



Whitepaper

Configuring the LISTSERV® Web Interface for IIS 6.X

August 16, 2010

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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 2003 (SP1 or later)
- Internet Information Server IIS 6.x

These instructions are generally similar for Windows NT 4.0/IIS 4.0 or Windows 2000/IIS 5.0, but nomenclature of some setup menu buttons may be slightly different. If you would like a copy of our separate paper(s) on either NT 4.0/IIS 4 or W2000/IIS5, please contact L-Soft support.

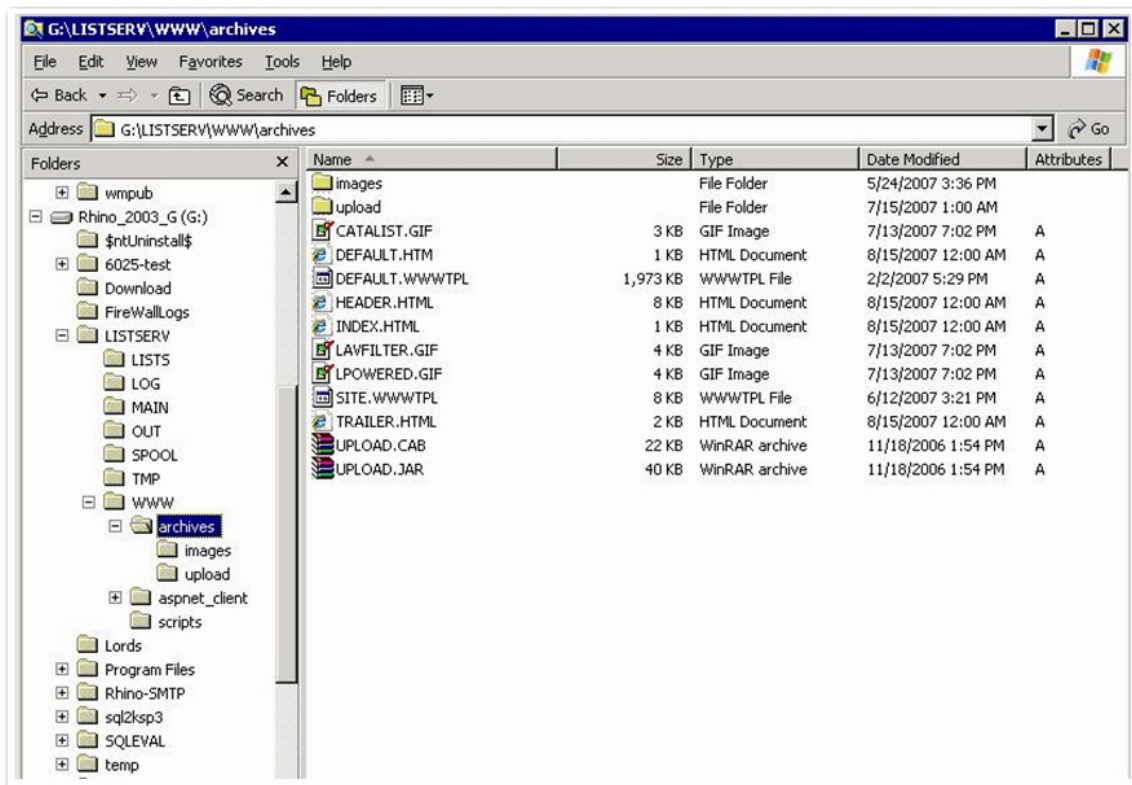
Step 1: Creating Additional Required Directories

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

After the normal installation of LISTSERV, create the following 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

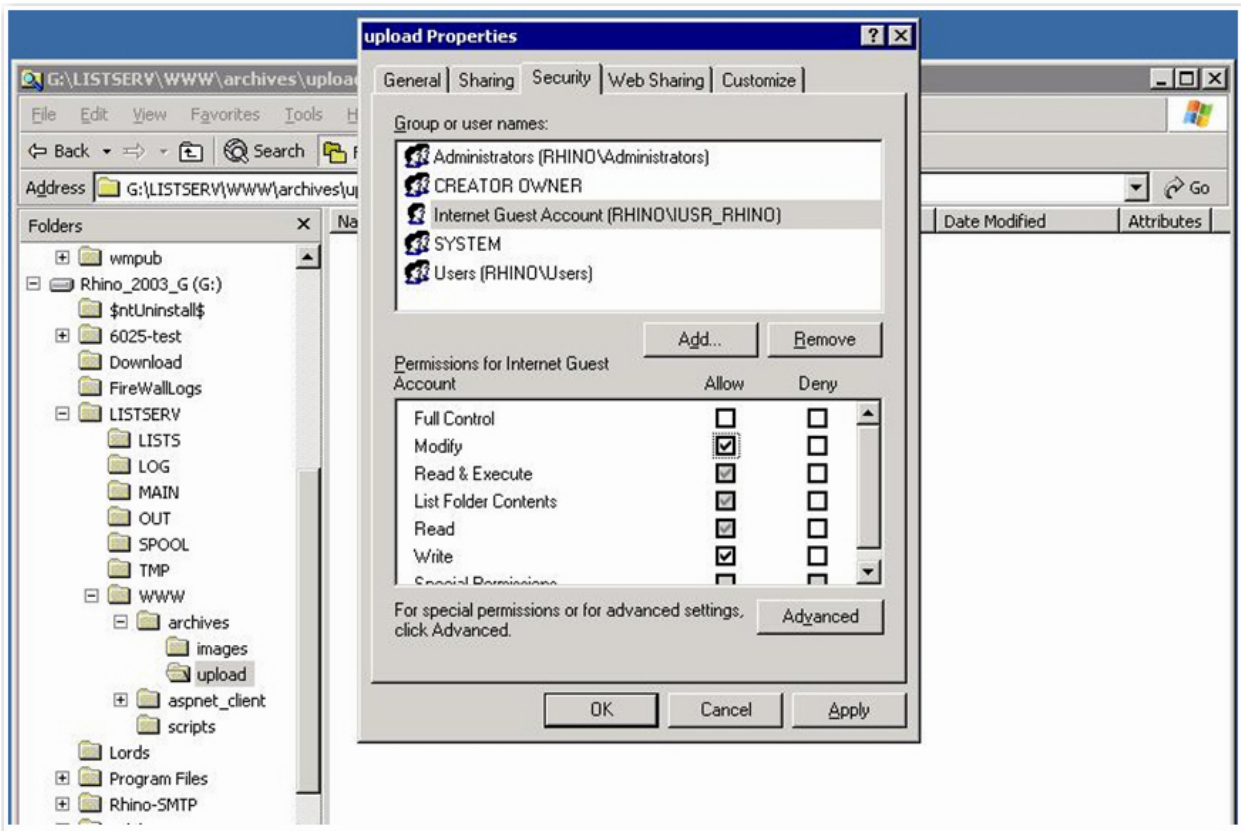
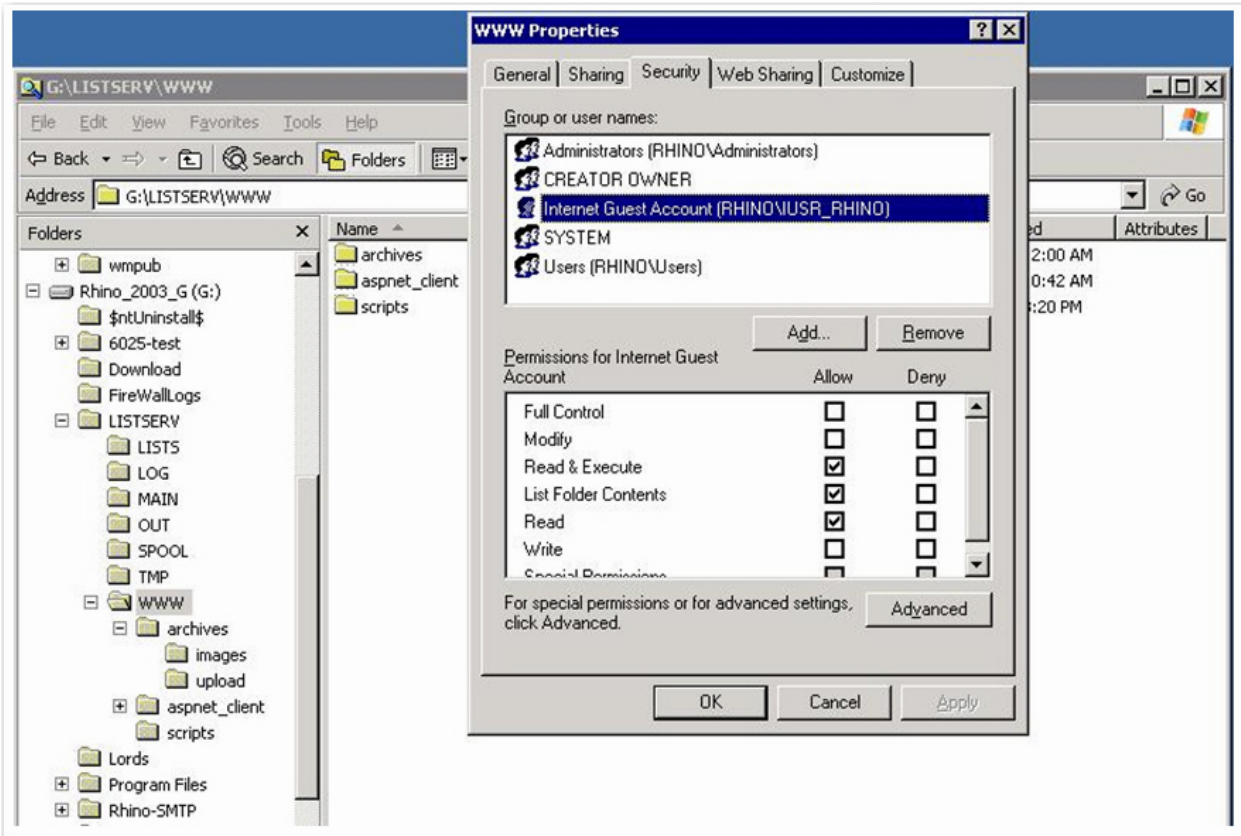
Note: The 'Everyone' user is fundamentally unsecure and should not be used in a properly secured NTFS file system.

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 **[Add]** button. Be sure the search location is only the Local_Machine user list, not a domain user list.

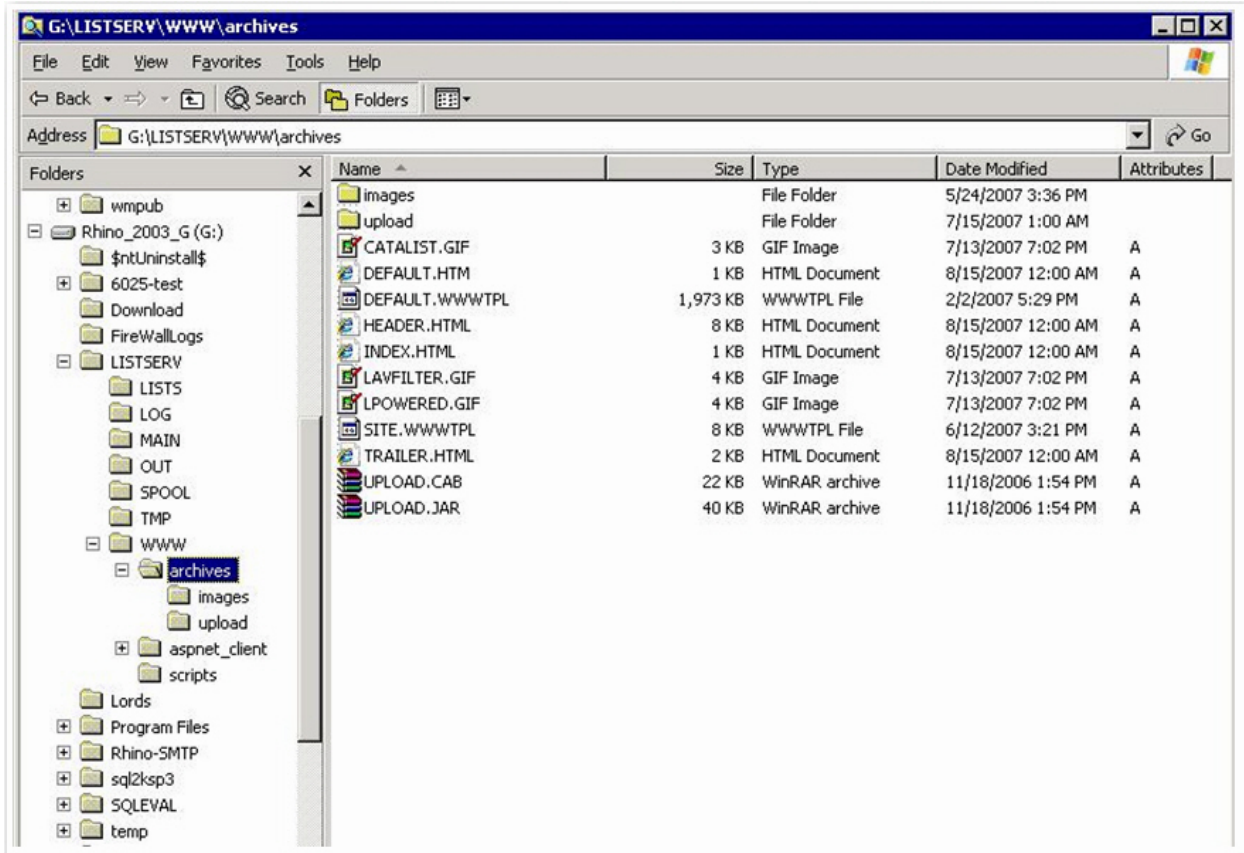
Directory	Permissions
x:\LISTSERV\ (and all subdirs or child directories)	Administrators: Full Control System: Full Control
x:\LISTSERV\LISTS (and all subdirs or child directories)	Administrators: Full Control System: Full Control IUSR_* : READ (anonymous user guest account for your machine)
x:\LISTSERV\WWW (and all subdirs or child directories)	Administrators: Full Control System: Full Control IUSR_* : READ (anonymous user guest account for your machine)
x:\LISTSERV\WWW\SCRIPTS	Administrators: Full Control System: Full Control IUSR_* : READ & EXECUTE (anonymous user guest account for machine)
x:\LISTSERV\WWW\ARCHIVES\UPLOAD Note: This is the ONLY directory where the IUSR_* account needs 'WRITE+MODIFY' permissions. In IIS6, the IUSR_* account typically has 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 user guest account for machine)



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. Repeat the steps leading up to this point. Do **not** move on until this step is successful.

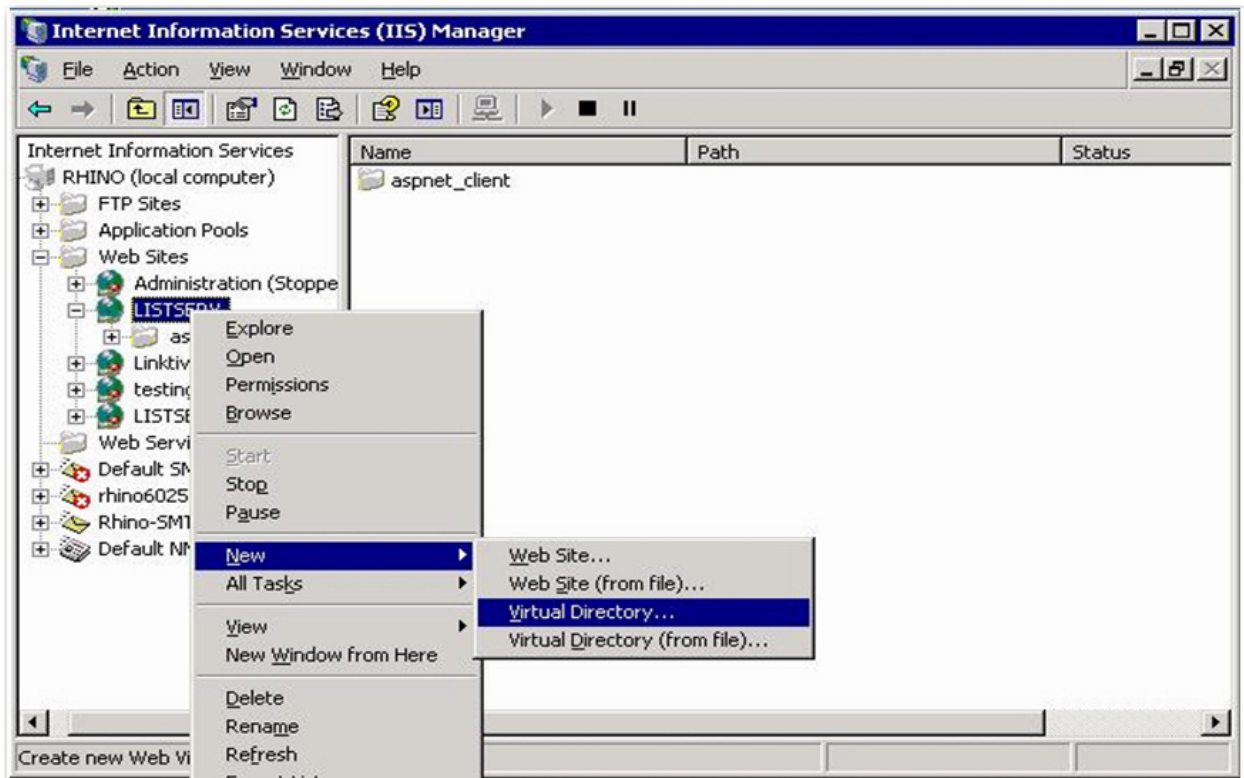


Step 3: Setting the IIS Management Permissions

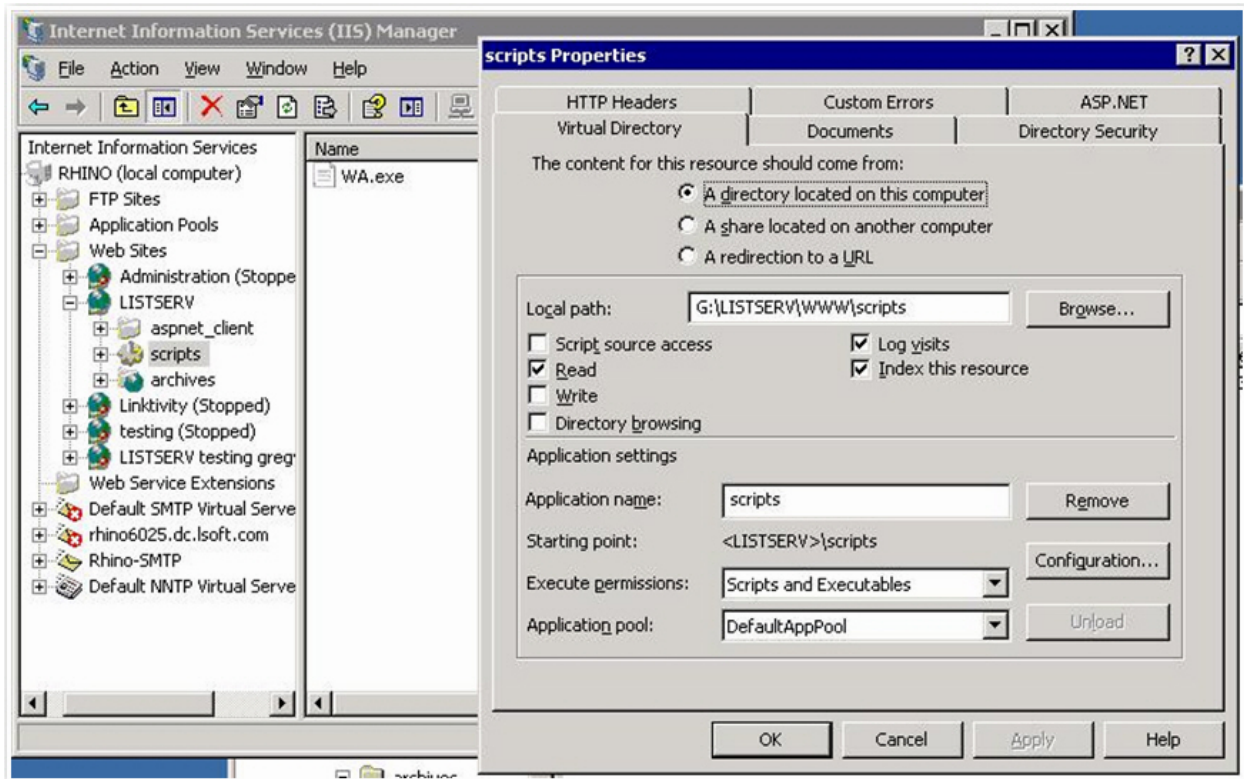
Open the IIS Management console (also known as Internet Services Manager). Select the name of your machine and click on **+** to expand the options. Perform the following actions:

1. Select **Web Sites**
 - a. Click on **+** to expand the options
 - b. Select and right-click on **Default Web Site**
 - c. Select **New**
 - d. Select **Virtual Directory**
 - e. Set **Alias** to **archives**
 - f. Set the true directory path to `x:\LISTSERV\WWW\ARCHIVES`
 - g. Set **IIS Permissions** to **READ (only)**
 - h. Click **[Next]**
 - i. Click **[Finish]**

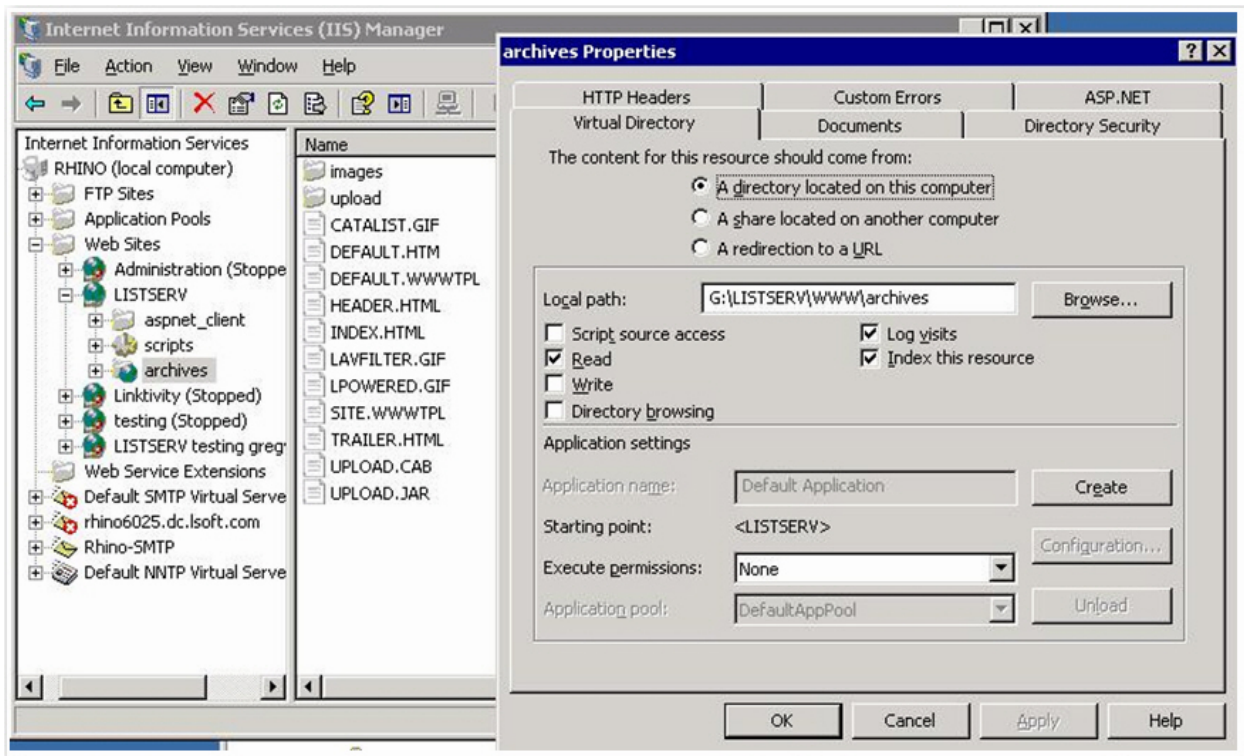
2. Select **Default Web Site**
 - a. Find and select **Scripts**
 - b. If not found, then
 1. Select and right-click on **Default Web Site**
 2. Select **New**
 3. Select **Virtual Directory**
 4. Set **Alias** to **scripts**
 5. Set the true directory path to `x:\LISTSERV\WWW\SCRIPTS`
 6. Set the **IIS Permissions** to **READ** and **EXECUTE** (CGI applications)
 7. click **[Next]**
 8. click **[Finish]**



3. Select and right-click on **Scripts**
 - a. Click on **Properties**. The first tab should be the Virtual Directory tab. Verify that the **A directory located on this computer** radio button is selected.
 - b. Verify that the directory path is `x:\LISTSERV\WWW\SCRIPTS`
 - c. Verify that the **Write** and **Directory Browsing** boxes are **not checked**
 - d. Verify that the **Execute Permissions** is **Scripts and Executables**
 - e. Verify that the **Application Pool** is **DefaultApplicationPool**
 - f. Select the Directory Security tab
 - g. Under **Anonymous access and authentication control**, click **[Edit...]**
 - h. Verify that the **Anonymous access** box is checked for **Authentication Methods**
 - i. Under this, click **[Edit...]**
 - j. Verify that the **Username** is **IUSR_*** (name of your machine)
 - k. Verify that there is a password (shown as xxxxxxxxxx). **Do not** change this password!
 - l. Click **[OK]**
 - m. Click **[Apply]** if you have changed anything; if nothing has changed, click **[OK]**
 - n. Click **[Apply]** if you have changed anything; if nothing has changed, click **[OK]**



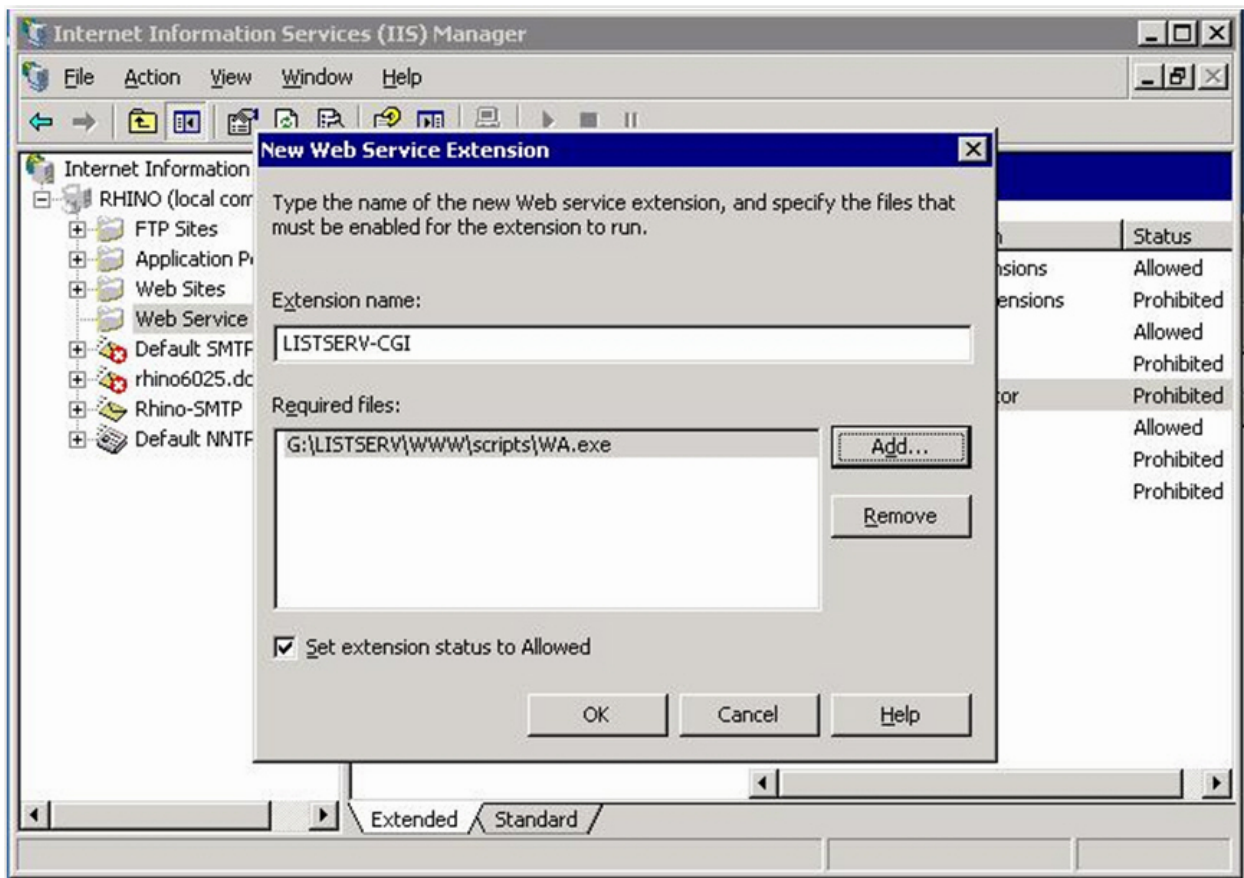
4. Select and right-click on **Archives**
 - a. Click on **Properties**
 - b. The first tab should be the Virtual Directory tab. Verify that the **A directory located on this computer** radio button is selected.
 - c. Verify that the directory path is `x:\LISTSERV\WWW\ARCHIVES`
 - d. Verify that the **Write** and **Directory Browsing** boxes are **not checked**.
 - e. Verify that the **Execute Permissions** is **None**
 - f. Select the Directory Security tab
 - g. Under **Anonymous access and authentication control**, click **[Edit...]**
 - h. Verify that the **Anonymous access** box is checked for **Authentication Methods**
 - i. Under this, click **[Edit...]**
 - j. Verify that the **Username** is **IUSR_*** (name of your machine)
 - k. Verify that there is a password (shown as xxxxxxxxxx). **Do not** change this password!
 - l. Click **[OK]**
 - m. Click **[Apply]** if you have changed anything; if nothing has changed, click **[OK]**
 - n. Click **[Apply]** if you have changed anything; if nothing has changed, click **[OK]**



Step 4: Setting the IIS Web Extension Properties

IIS 6 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. Select **Web Service Extensions**. Make sure that the Extended tab is at the bottom. The default settings for all types of scripts (ASP, ISAPI, etc.) are prohibited. Some may already be enabled, depending what you may have running on your web site.
2. Select the **Add a new Web service extension** option.
 - a. For **Extension Name**, enter 'LISTSERV-cgi' (without quotes)
 - b. For **Required files**, click **[Add]** and browse to find
x:\LISTSERV\WWW\SCRIPTS\wa.exe
 - c. Click **[OK]**
 - d. Check the **Set extension status to Allowed** box
 - e. Click **[OK]**



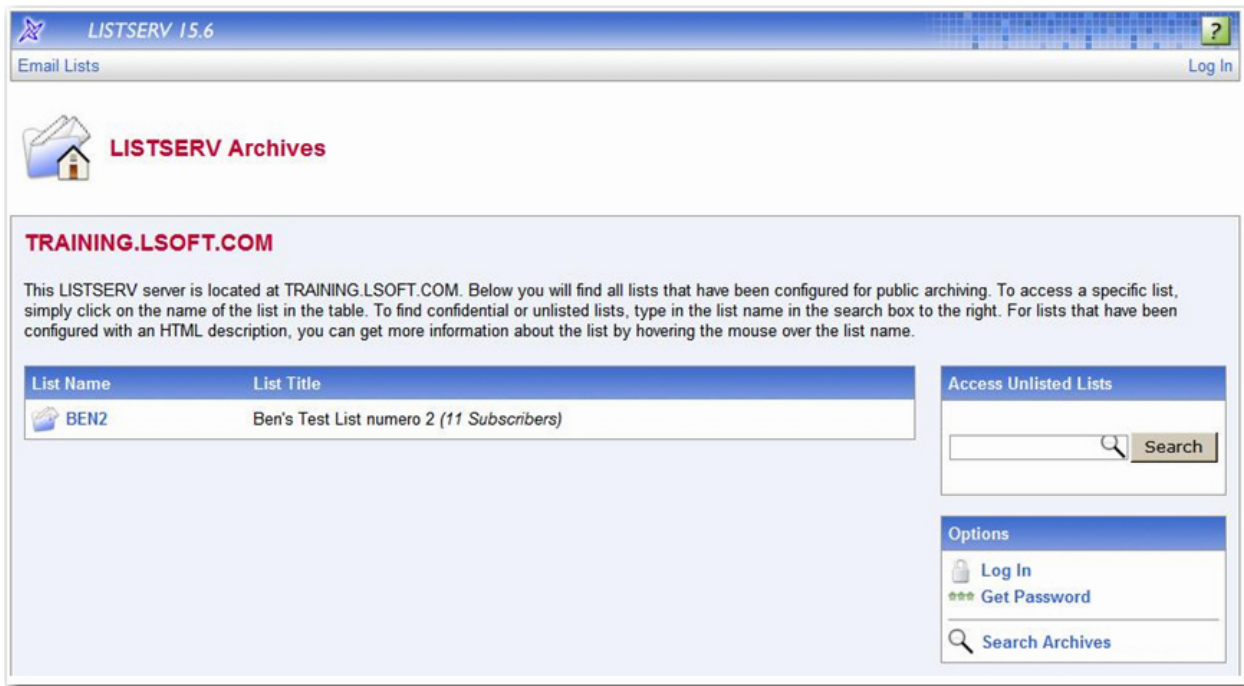
Step 5: Final Steps

Windows Server 2003 Service Pack 1 implements a software firewall in Windows. By default, this firewall 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 and/or you have external means of providing similar protection for the server.

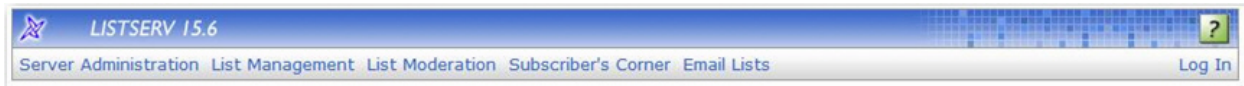
Sometimes it is necessary to stop/restart the Default Web Site in the IIS Manager at this point. It does not hurt to do so now.

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 neither URL works, then check the network access permissions between your desktop machine and the server machine. Network rules may also prevent access to a remote machine.

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.