



## Setting and Checking LISTSERV® www Interface Permissions

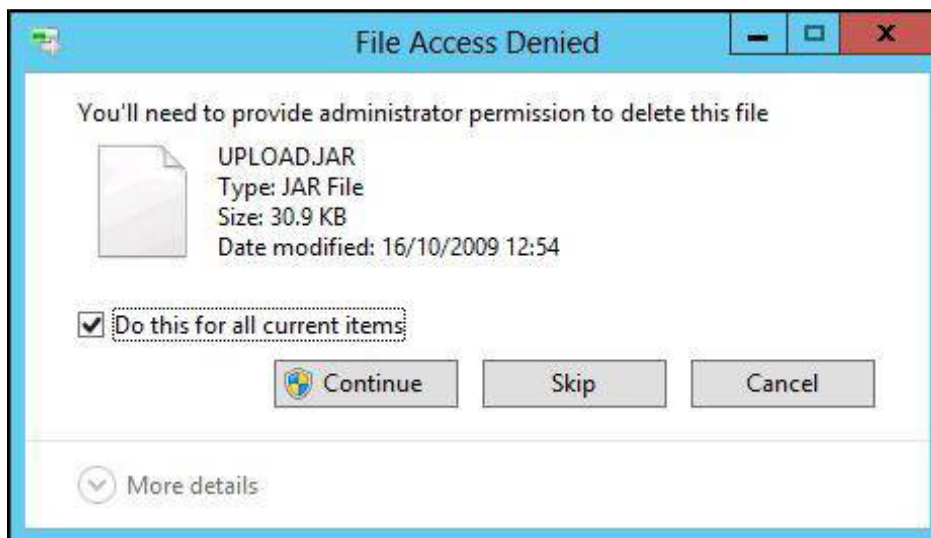
### Microsoft Windows Server with IIS 10.x

Last Updated: 20 May 2025

These instructions apply only to Windows Server with Internet Information Server IIS 10.x. They should also work for IIS 10 on Windows 10 or Windows 11, though some illustrations may appear differently in the Workstation versions of Windows.

(Some of these illustrations are reused from Windows Server 2012, because there is no difference in the instructions to install the LISTSERV web interface between IIS 8.x and IIS 10.x., and the illustrations will not materially differ.)

To install LISTSERV and configure its WWW interface successfully, you **MUST** be logged in as the Local Server Administrator or use an account that is a member of the Local Server Administrators Group (could also be 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 like this.

This paper assumes LISTSERV has already been installed on your machine by running the regular LISTSERV installer kit. This process includes a checkbox on whether or not to also install the LISTSERV www interface. If you check 'yes', then most of these steps (creating additional directories, adding lines to the site.cfg file, etc.) will have already been done by the installer. Nevertheless, all necessary steps are listed here and you should verify that the installer has done them correctly.

Further, you need to verify that certain necessary components or modules of IIS 10 are installed on your system in order to be able to successfully configure IIS 10 for use with LISTSERV. Please check these first and if necessary, install them before proceeding.



Verify that the 'ISAPI Extensions' and 'CGI' are installed with IIS 10. Open Windows Server Manager. Click 'Add server roles and features'. Scroll down and click the little arrows on the left to expand and display the detail of IIS 10 features installed.

### Add Roles and Features Wizard

## Select server roles

Before You Begin

Installation Type

Server Selection

**Server Roles**

Features

Confirmation

Results

Select one or more roles to install on the selected server.

### Roles

- ☐ Host Guardian Service
- ☐ Hyper-V
- ☐ Network Controller
- ☐ Network Policy and Access Services
- ☐ Print and Document Services
- ☐ Remote Access
- ☐ Remote Desktop Services
- ☐ Volume Activation Services
- ☒ Web Server (IIS) (14 of 43 installed)
  - ☒ Web Server (13 of 34 installed)
    - ☒ Common HTTP Features (4 of 6 installed)
    - ☒ Health and Diagnostics (1 of 6 installed)
    - ☒ Performance (1 of 2 installed)
    - ☒ Security (2 of 9 installed)
    - ☒ Application Development (5 of 11 installed)
      - ☐ .NET Extensibility 3.5
      - ☒ .NET Extensibility 4.7 (Installed)
      - ☐ Application Initialization
      - ☐ ASP
      - ☐ ASP.NET 3.5
      - ☒ ASP.NET 4.7 (Installed)
      - ☒ CGI (Installed)
      - ☒ ISAPI Extensions (Installed)
      - ☒ ISAPI Filters (Installed)
      - ☐ Server Side Includes

If the 'CGI' and 'ISAPI Extensions' roles are not installed, click the check boxes and proceed to install them. These may not be installed in a default installation for IIS 10, but they are required for the LISTSERV WWW interface to run. You *may* need the original Windows Installation Media to add these roles, though they should be accessible and installable via the Microsoft **Server Manager/Manage/Add Roles and Features** wizard without need for the media.

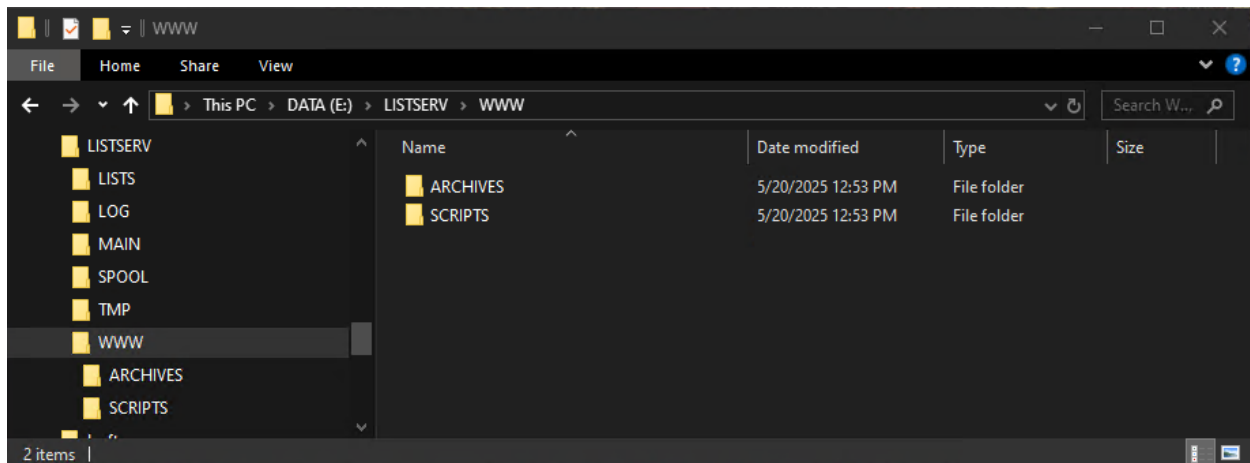
### 1. Create Additional Required Directories

Stop LISTSERV, if it is currently running.



The normal installation of LISTSERV should make the following additional directories. Please verify and make them manually if they do not already exist. Note, the directory names below are the default names in a normal, 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 have no idea on which drive you will install LISTSERV. Please make appropriate substitutions where necessary.

x:\LISTSERV\LISTS	Parent directory for list message archive files
x:\LISTSERV\WWW	Parent directory for LISTSERV www 'root' directory
x:\LISTSERV\WWW\ARCHIVES	This will be LISTSERV www 'root' directory
x:\LISTSERV\WWW\ARCHIVES\UPLOAD	This directory is required
x:\LISTSERV\WWW\SCRIPTS	Directory where LISTSERV wa.exe CGI script will be installed and run from



Edit x:\LISTSERV\MAIN\site.cfg (the LISTSERV Site Configuration File) with a plain text editor (e.g., Notepad) and create or modify the following settings:

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

Save the site.cfg file.

Manually copy x:\LISTSERV\MAIN\WA.exe to x:\LISTSERV\WWW\SCRIPTS if the installer has not already done this.

**Do not start LISTSERV yet.**



## 2. Set NTFS File and Directory Permissions

Security settings as below are most easily set or checked using the Windows Explorer program. First select the desired Directory, Right-Click on 'Properties', then choose the 'Security' Tab. If you do not see the security tab, you do not have Administrator level privileges and you cannot complete this setup until you do.

If the IUSR user (or Administrators group or SYSTEM user) is not present for any of these directories 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 account list.

The IUSR user is the anonymous internet user account which will be used to access the LISTSERV web interface. (Note that login/security is handled by WA.EXE, not by IUSR.)

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

x:\LISTSERV\WWW (and all subdirectories)

Administrators	Full Control
System	Full Control
IUSR	READ

x:\LISTSERV\WWW\SCRIPTS

Administrators	Full Control
System	Full Control
IUSR	READ & EXECUTE

x:\LISTSERV\WWW\ARCHIVES\UPLOAD

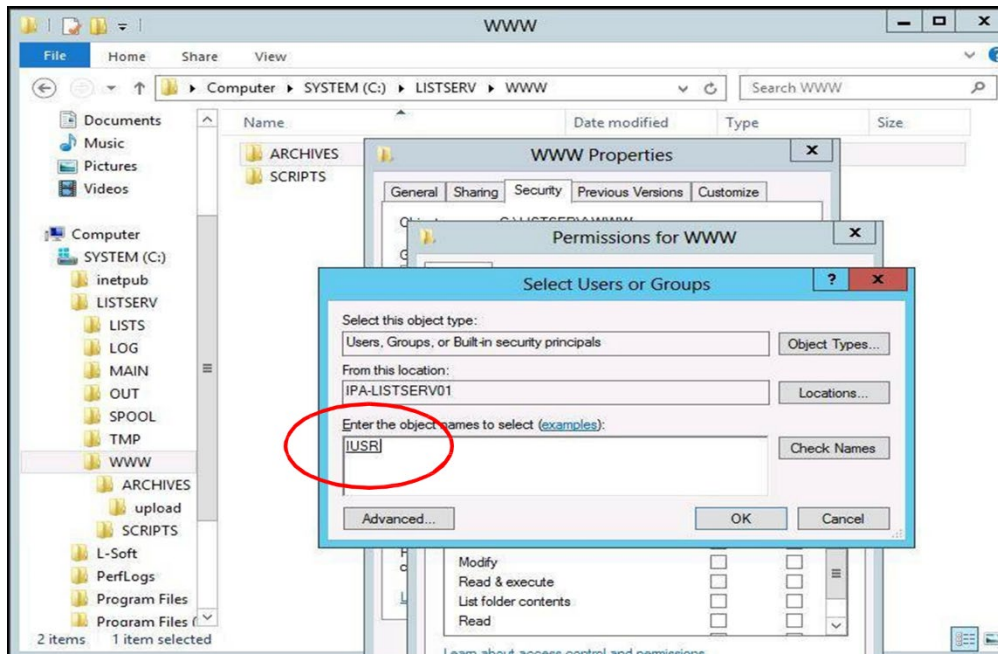
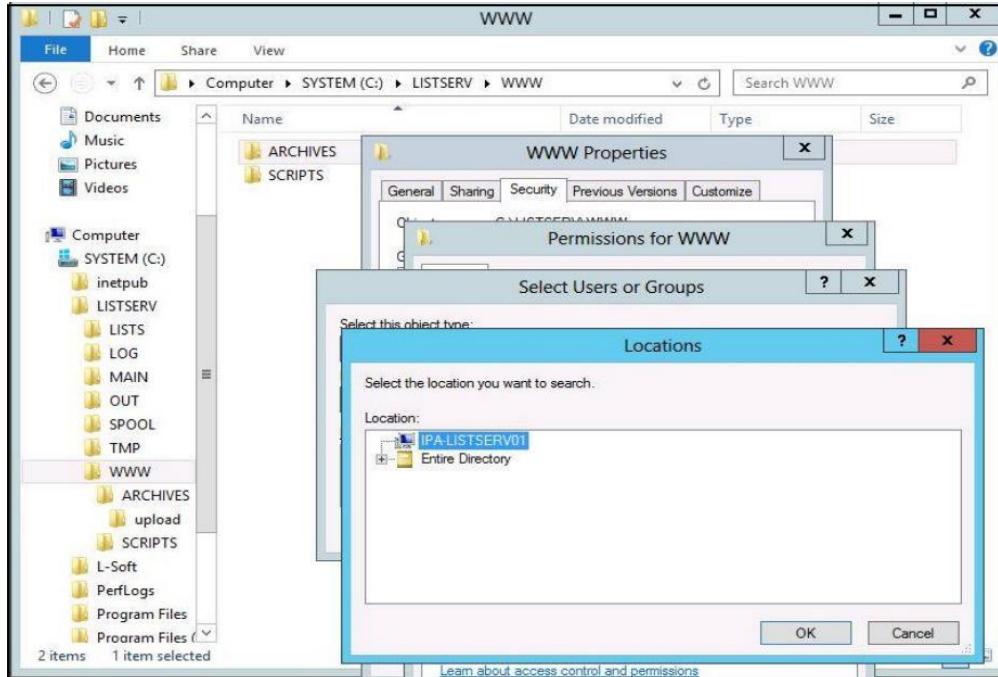
Administrators	Full Control
System	Full Control
IUSR	READ, WRITE, MODIFY

(Note: The UPLOAD directory is the ONLY directory where the IUSR account needs 'MODIFY' permissions, which includes 'WRITE'. Also note, the IUSR account may also have special WRITE-DENY permissions on some directories. You may need to override this for this directory only.)



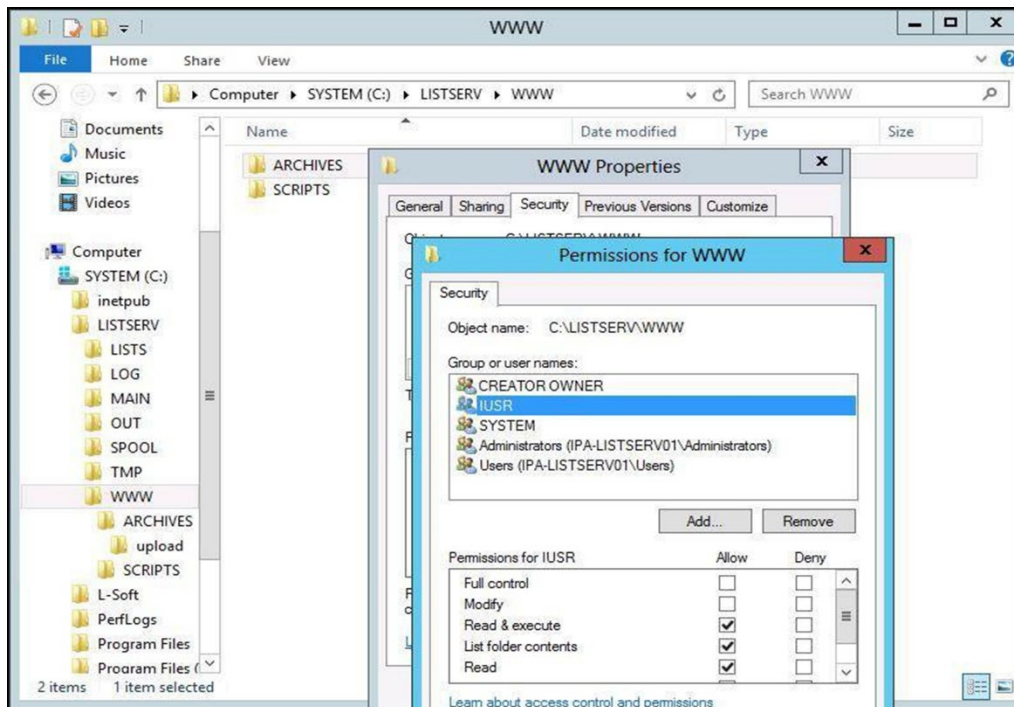
## Configuring LISTSERV WWW Interface for IIS 10.x

Start with the x:\LISTSERV\WWW directory:

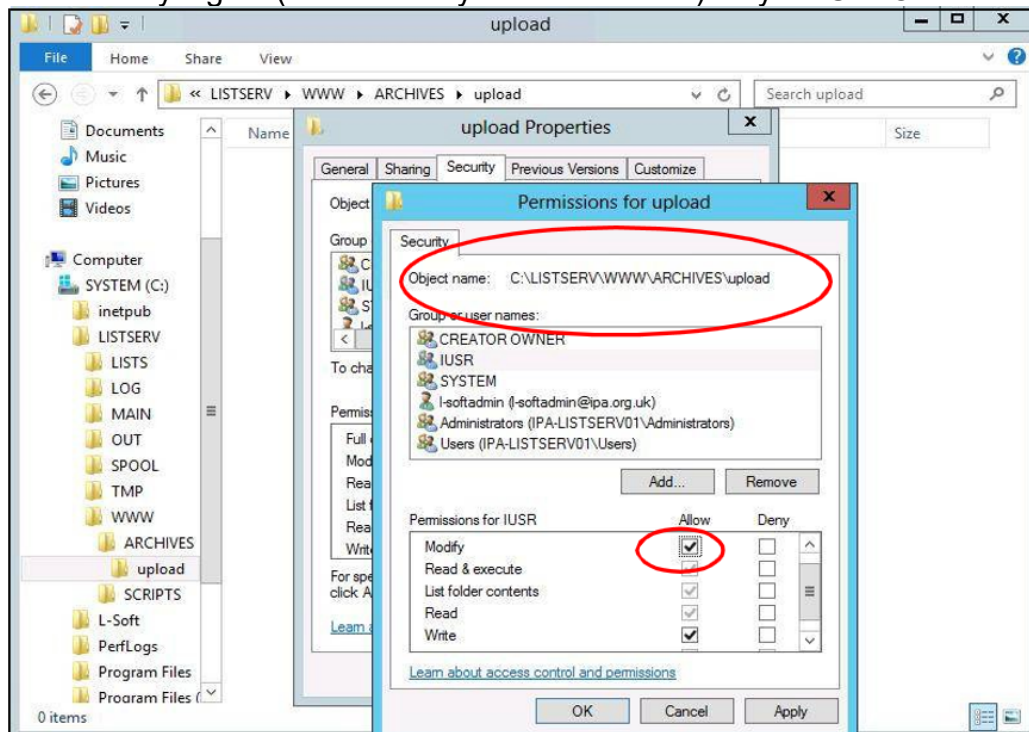




## Configuring LISTSERV WWW Interface for IIS 10.x



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

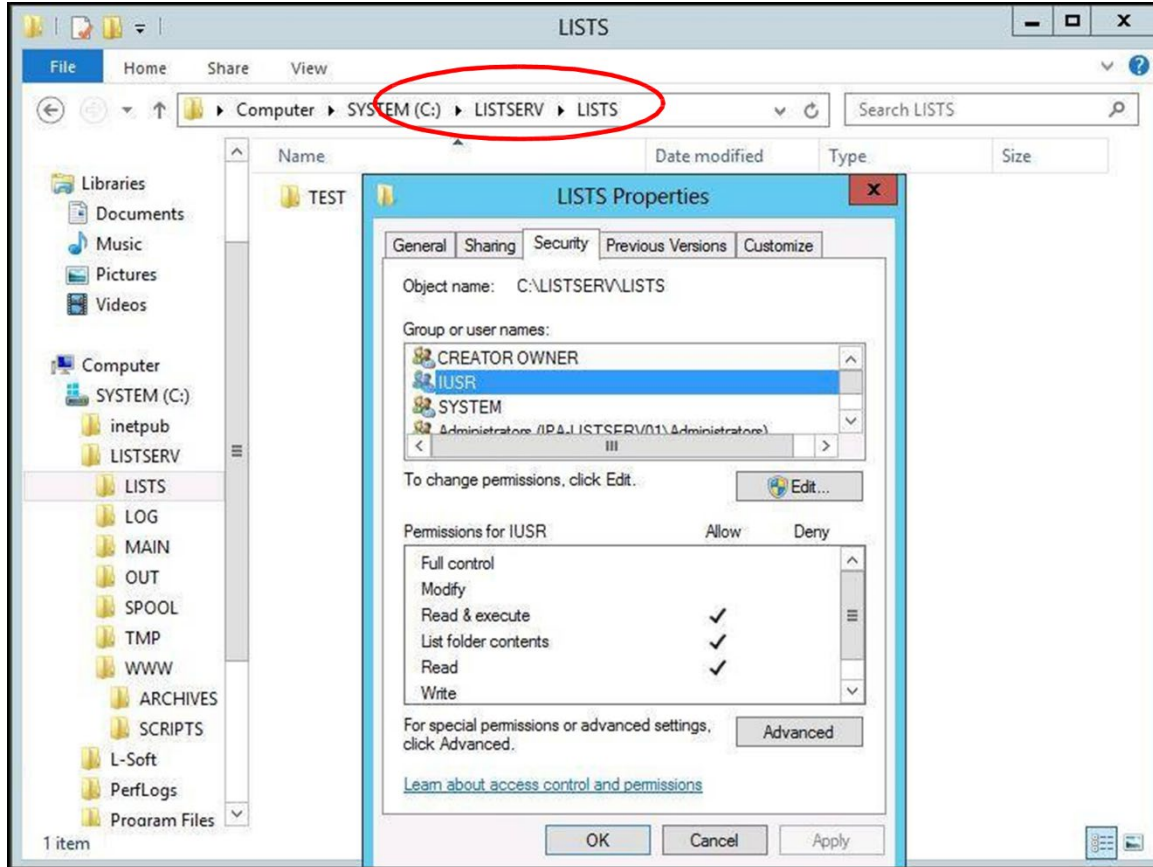






## Configuring LISTSERV WWW Interface for IIS 10.x

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

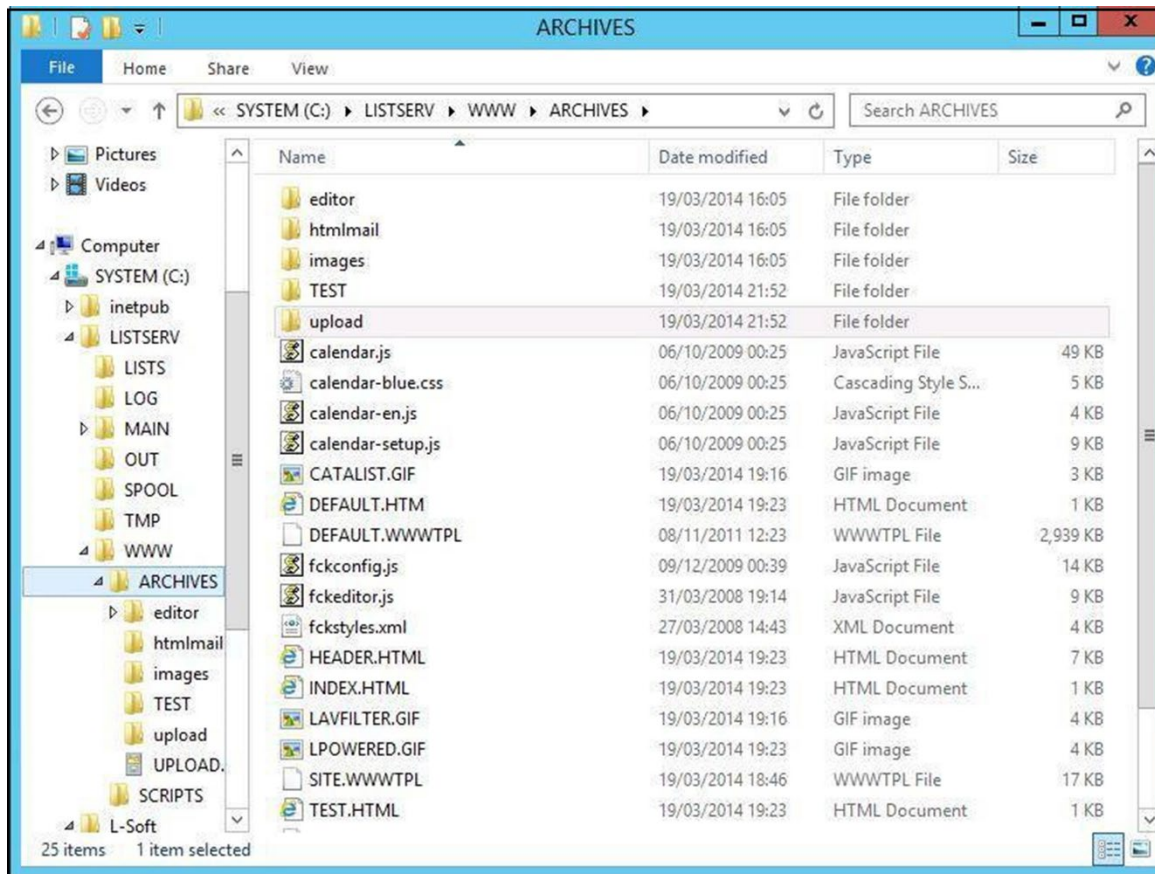




Now start LISTSERV.

Look in the x:\LISTSERV\WWW\ARCHIVES directory.

There you should see several files, including DEFAULT.WWWTPL, 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.



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.

### 3. Create Virtual Directories in IIS

Open the IIS Management console (also known as Internet Services Manager)

Select the name of your machine and click on the little arrow to expand the options

Select 'Sites'

Click on the little arrow to expand the options

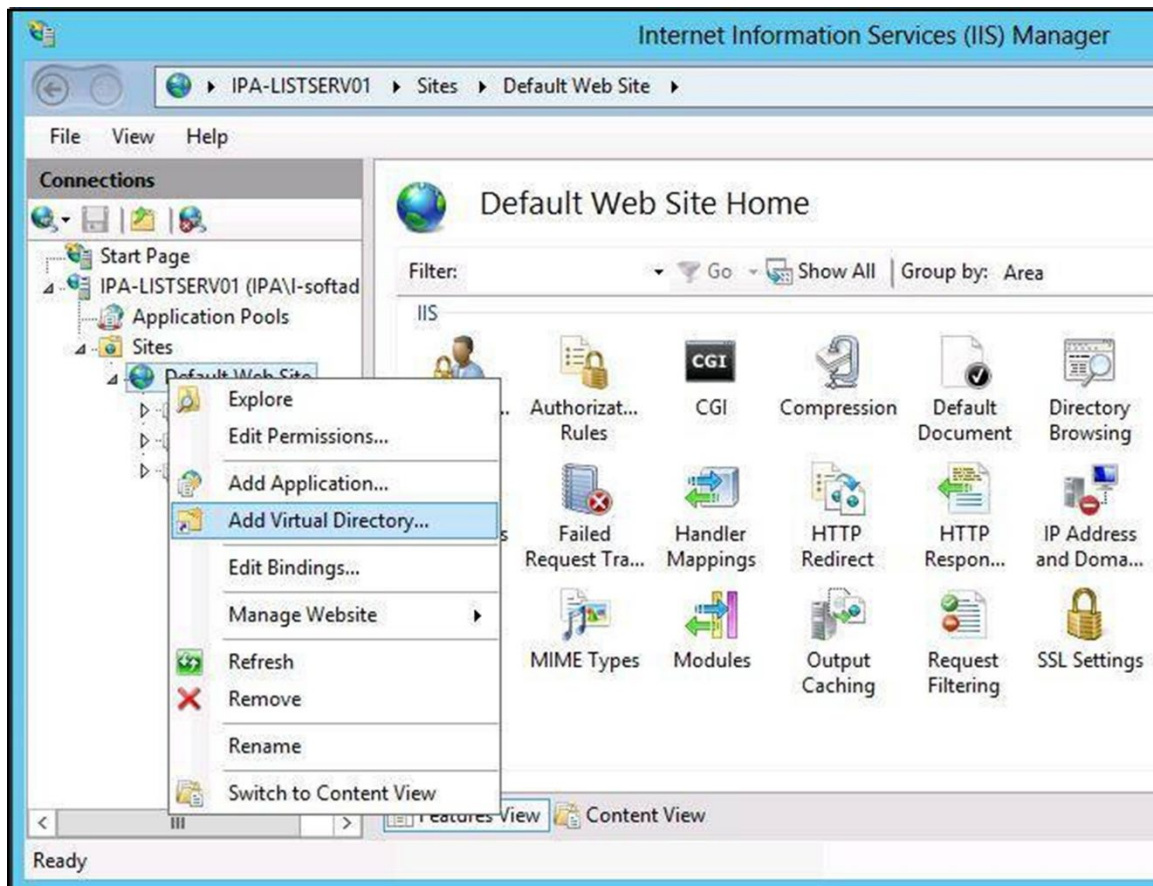
Select 'Default Web Site' and Right Click (sometimes you may need to select the name)

Select 'Add Virtual Directory'





## Configuring LISTSERV WWW Interface for IIS 10.x



Set Alias: to 'ARCHIVES' (without quotes, without '/')

Browse (... button) to select the directory path to x:\LISTSERV\WWW\ARCHIVES

Click Ok





Select 'Default Web Site' and Right Click (sometimes you may need to select the name)  
Select 'Add Virtual Directory'  
Set Alias: to 'scripts' (without quotes, without '/')  
Browse (... button) to select the directory path to x:\LISTSERV\WWW\SCRIPTS  
Click Ok

The screenshot shows the 'Add Virtual Directory' dialog box. The 'Site name' is 'Default Web Site' and the 'Path' is '/'. The 'Alias' is 'SCRIPTS'. The 'Physical path' is 'C:\LISTSERV\WWW\SCRIPTS'. There are buttons for 'Connect as...', 'Test Settings...', 'OK', and 'Cancel'. The 'Example: images' text is also visible.

Site name: Default Web Site  
Path: /

Alias:  
SCRIPTS

Example: images

Physical path:  
C:\LISTSERV\WWW\SCRIPTS

Pass-through authentication  
Connect as... Test Settings...

OK Cancel



#### 4. Set IIS Web Extension Properties

IIS 10 implements a variety of restrictions on ASP, CGI, and other executables that are significantly stronger than previous versions of IIS, and the configuration of these restrictions is significantly different. You must now configure IIS to allow it to run the wa.exe CGI 'script'.

From the IIS 10 main screen, double-click on 'ISAPI and CGI Restrictions':



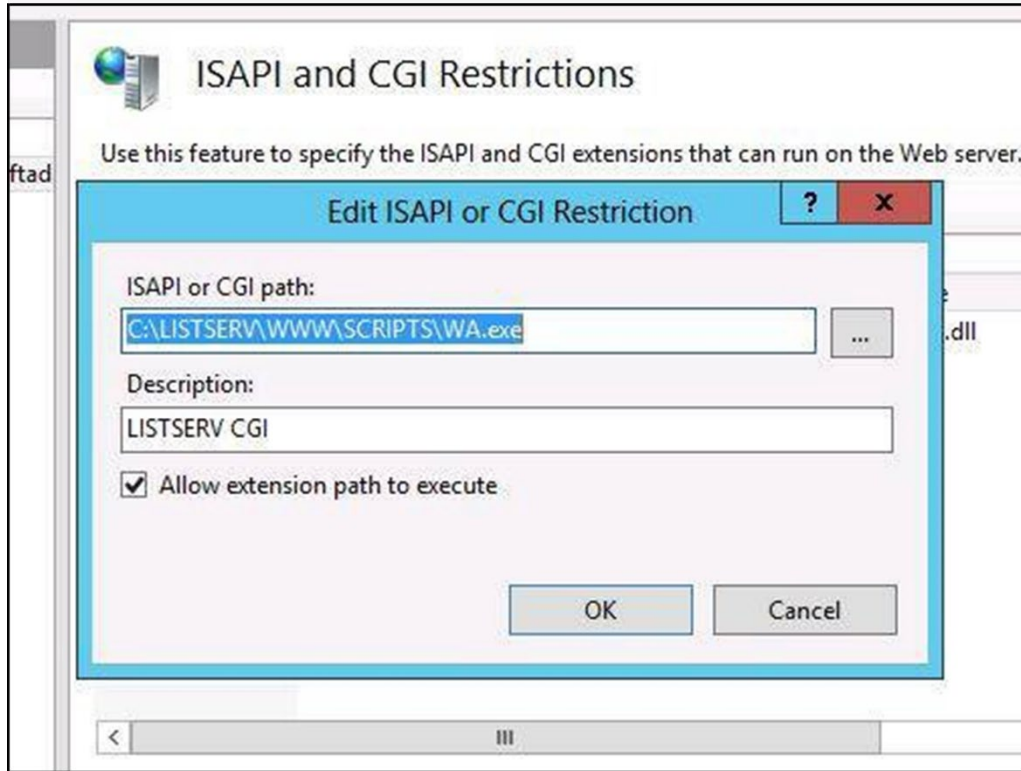
Click on the 'Add...' link in the Actions box on the right side.

For Path: click the '...' button and browse to find x:\LISTSERV\WWW\SCRIPTS\WA.exe

For 'Description:' enter 'LISTSERV-CGI' (without quotes)

Check the box 'Allow extension path to execute'

Click OK



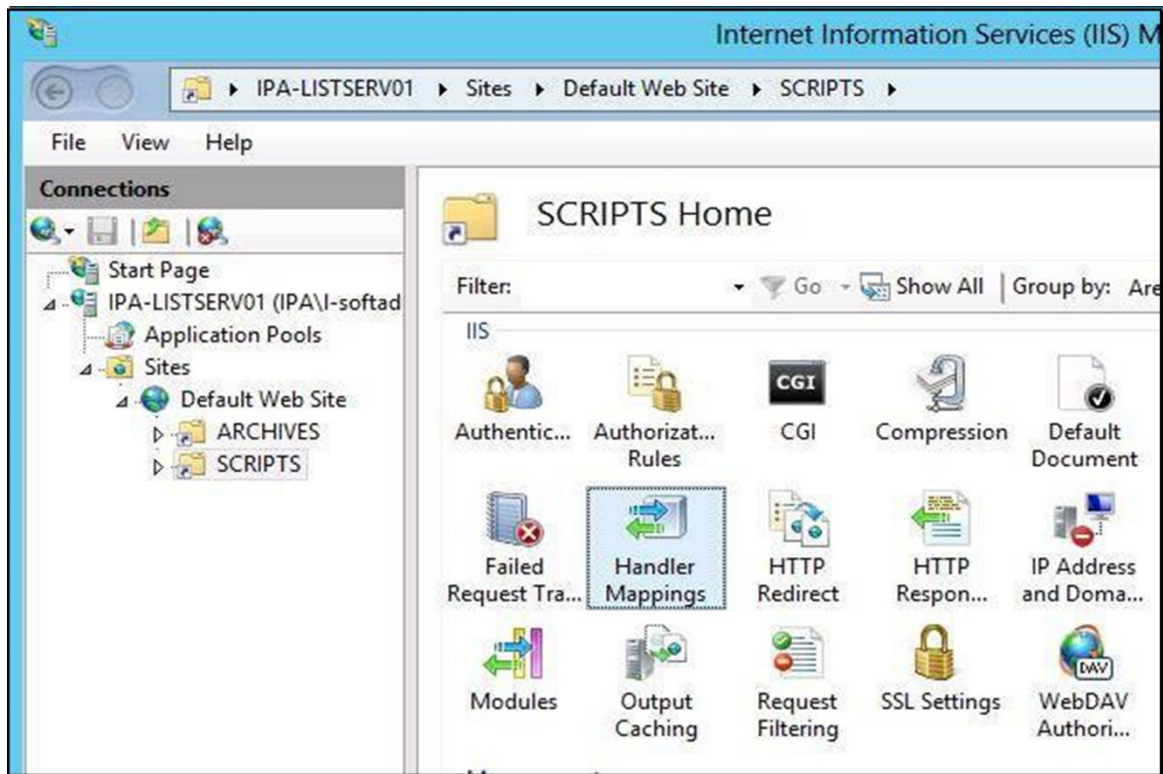
To allow the execution of WA.exe in the x:\LISTSERV\WWW\SCRIPTS directory:

Click on the ~\scripts item under 'Default Web Site' (Left window)

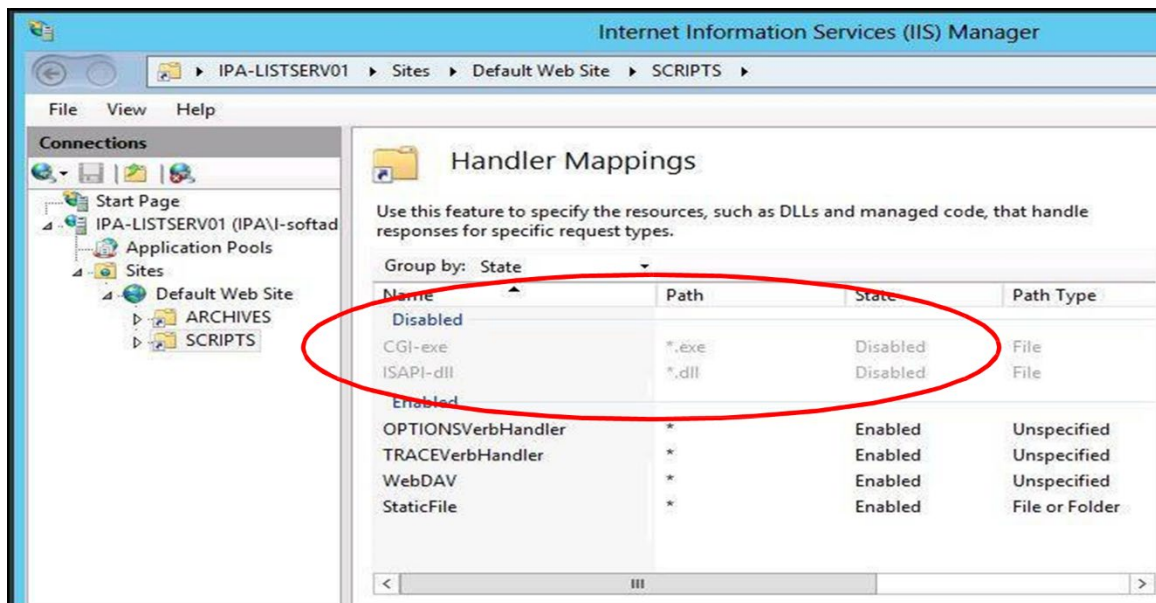
Double-click on "Handler Mappings" (Middle window)



## Configuring LISTSERV WWW Interface for IIS 10.x



Find and click on 'CGI-exe' in the (grayed out) list of Disabled extensions,

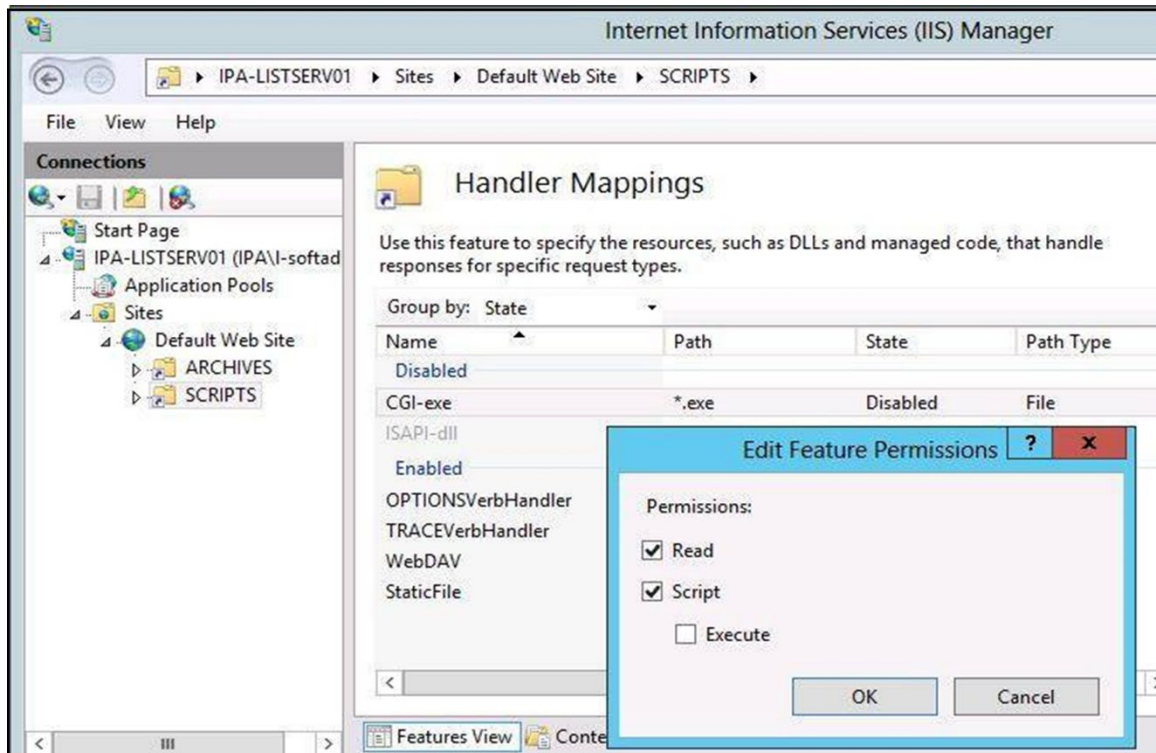


click 'Edit Feature Permissions' (Right Window):

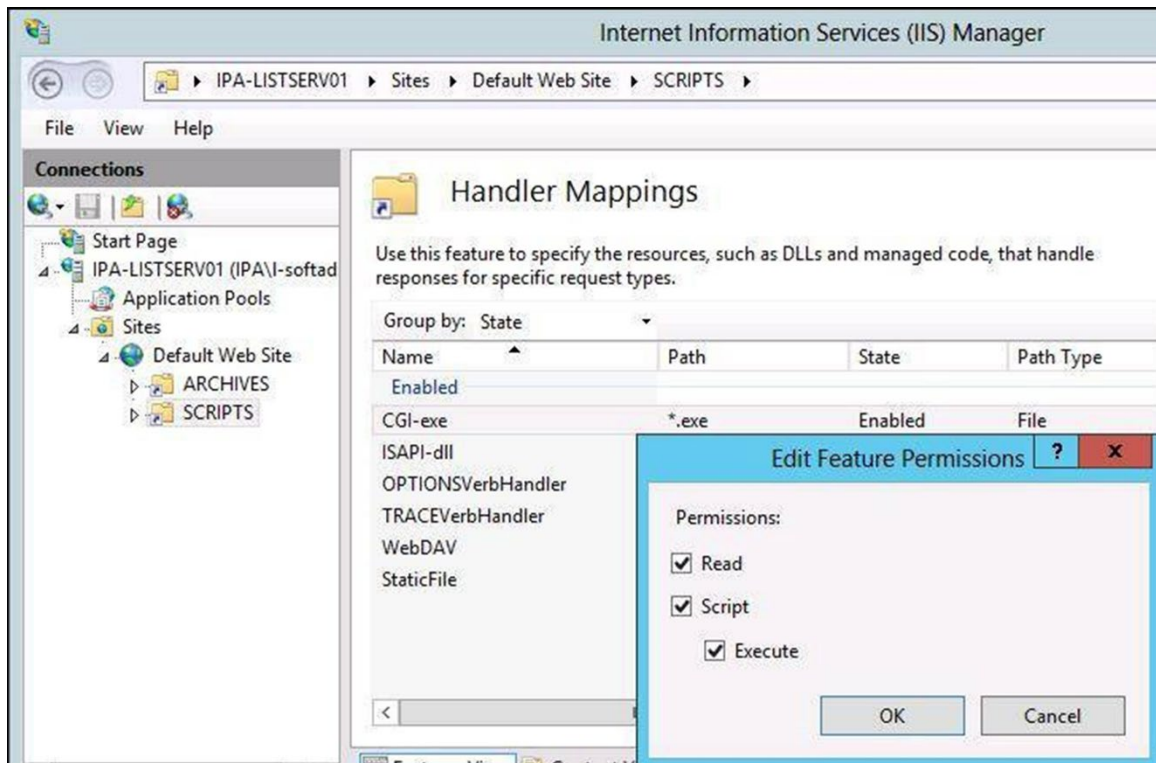




## Configuring LISTSERV WWW Interface for IIS 10.x



Check the box for 'Execute'. The background will suddenly change and the grayed-out disabled options will be enabled. Then click OK.





## 5. Final Steps

Windows Server 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/HTTPS services and SMTP services to work. We do not recommend disabling the Firewall unless you are fully aware of the risks or if 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](http://your_server_name/scripts/wa.exe) from a local web browser (preferably not the browser on the LISTSERV machine itself).

You should see a page titled 'LISTSERV Archives':

LISTSERV > Log In ?

LISTSERV Archives  
Browse and search the archives of lists on this server

Access Unlisted Lists:  
  
Search

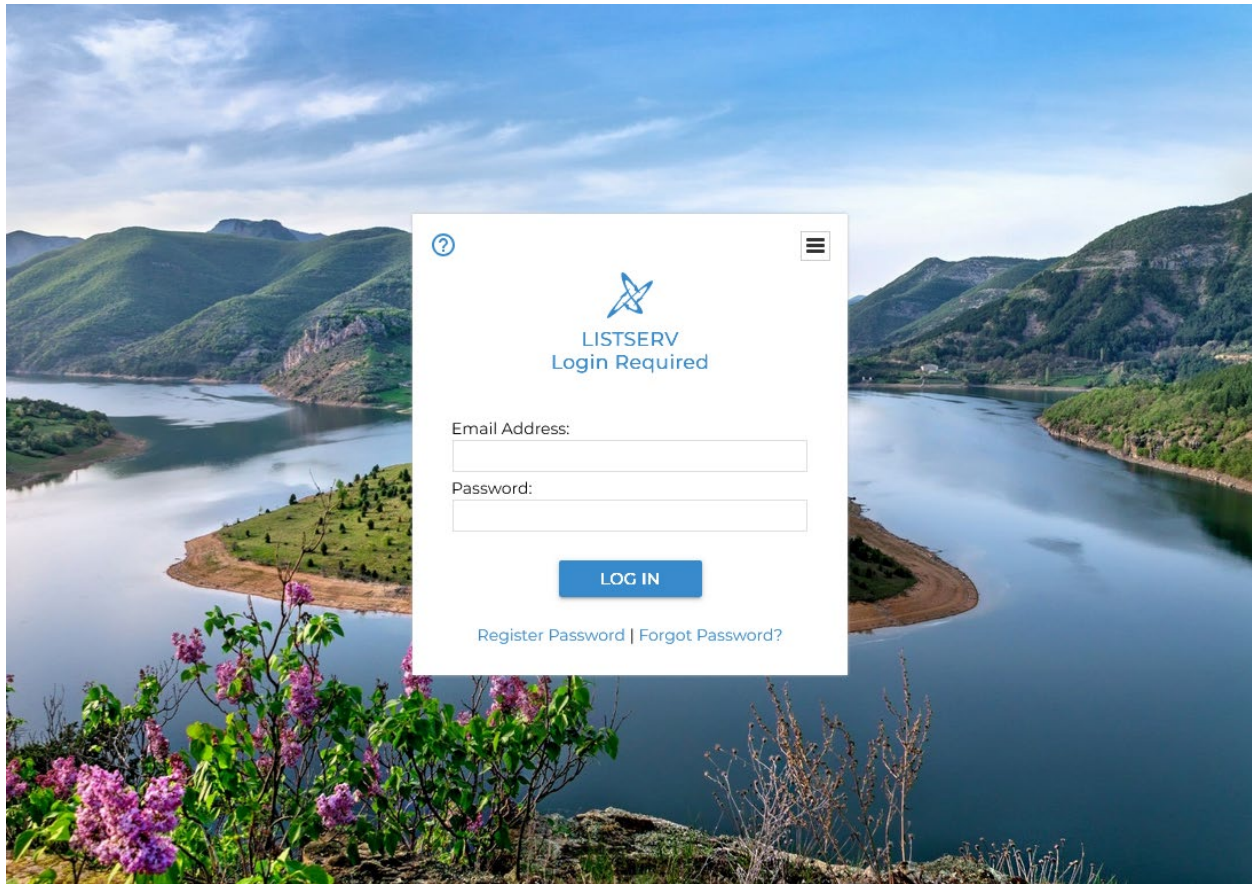
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List Name	Subscribers	List Title
ALEX-NO-INTERFACE	2	No interface list
ALEX-SAMPLE-LIST	4	Alex's sample list
ANDREW-RDAY2	2	Andrews test list Day 2
ASHRAE-TEST	1	ASHRAE Committee Announcements
JEFF_TEST	4	Jeff's Test List
LOGIN_BEST_PRACTICES	1	How to log into applications with the right email address
WALID-KH	7	TEST Training

Lists per Page:  
50 Update

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If you get the 'LISTSERV Archives' page, similar to that shown above, then click on 'Log In'. You should be presented with a 'Login Required' page, requesting your email address and Personal LISTSERV Password to login.



If you don't have a Personal LISTSERV Password (different from the CREATEPW stored in site.cfg) now would be a good time to create one. Click on the link above the login boxes to "Register Password"

### Troubleshooting

If the URL to the LISTSERV Archives page doesn't work, then check 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 either URL presents you with a Windows login screen asking for Windows User account login and Password, then your NTFS file/directory permissions as set above are not correct. Revisit Section 2, above, on these settings.

If you can get this far then you should be OK. If not, go work back to the last successful checkpoint, then work forward again verifying settings. 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>.