i Application Server (Standard Edition v1.0.2.2.2) by using "Oracle9i Application Server Installation Guide, Release 1 (v1.0.2.2.2) for Windows NT/2000, Part Number A95822-01."

3) Configure the Oracle Plug-in for Microsoft IIS by using "Oracle Plug-in for Microsoft IIS Configuration and User's Guide, Release 1.0.2 for Windows, Part Number A87355-01."

8.4 Operation with IBM WebSphere Application Server

IBM WebSphere® Application Server is a leading Java™ technology-based Web application server, integrating enterprise data and transactions with the e-business world. It provides a rich, e-business application deployment environment with a complete set of application services including capabilities for transaction management, security, clustering, performance, availability, connectivity and scalability.

Procedures for installing Version 5.1.x on Microsoft IIS can be found on IBM's web site at:

http://publib.boulder.ibm.com/infocenter/wasinfo/v5r1//index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/tins_manualWebIIS.html

There are no further steps required for its use with the AirZip Accelerator for IIS.

9 Contact Information

To report problems and/or provide feedback, please contact AirZip.

Additional help resources or updates may be available by emailing support@airzip.com

Last page of document