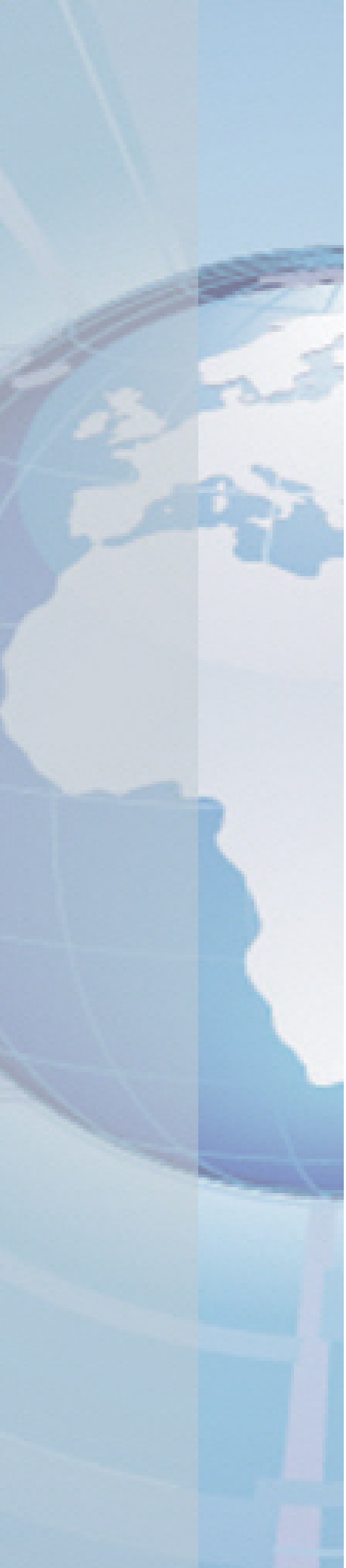

Whitepaper

Configuring the LISTSERV® Web Interface for IIS 7.X

May 10, 2011

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Information in this document is subject to change without notice. Companies, names, and data used for example herein are fictitious unless otherwise noted. Some screen captures have been cropped and/or edited for emphasis or descriptive purposes.

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L-Soft invites comments on its documentation. Please feel free to send your comments by email to: manuals@lsoft.com

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Introduction

These instructions apply to:

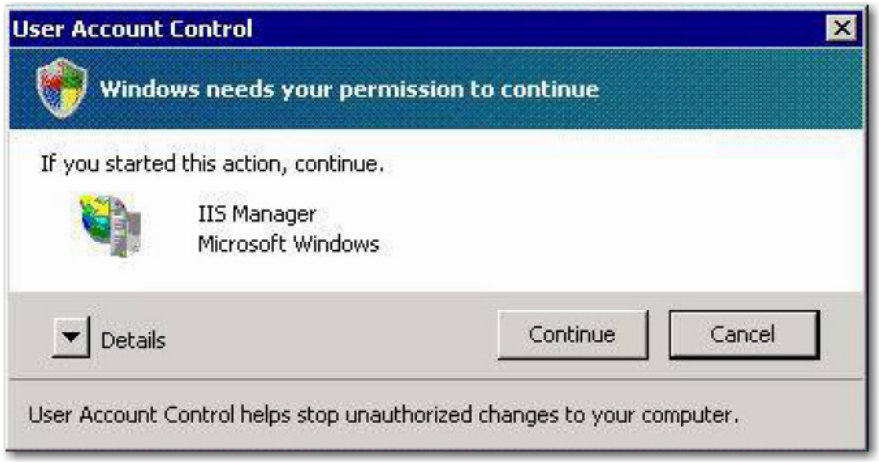
Windows 2008
Internet Information Server IIS 7.x

These instructions apply only to Windows Server 2008 with Internet Information Server IIS 7.x. These instructions could also work for IIS 7 on Windows 7; however, some of the screen shots in this document may appear slightly different.

Before You Begin

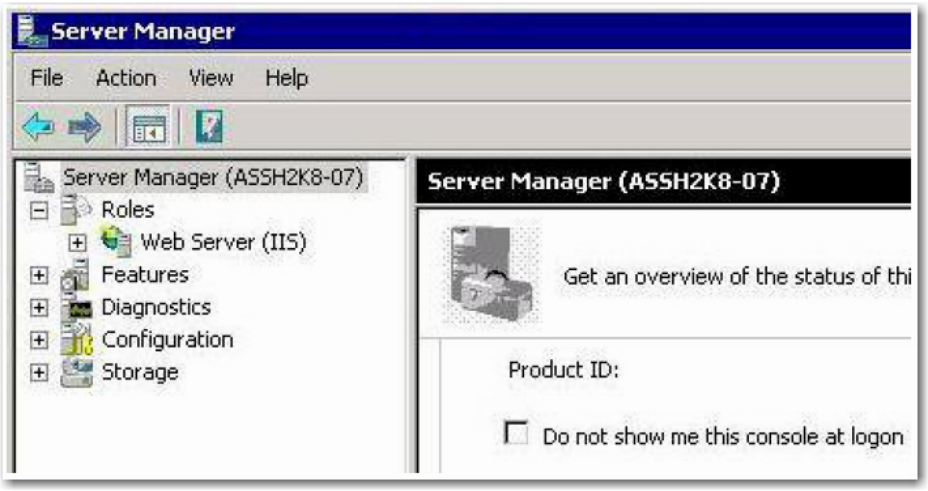
To successfully install LISTSERV and configure its WWW interface, you MUST be logged in as the Local Server Administrator or use an account that is a member of the Local Server Administrators Group (i.e. not a domain Administrators account). Even so, you may at times be confronted by Windows UAC Security warnings:

We don't recommend turning off UAC so simply click **[Continue]** and proceed whenever you are challenged by this.

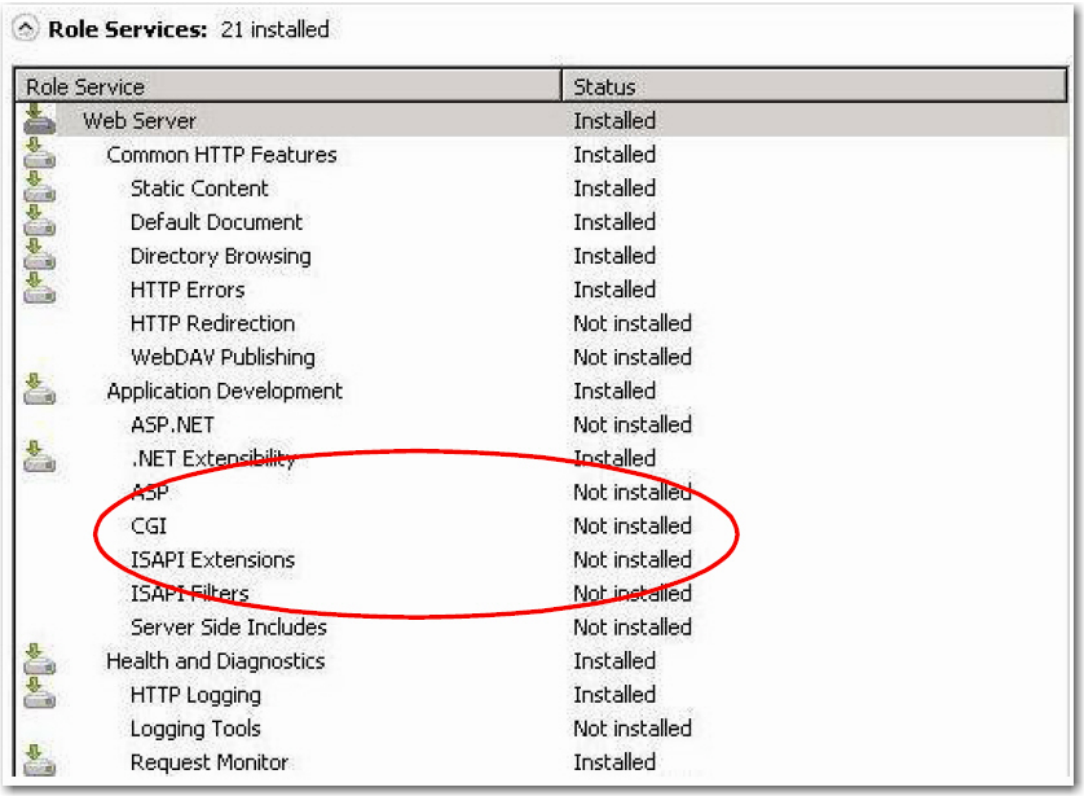


In addition, you need to verify that certain necessary components or modules of IIS 7 are installed on your system in order to be able to successfully configure IIS 7 and LISTSERV. Please check these first and if necessary, install before proceeding.

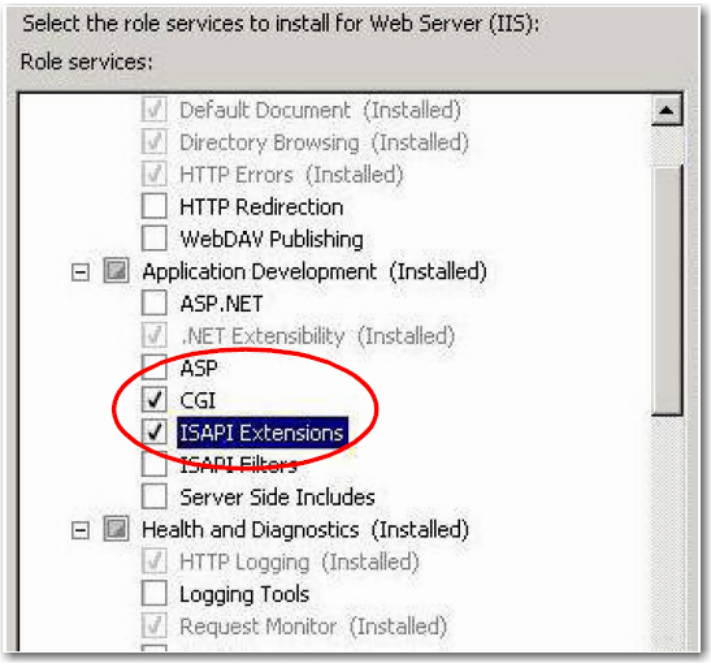
Verify that the **ISAPI extensions** and **CGI** are installed with IIS 7. Open the Windows Server Manager, and then scroll down to Roles Summary for IIS.



Double-click to display the currently installed roles for IIS



If the **CGI** and **ISAPI Extensions** roles are not installed, click on **Add Roles** and select them from the list. These may not be included in the default installation for IIS 7, but they are required for the LISTSERV WWW interface to run. You may need the original Installation Media to add these roles.



Important: Users of the IIS SMTPSVC, please see the special note on last page of this document for an additional role (IIS 6 Management Console) that should be installed at this time.

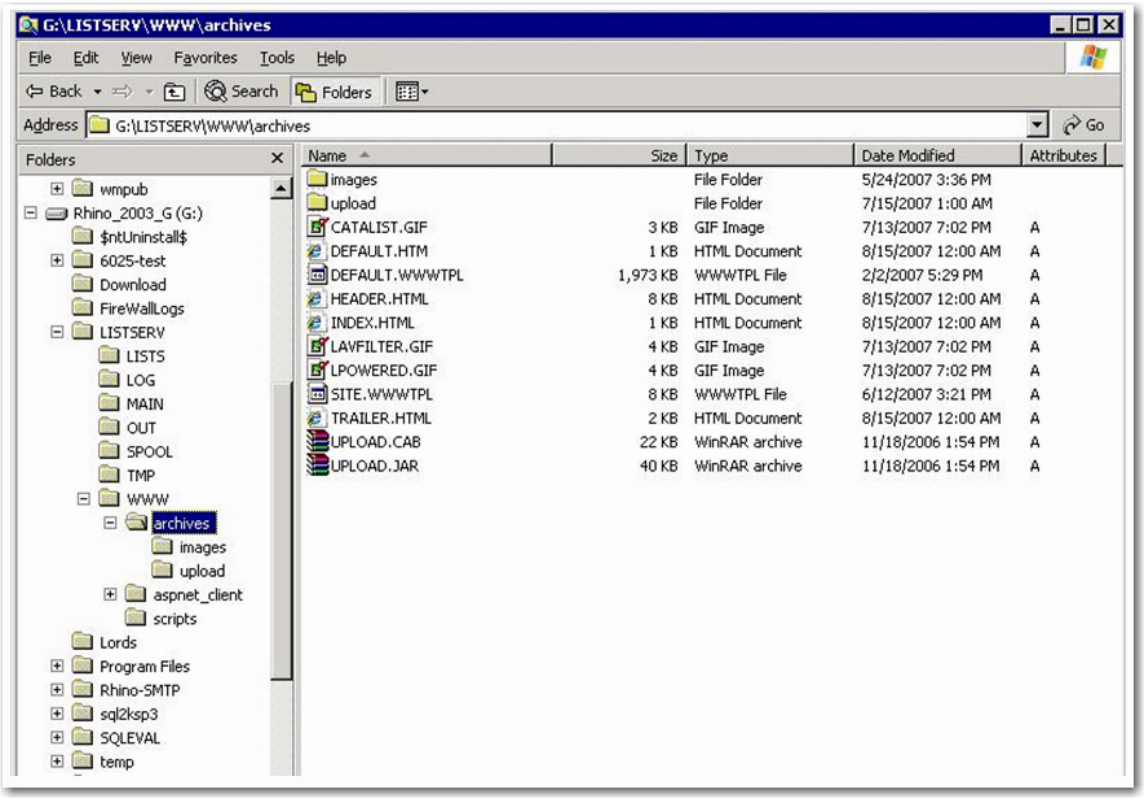
Step 1: Creating Additional Required Directories

Before you begin, stop LISTSERV if it is currently running.

After the normal installation of LISTSERV, make the following additional directories if they do not already exist:

`x:\LISTSERV\LISTS`	(parent directory for list message archive files)
`x:\LISTSERV\WWW`	(parent directory for LISTSERV www 'root' dir)
`x:\LISTSERV\WWW\ARCHIVES`	(this will be LISTSERV www 'root' dir)
`x:\LISTSERV\WWW\ARCHIVES\UPLOAD`	(this dir is required)
`x:\LISTSERV\WWW\SCRIPTS`	(where LISTSERV wa.exe cgi script will run)

Note: The directory names are the defaults specified in a default installation. If you have chosen not to use these defaults, then you must make any necessary transpositions. The Drive letter is shown as x:\ because we do not know where you have installed LISTSERV and IIS. IIS defaults to installing on C: on most cases, but not all. Please make appropriate substitutions where necessary.



Open the LISTSERV Site Configuration file (`x:\LISTSERV\MAIN\site.cfg`) in Notepad and make the following settings or changes:

```
WWW_ARCHIVE_CGI= /scripts/wa.exe
WWW_ARCHIVE_DIR= x:\LISTSERV\WWW\ARCHIVES
SITE_CONFIG_CGI_DIR= x:\LISTSERV\WWW\SCRIPTS
```

Save the file.

Manually copy `x:\LISTSERV\MAIN\wa.exe` to `x:\LISTSERV\WWW\SCRIPTS`.

Do not start LISTSERV yet.

Step 2: Setting the NTFS File & Directory Permissions

Note: The 'Everyone' user is fundamentally unsecure and should not be used in a properly secured NTFS file system.

Security settings, as below, are most easily set or checked using the Windows Explorer program. First, select the desired directory, right-click on **Properties**, and then choose the **Security** tab.

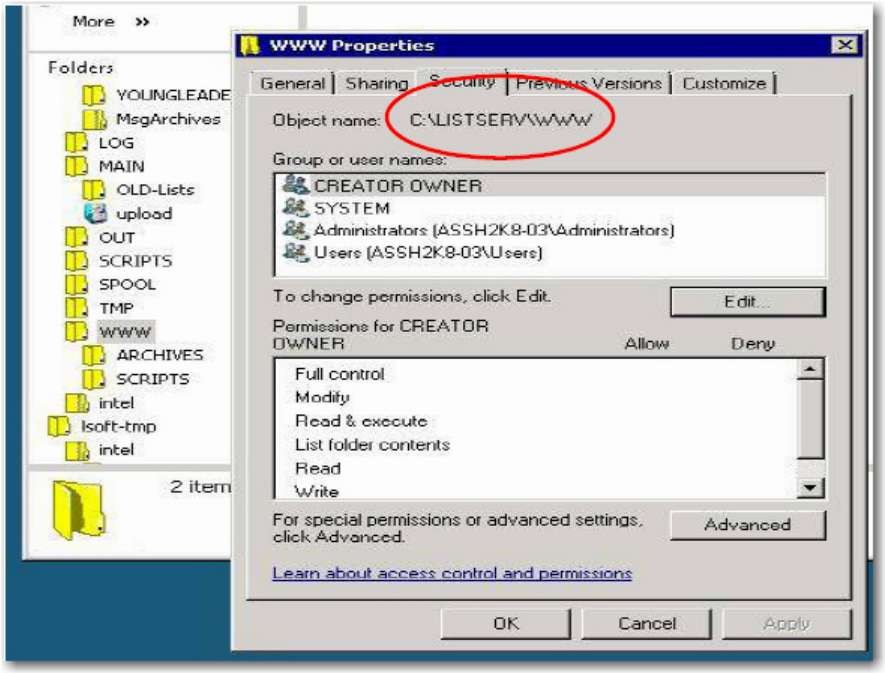
Important: If you do not see the Security tab, you do not have Administrator level permissions and you cannot complete this setup until you do.

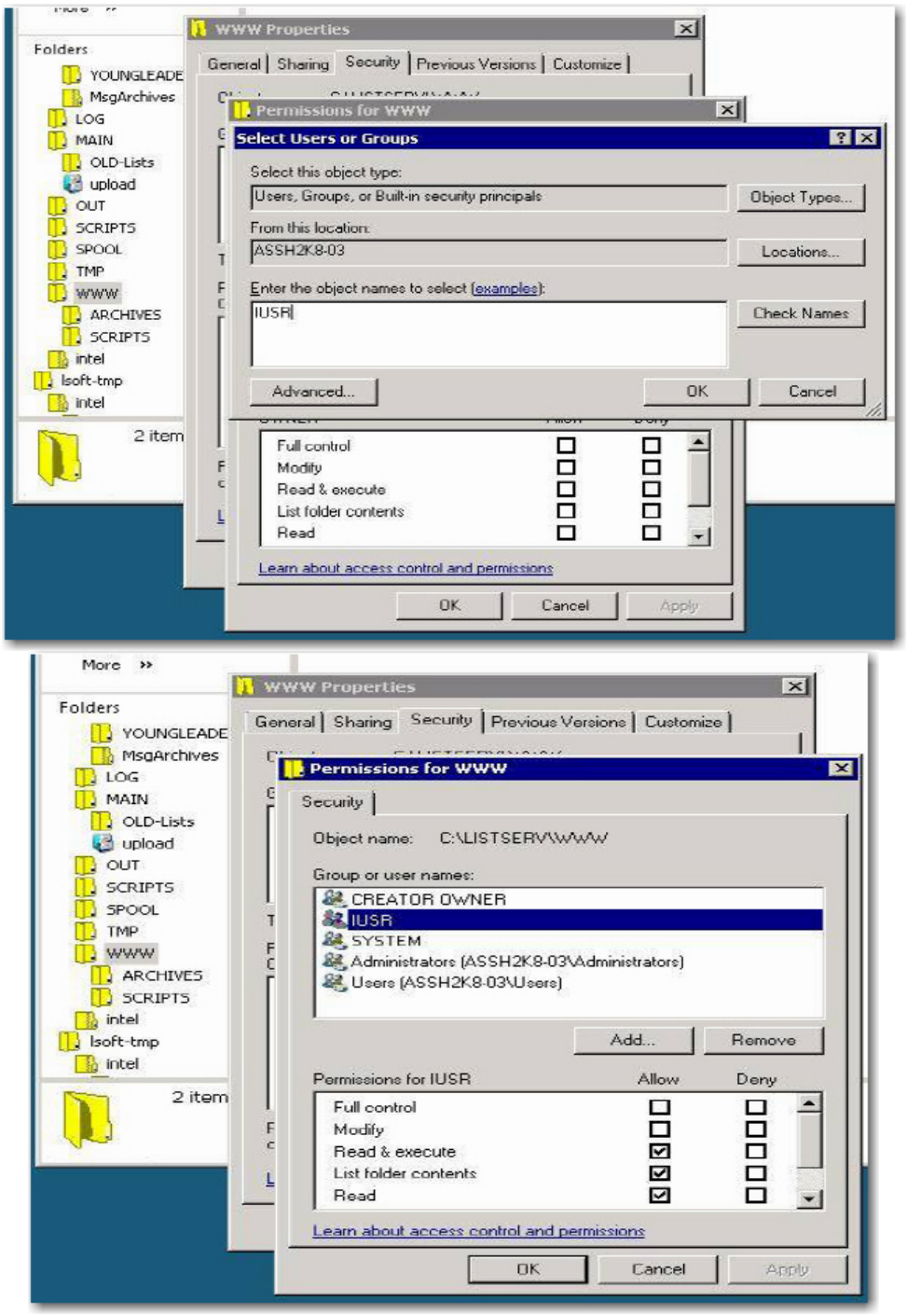
IF the IUSR-* user (or Administrators Group or SYSTEM user) is not present, then you will need to click the **[Edit]** button to add a new user. Be sure the search location is only the Local_Machine user list, **not** a domain user list.

In early versions of Windows, the local IUSR account was IUSR_machinename; but in Windows 2008, the user account is now simply IUSR.

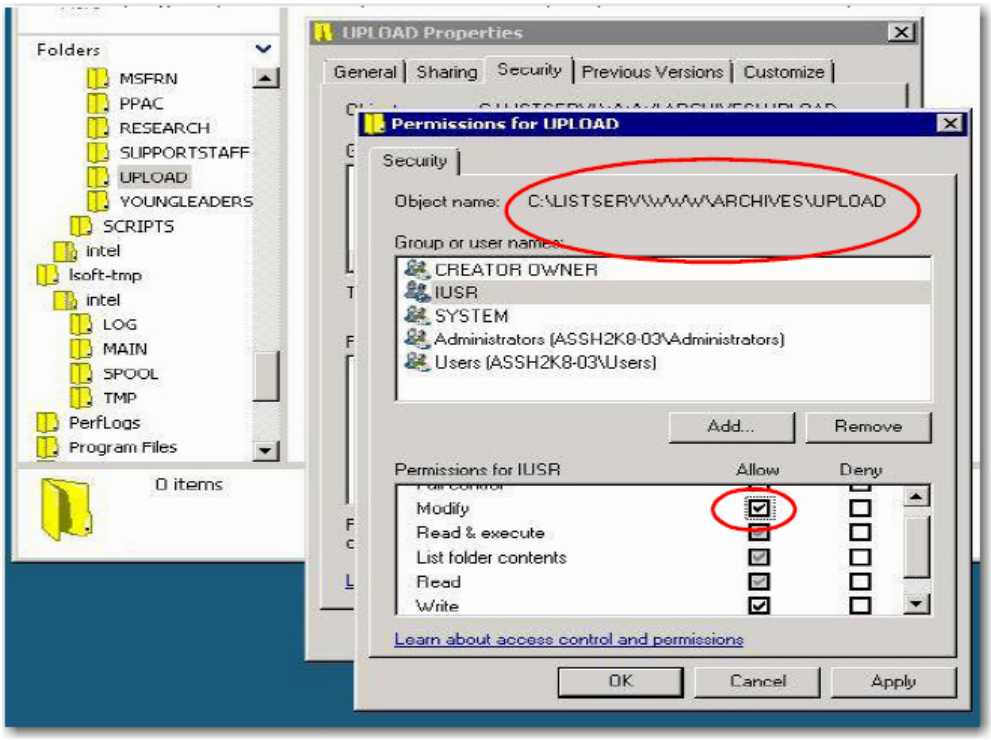
Directory	Permissions
`x:\LISTSERV\` (and all subdirectories)	**Administrators:** Full Control **System:** Full Control
`x:\LISTSERV\LISTS` (and all subdirectories)	**Administrators:** Full Control **System:** Full Control **IUSR:** READ (anonymous internet user account)
`x:\LISTSERV\WWW` (and all subdirectories)	**Administrators:** Full Control **System:** Full Control **IUSR:** READ (anonymous internet user account)
`x:\LISTSERV\WWW\SCRIPTS`	**Administrators:** Full Control **System:** Full Control **IUSR:** READ & EXECUTE (anonymous internet user account)
`x:\LISTSERV\WWW\ARCHIVES\UPLOAD` **Notes:** This is the ONLY directory where the IUSR account needs 'MODIFY' permissions, which includes 'WRITE'. The IUSR account may also have special WRITE-DENY permissions on all directories. You may need to override this for this directory only.	**Administrators:** Full Control **System:** Full Control **IUSR:** READ, WRITE, MODIFY (anonymous internet user account)

Start with the x:\LISTSERV\WWW directory:

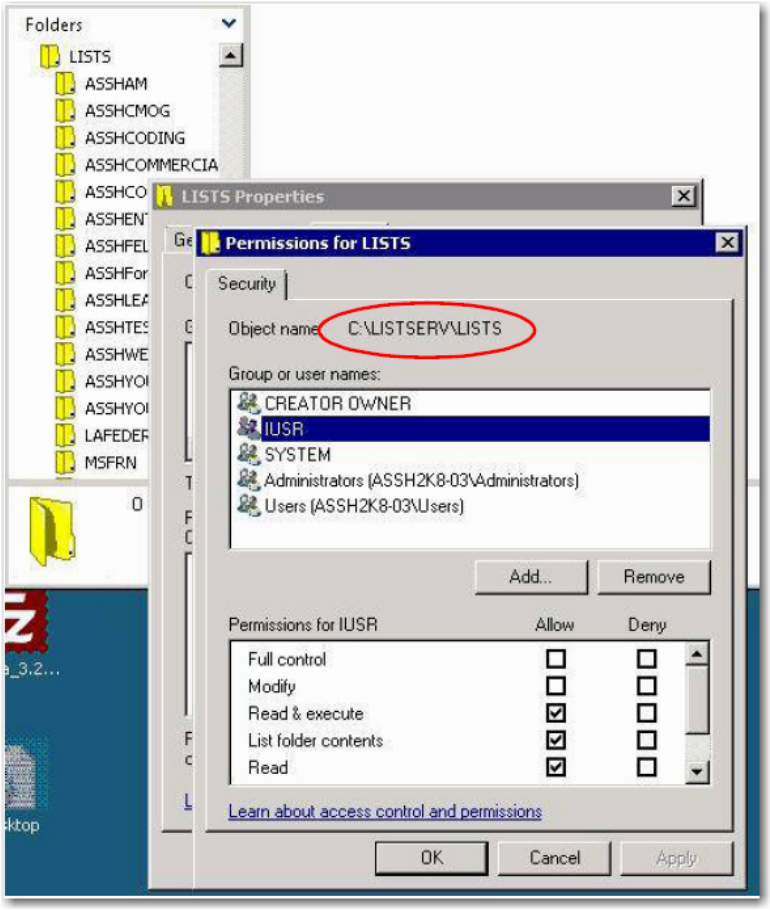




Add **Modify** rights (automatically includes **Write**) only on the UPLOAD directory:



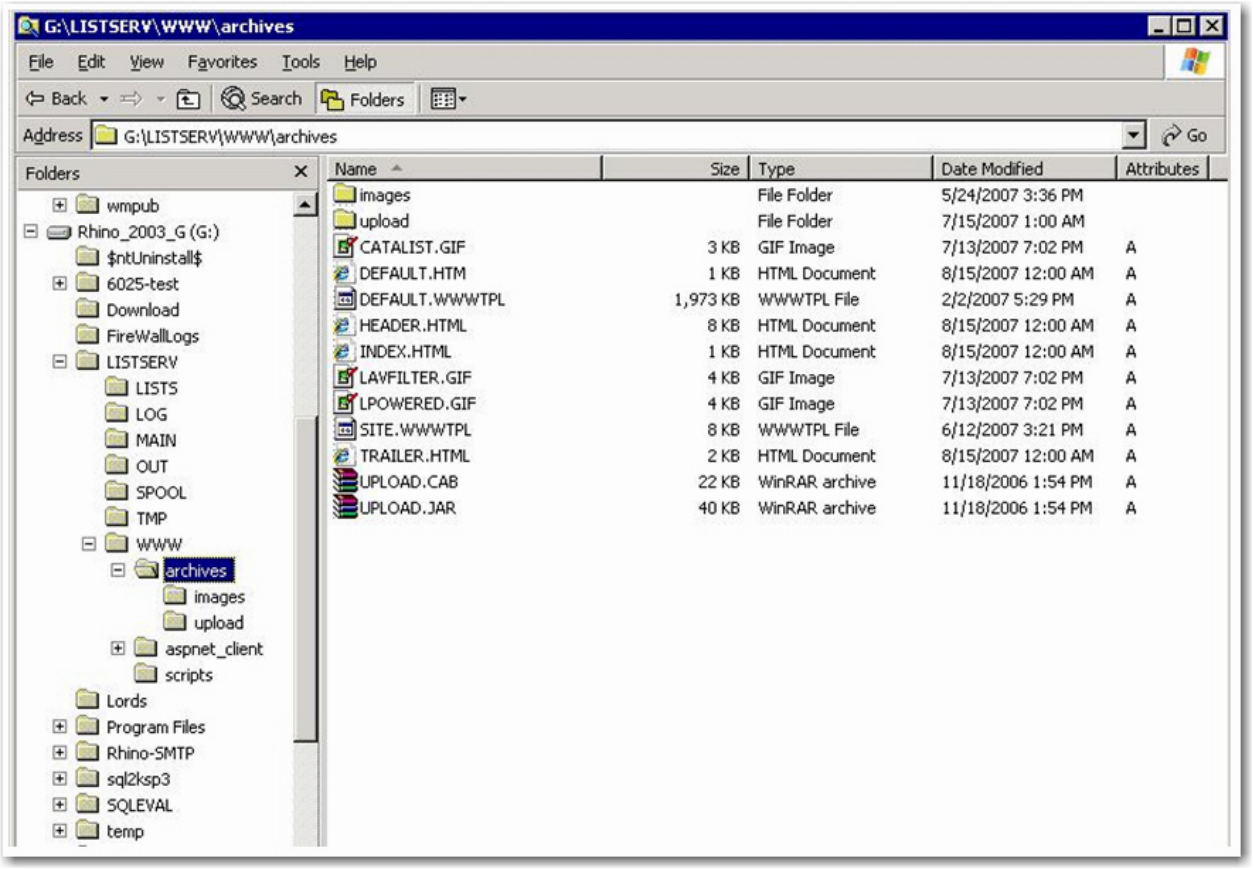
Also, set the READ permissions for IUSR on the x:\LISTSERV\LISTS directory:



Now start LISTSERV.

Look in the `x:\LISTSERV\WWW\ARCHIVES` directory. You should see several files, including `DEFAULT.WWWTPL`, `HEADER.HTML`, `TRAILER.HTML`, `INDEX.HTML`, and `DEFAULT.HTM` (more files may also be there, but at least these). This is a good sign; it means LISTSERV recognizes the directory and can write its files there.

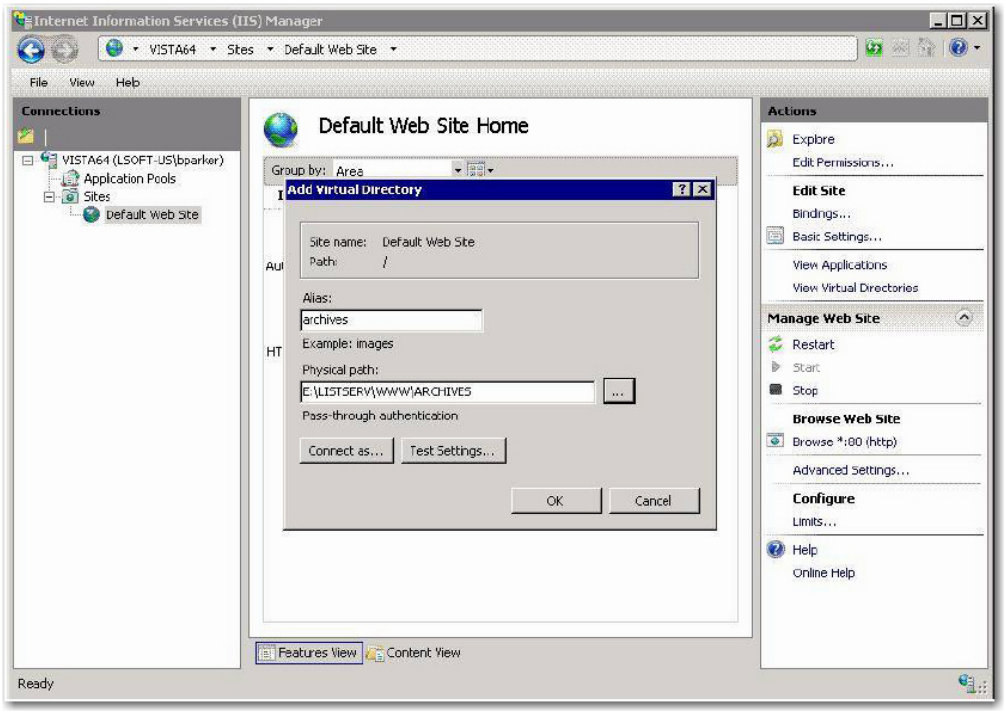
Important: If this does not happen, then there is a problem. You should check the LISTSERV log file (x:\LISTSERV\LOG\LISTSERV-yyyymmdd.LOG) for any error messages. You may ask L-Soft Support for help interpreting the log file. Repeat the steps leading to this point to verify all settings. Do **NOT** pass here until this step performs OK.



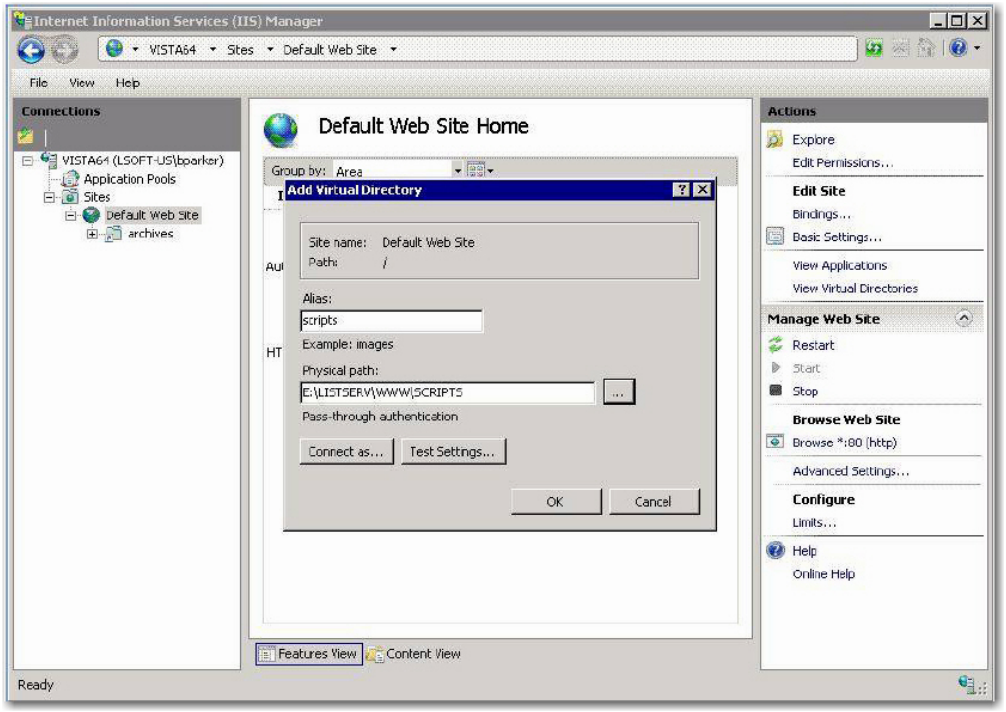
Step 3: Creating Virtual Directories in IIS

Open the IIS Management console (also known as Internet Services Manager). Select the name of your machine and click on **+** to expand the options. Perform the following actions:

1. Select **Sites**
    a. Click on **+** to expand the options
    b. Select and right-click on **Default Web Site**
    c. Select **Add Virtual Directory**
    d. Select **Virtual Directory**
    e. Set **Alias** to **archives**
    f. Click **[Browse]** to set the true directory path `to x:\LISTSERV\WWW\ARCHIVES`
    g. Click **[OK]**



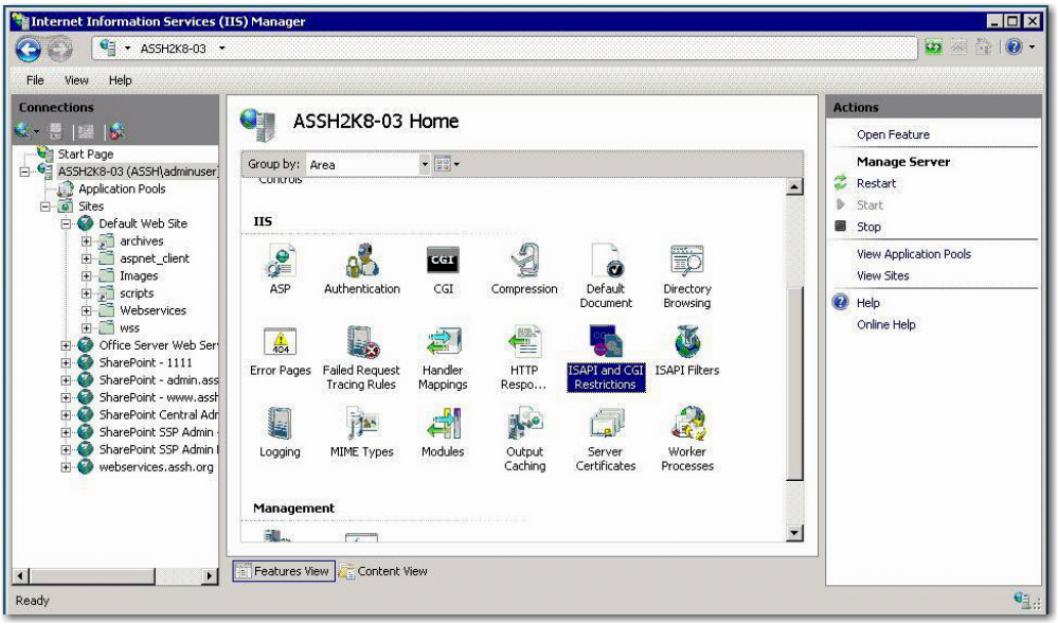
2. Select **Default Web Site**
    a. Select and right-click on **Default Web Site**
    b. Select **Add Virtual Directory**
    c. Set **Alias** to **scripts**
    d. Set the true directory path to `x:\LISTSERV\WWW\SCRIPTS`
    e. Click **[OK]**



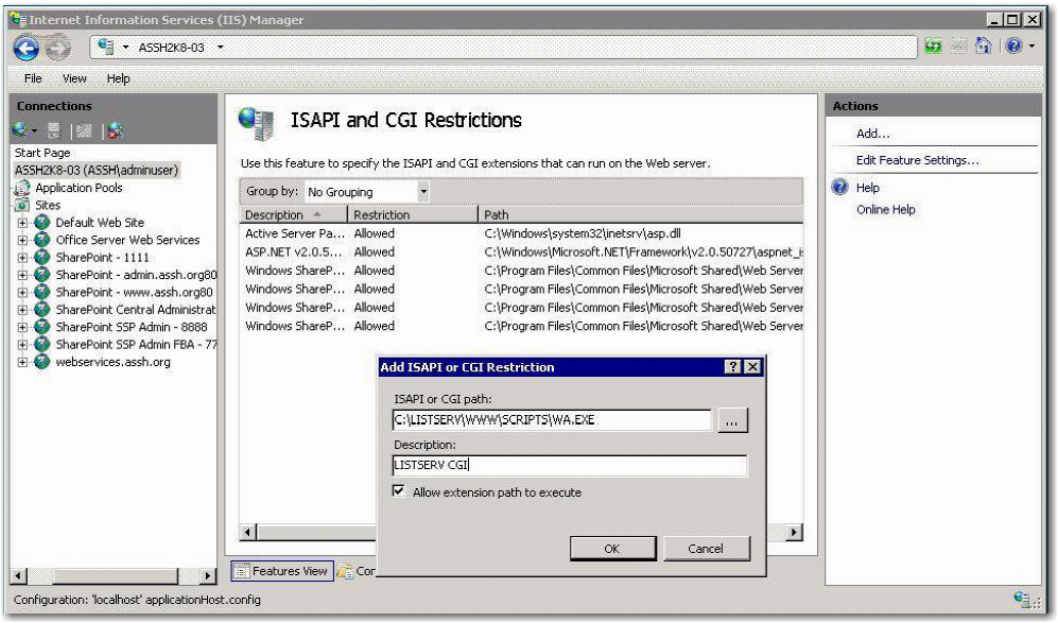
Step 4: Setting the IIS Web Extension Properties

IIS 7 implements a variety of restrictions on ASP, CGI, and other executable scripts that are significantly stronger than previous versions of IIS. You must now configure IIS to allow it to run the wa.exe script.

1. From the IIS 7 main screen, double-click on **ISAPI and CGI Restrictions**.



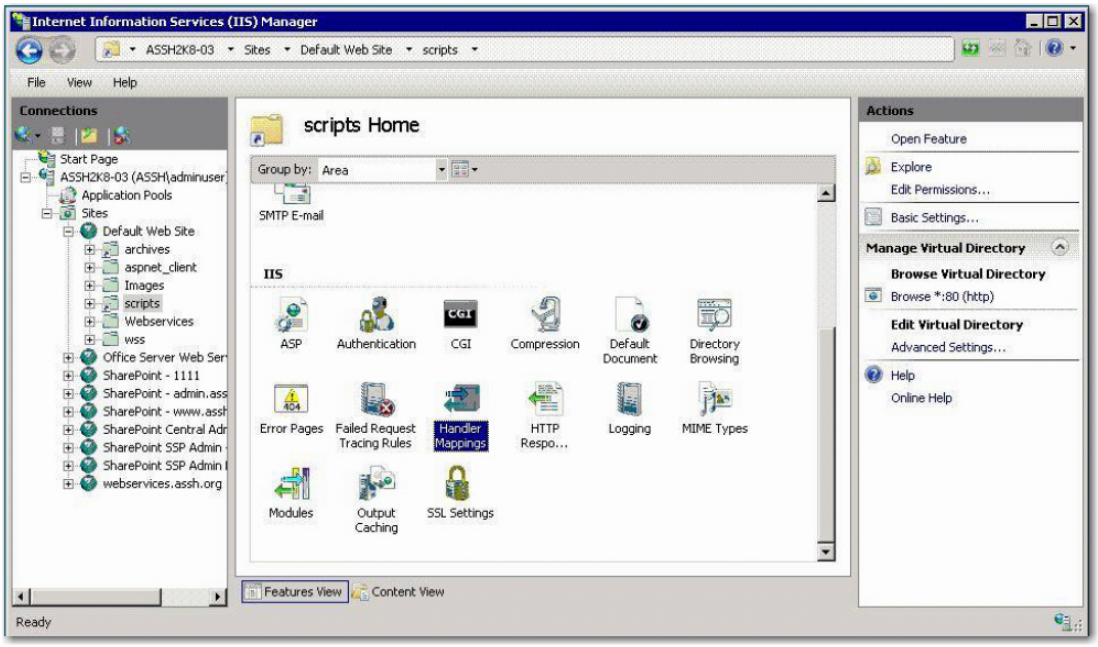
2. Click on the **Add** link in the **Actions** box on the right side.
3. For Path: click the **[...]** button and browse to find x:\LISTSERV\WWW\SCRIPTS\wa.exe
4. For the **Description**, enter 'LISTSERV-CGI' (without the quotes).
5. Check the **Allow extension path to execute** box.
6. Click **[OK]**



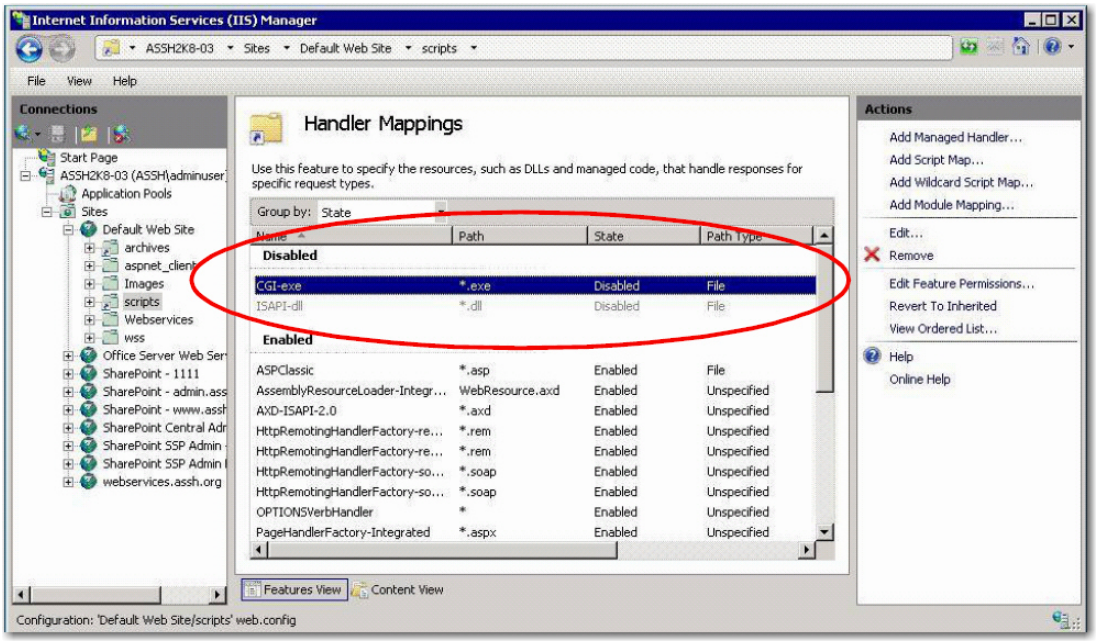
7. To allow the execution of wa.exe in the x:\LISTSERV\WWW\SCRIPTS directory:

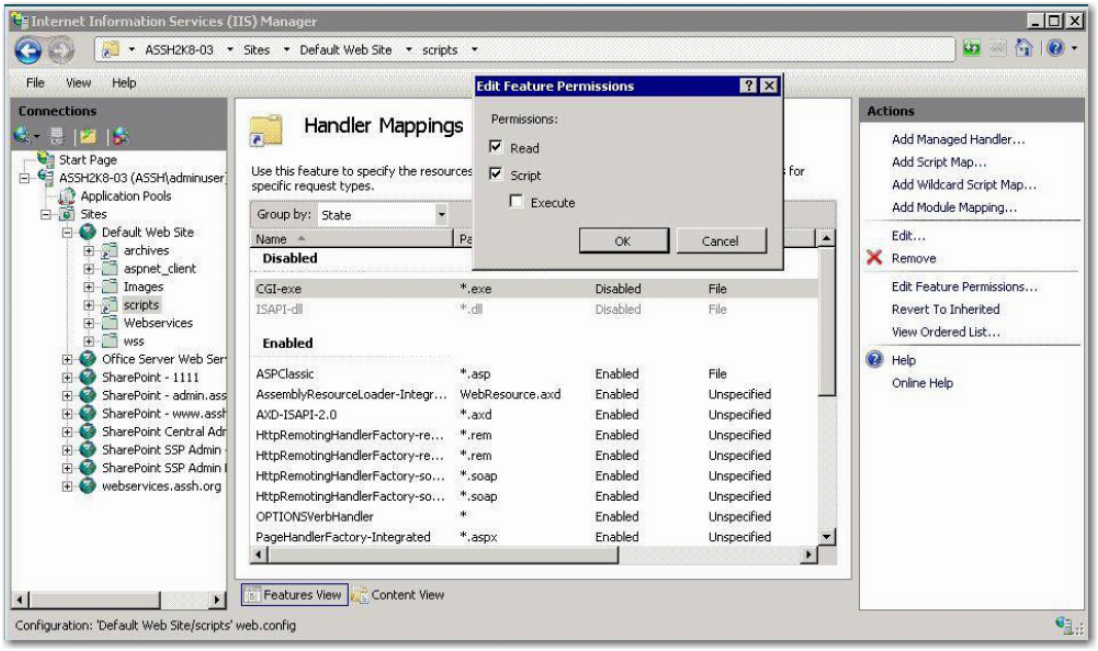
a. Browse to the ~\scripts directory (Left window)

b. Double-click on **Handler Mappings** (Middle window)

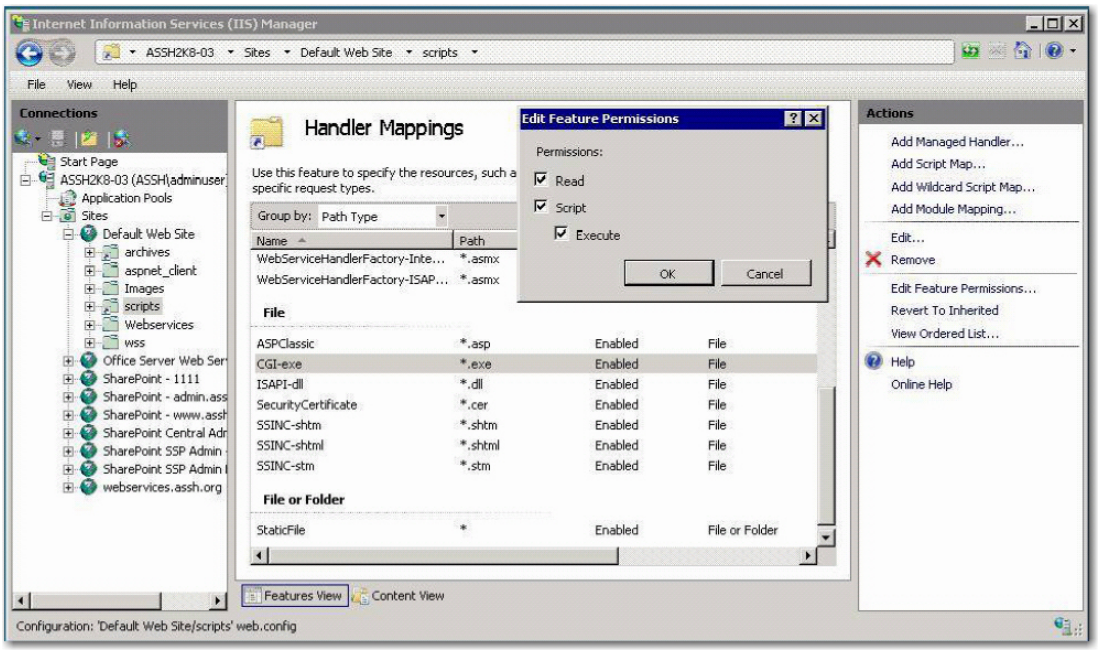


c. Find **CGI-exe** in the (grayed out) list of Disabled extensions, and then click **Edit Feature Permissions** (Right).





d. Check the **Execute** box (the background will suddenly change), and then click **[OK]**.



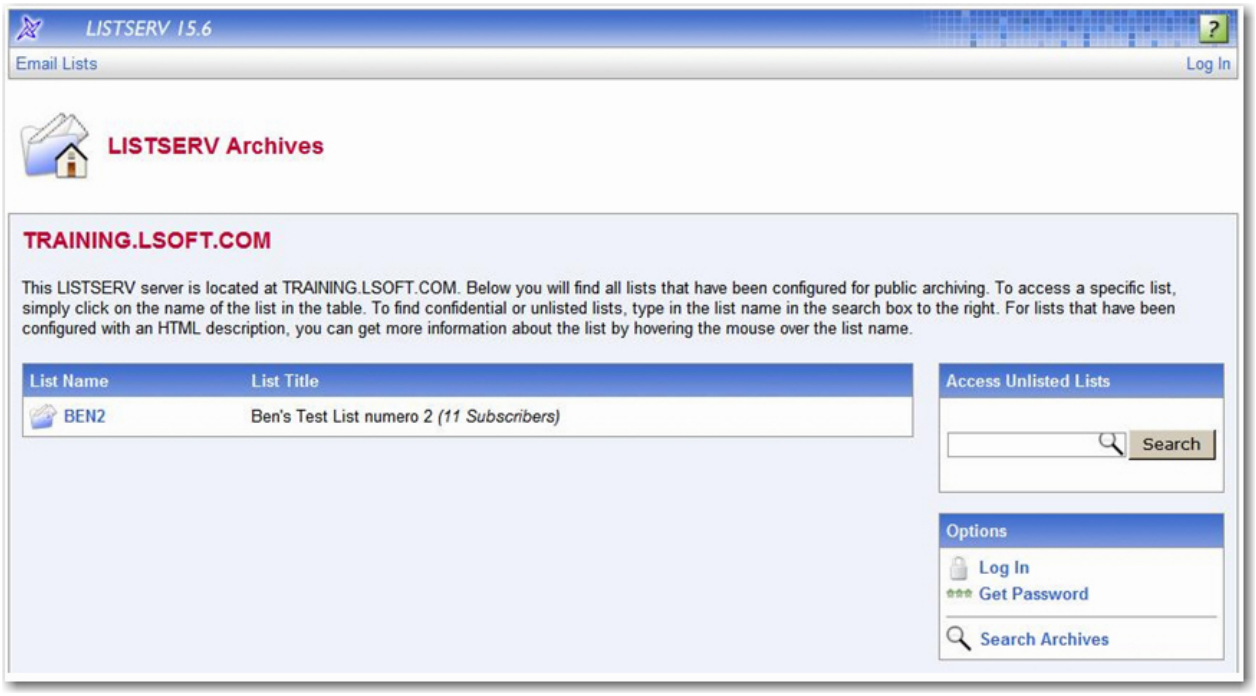
Step 5: Final Steps

Windows Server 2008 implements a software firewall in Windows. By default, this firewall, if enabled, will prevent IIS from serving any web pages. The same is true of SMTP services (receiving email). You must configure the Windows Firewall to permit HTTP services and SMTP services to work. We do not recommend disabling the Firewall unless you are fully aware of the risks or you have external means of providing similar protection for the server.

Sometimes it is necessary to stop/restart the Default Web Site in the IIS Manager at this point. It does not hurt to do so now.

Now try to access http://your_server_name/scripts/wa.exe from a local web browser.

You should see the LISTSERV Archives page.



If this does not work or if you get a 'page cannot be displayed' error, try the link http://your_server_name/archives/header.html (this is a static page link that should always work).

If you get the LISTSERV Archives page, then click on **Log In**.

The Login Required page should be displayed. Enter your email address and personal LISTSERV password to login. If you do not have a personal LISTSERV password (different from the CREATEPW stored in site.cfg), then you can create one by clicking on the **Get a new LISTSERV Password** link.

If either URL doesn't work, then check the network access permissions between your desktop machine and the LISTSERV machine. Your network rules may prevent access to that machine. Also, be sure the Fully Qualified Domain Name of your server has been entered in local/internal DNS and points to the correct IP address.

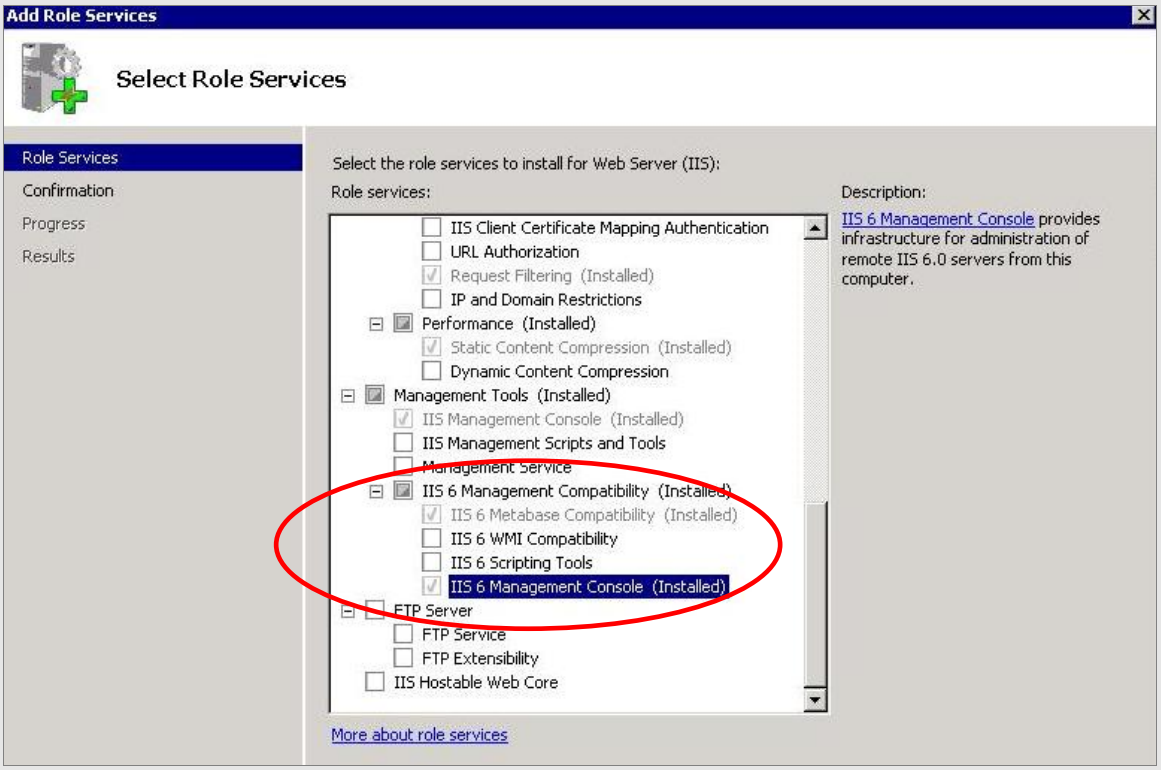
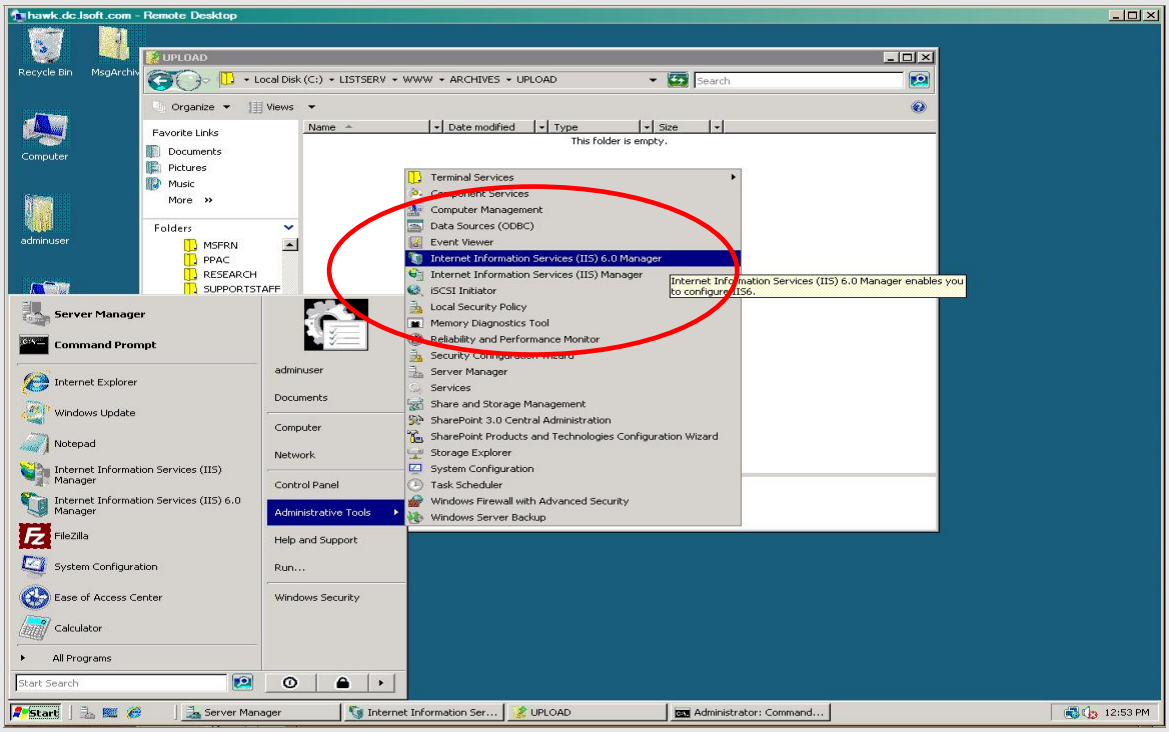
If both URLs take you to a Windows login screen asking for a Windows account user login and password, then your NTFS file/directory permissions above are not correct. Revisit the above section on these settings.

If you can get this far, then you should be OK.

If not, then work back to the last successful checkpoint, and then work forward again.

If you encounter problems, you should reference the IIS log file. This is typically located at C:\inetpub\logs\LogFiles. For help interpreting IIS Status Codes see http://support.microsoft.com/kb/318380 .

Special Note for users of IIS SMTPSVC: IIS 7 Manager does not implement any means to configure the SMTPSVC. Instead, you need to install the IIS 6 Management Console from the Windows 2008 Installation Media; and then, use that to configure SMTPSVC in the same manner as for Windows 2003/IIS 6.



After Installing, the IIS6 Manager now appears on the **Administrative Tools** menu: