



Setting and Checking LISTSERV® www Interface Permissions Windows Server 2012 with IIS 8.x

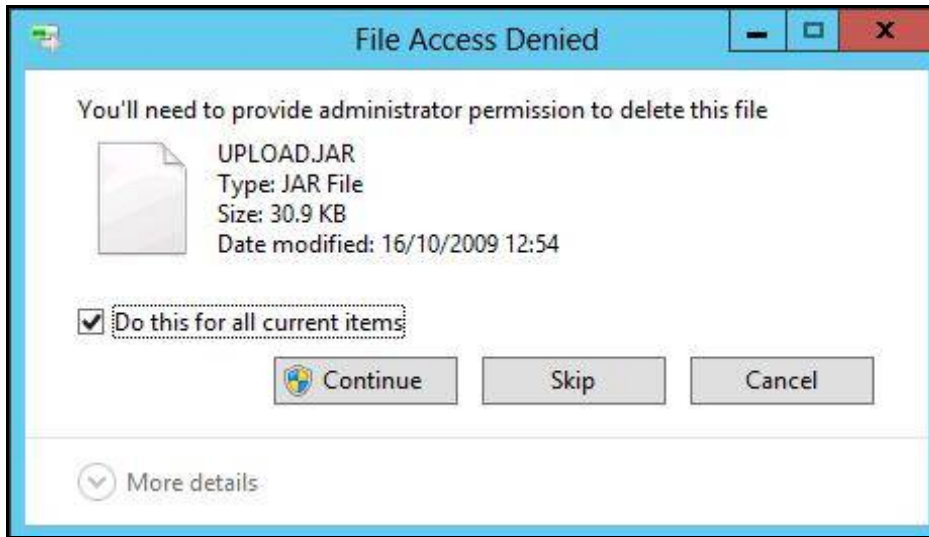
Last Updated: 20 Mar 2014

These instructions apply only to Windows Server 2012 with Internet Information Server IIS 8.x. The instructions should also work for IIS 8 on Windows 8. But some illustrations here may appear slightly different.

If you would like a copy of our separate paper for Windows 2008/IIS 7.x please see here:

[LISTSERV WWW Interface Windows 2008/IIS7](#)

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 (could also be domain Administrators account). Even so, you may at times be confronted by Windows UAC Security warnings:

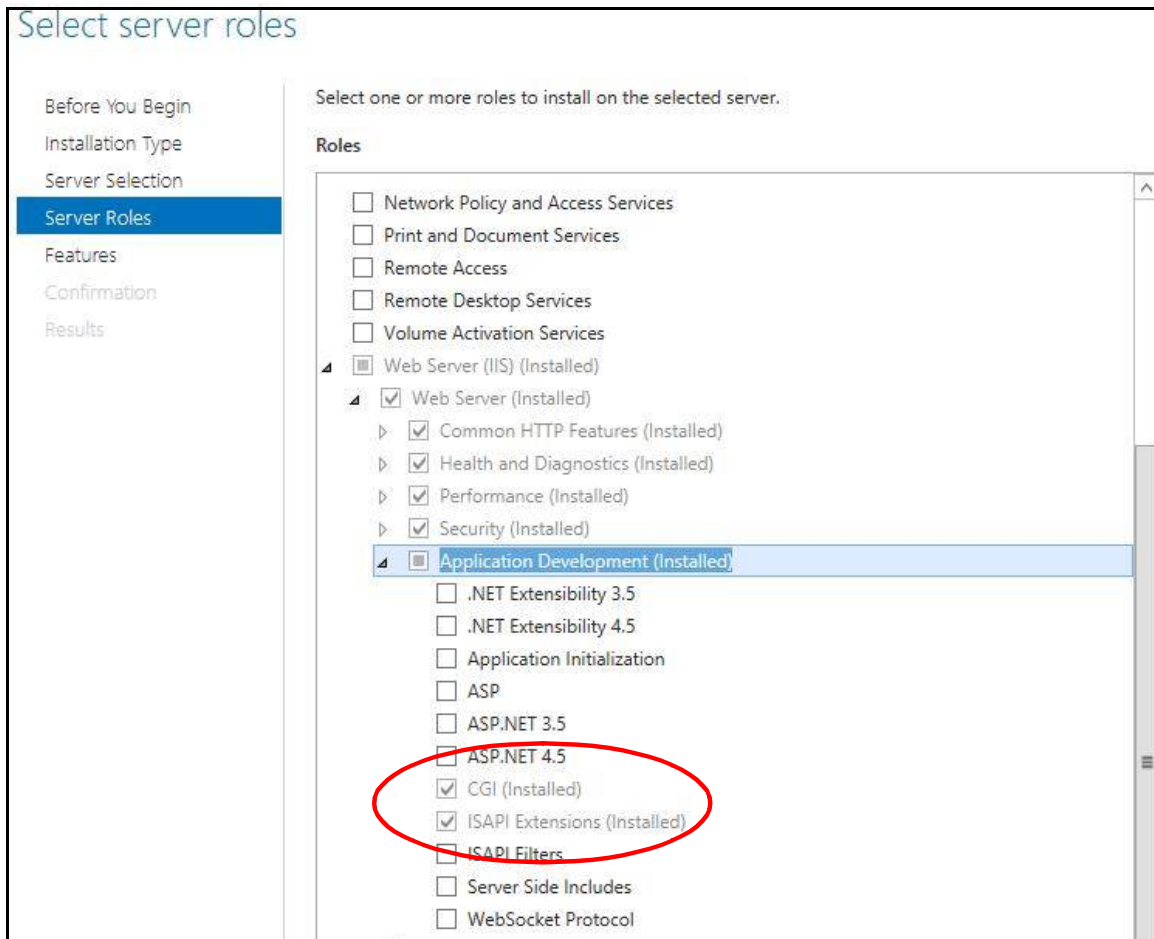


We don't recommend turning off UAC so simply click 'Continue' and proceed whenever you are challenged like this.

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 8 are installed on your system in order to be able to successfully configure IIS 8 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 8. 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 8 features installed.



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 8, but they are required for the LISTSERV WWW interface to run. You may need the original Windows Installation Media to add these roles.

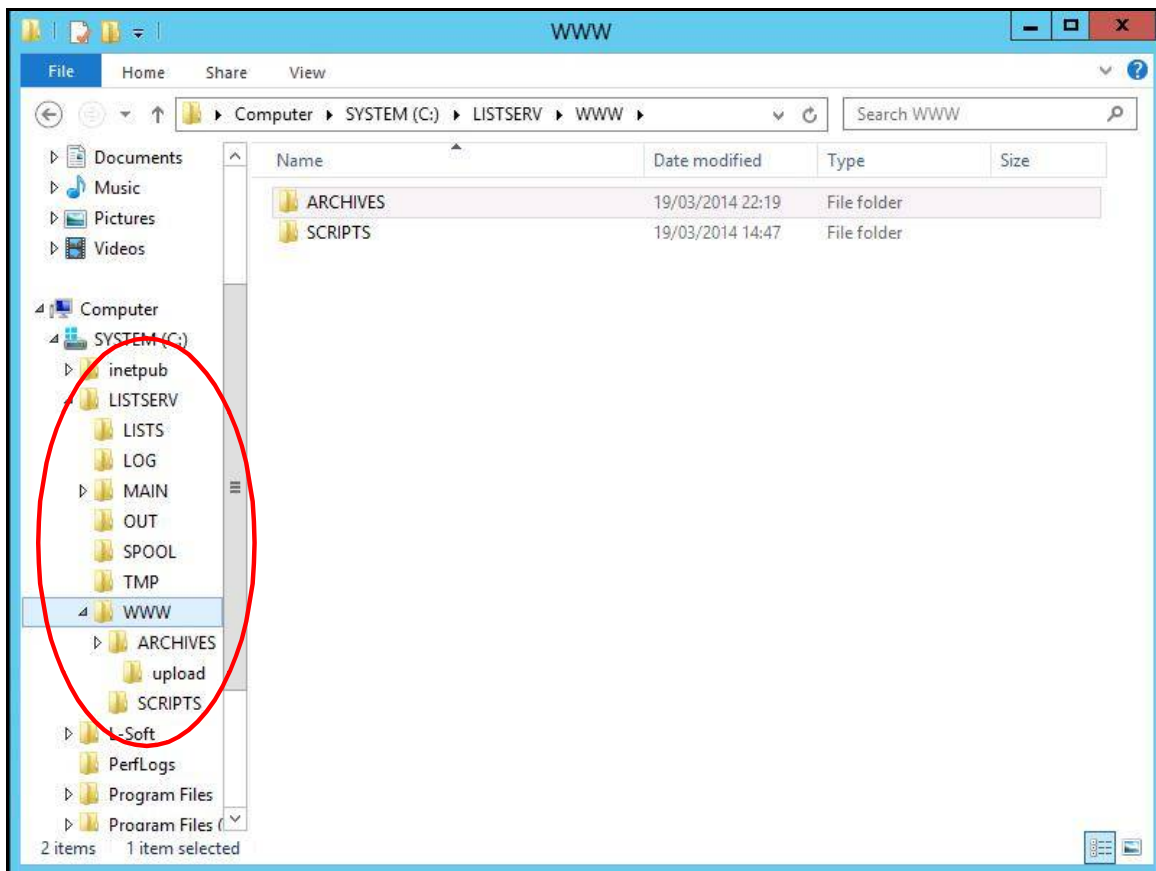
Note: Users of the IIS SMTPSVC please see also the special note on page 17 of this document for an additional required role (IIS 6 Management Console) that should also be installed at this time.

1. Create Additional Required Directories

Stop LISTSERV, if 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' 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)



Edit x:\LISTSERV\MAIN\site.cfg (the LISTSERV Site Configuration File) with 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. (In earlier versions of Windows, the local IUSR account was IUSR_machinename, but in Windows 2008 and 2012 the user account is now simply 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 (anonymous internet user account)

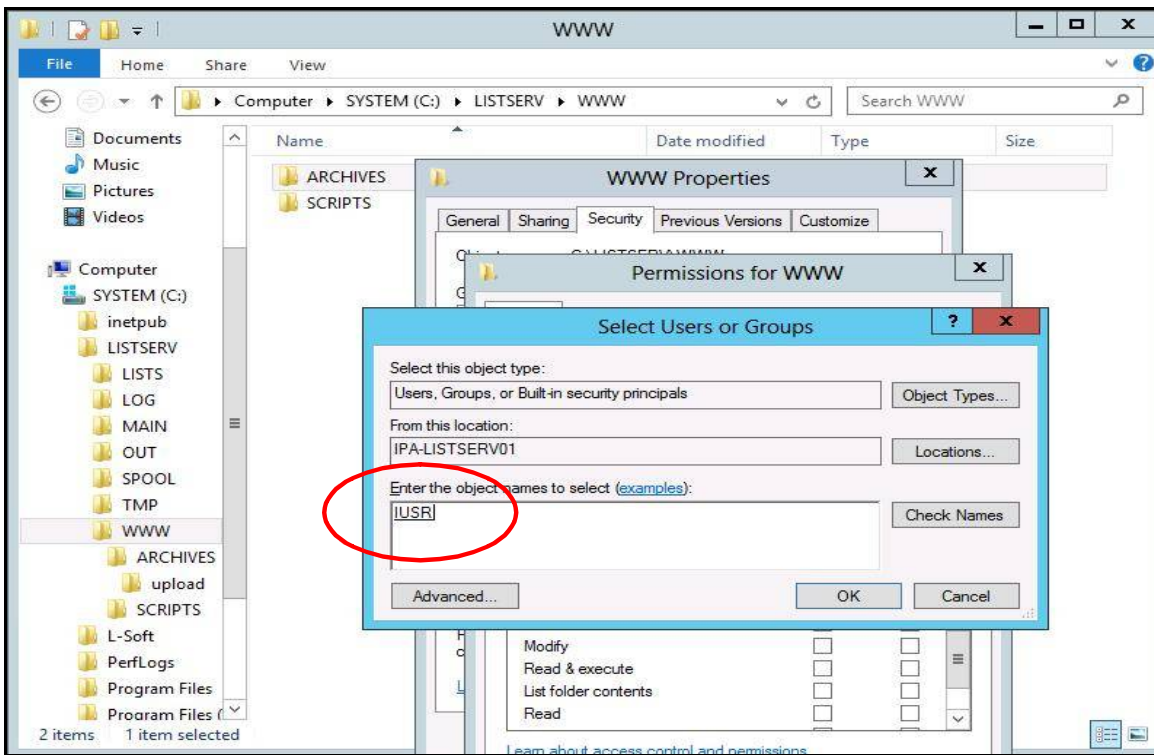
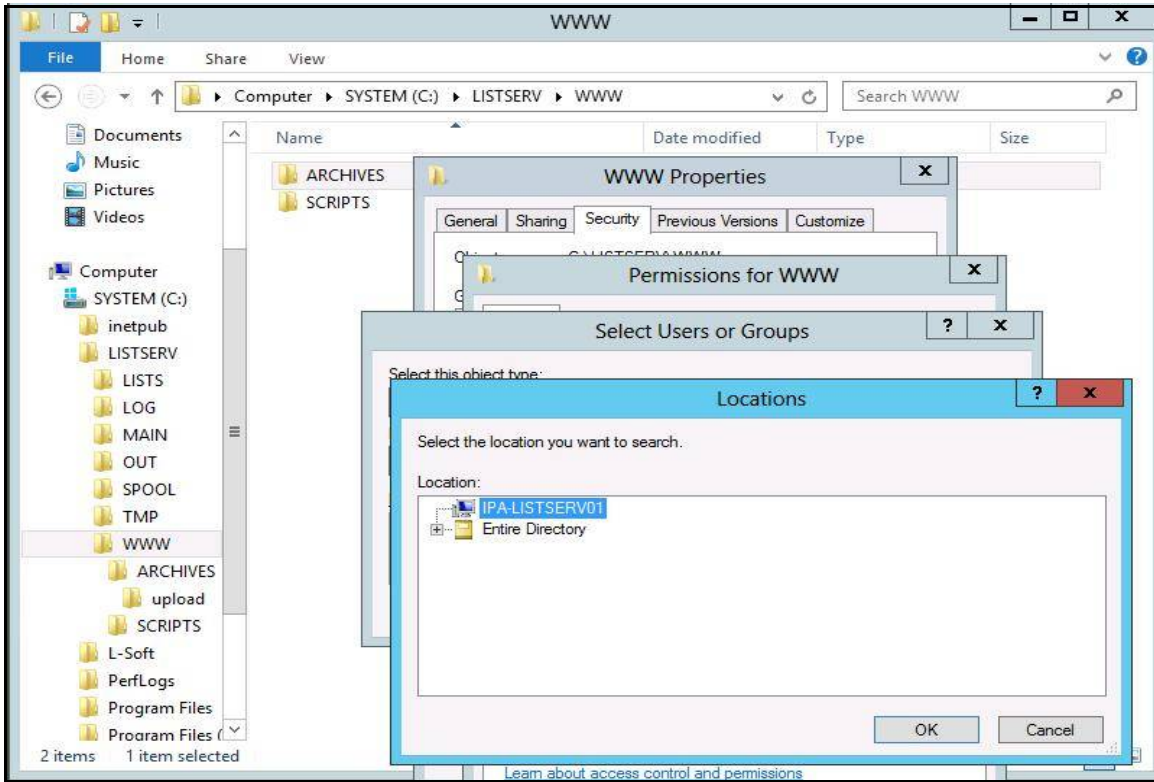
x:\LISTSERV\WWW (and all subdirectories)
Administrators Full Control
System Full Control
IUSR READ (anonymous internet user account)

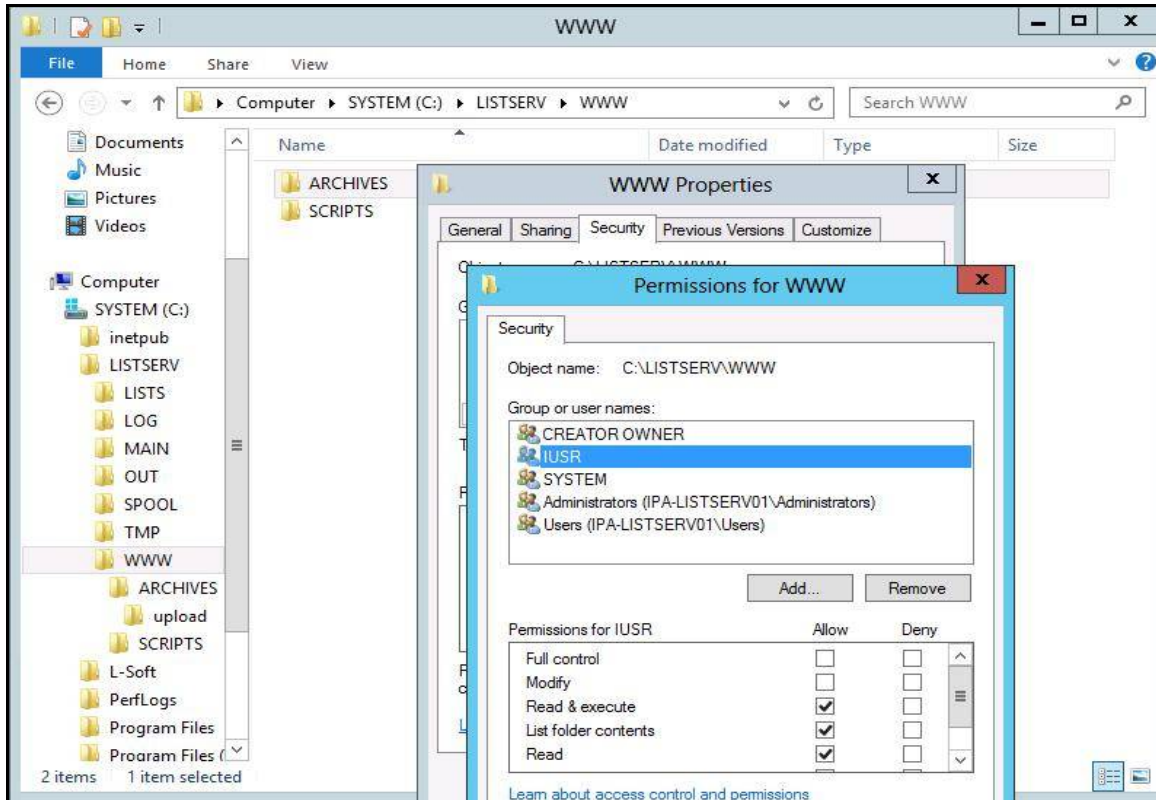
x:\LISTSERV\WWW\SCRIPTS
Administrators Full Control
System Full Control
IUSR READ & EXECUTE (anonymous internet user account)

x:\LISTSERV\WWW\ARCHIVES\UPLOAD
Administrators Full Control
System Full Control
IUSR READ, WRITE, MODIFY (anonymous internet user account)

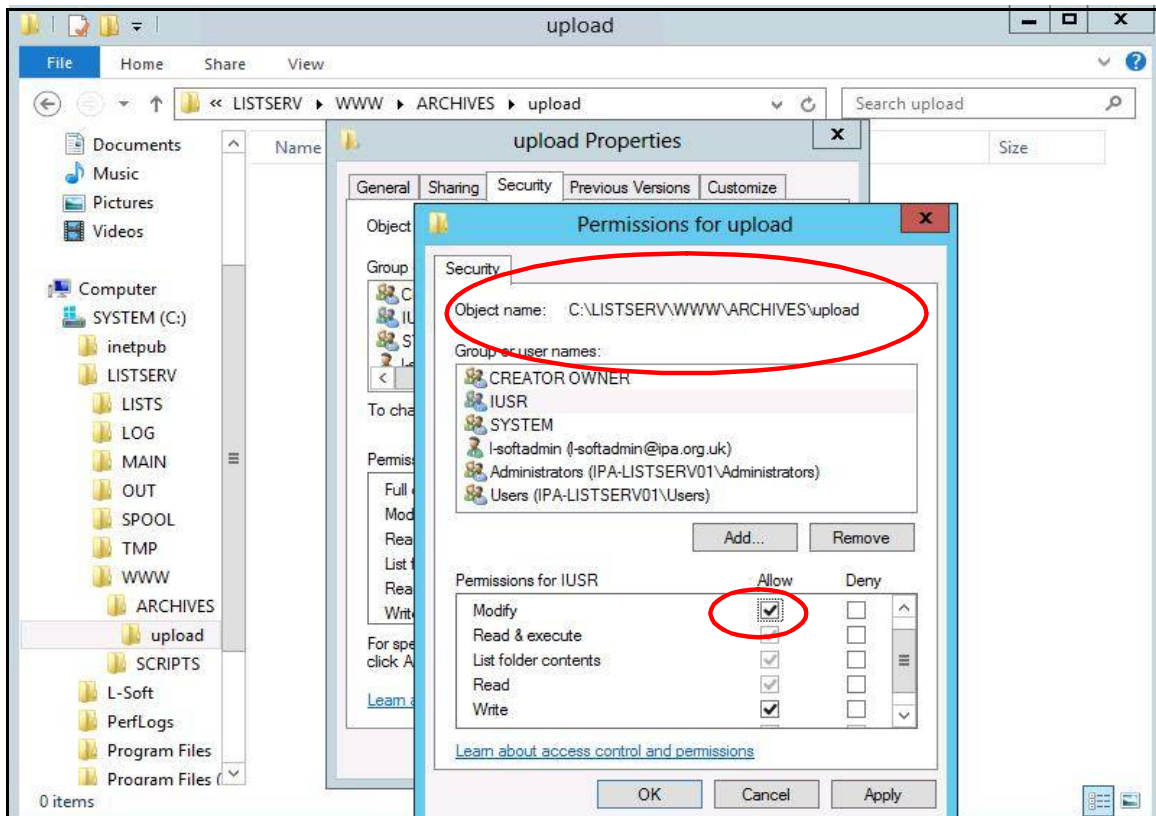
(Note the UPLOAD directory is the ONLY directory where the IUSR account needs 'MODIFY' permissions, which includes 'WRITE'. Note, the IUSR account may also have special WRITE-DENY permissions on some directories. You may need to override this for this directory only.)

Start with the x:\LISTSERV\WWW directory:

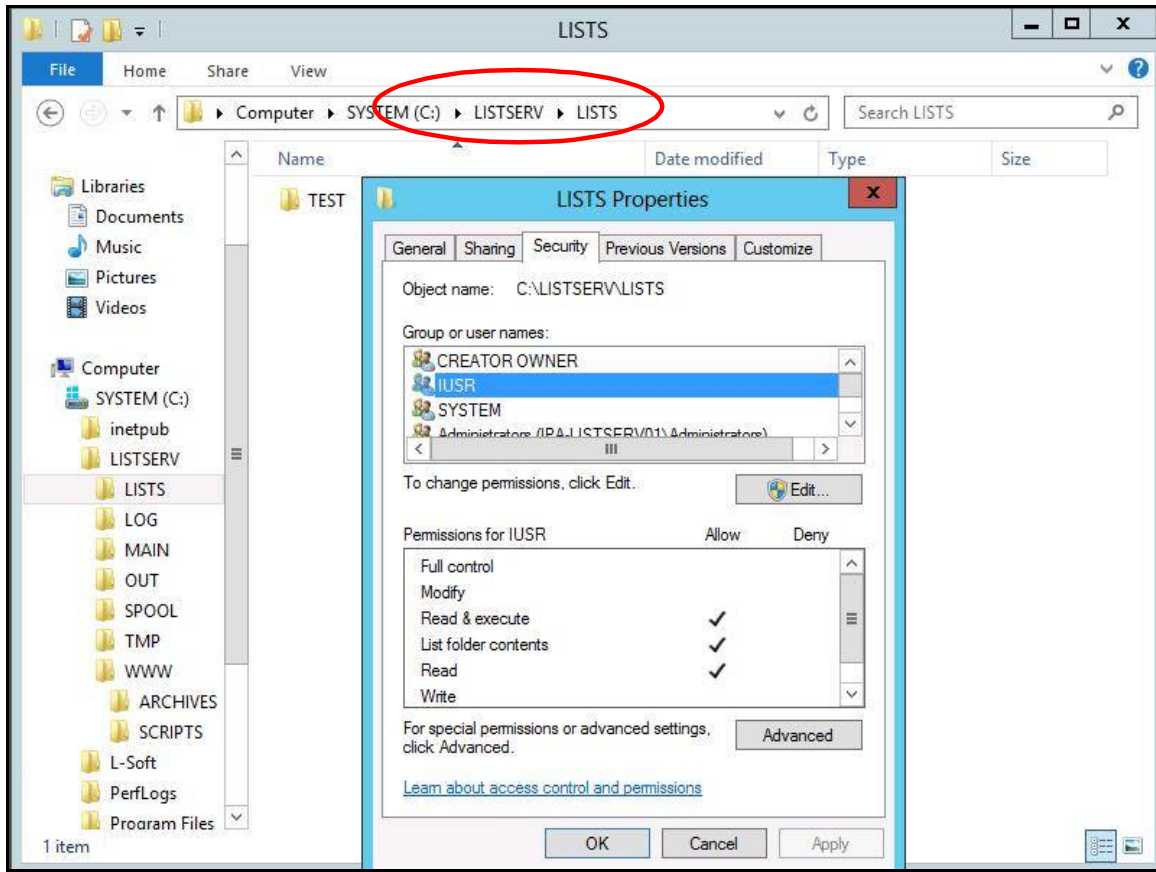




Add 'Modify' rights (automatically includes 'Write') only on UPLOAD directory:



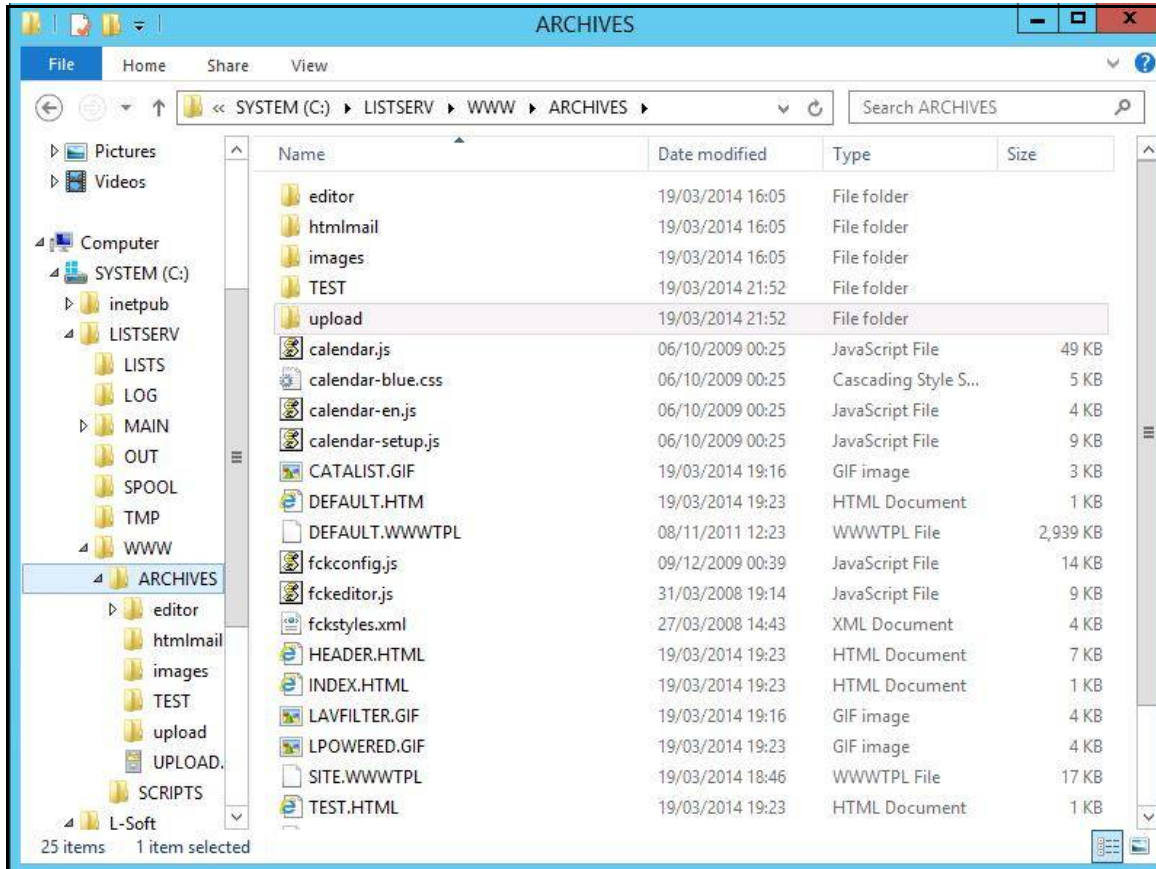
Also set the READ permissions for IUSR on the x:\LISTSERV\LISTS directory:



Now start LISTSERV.

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

There 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.

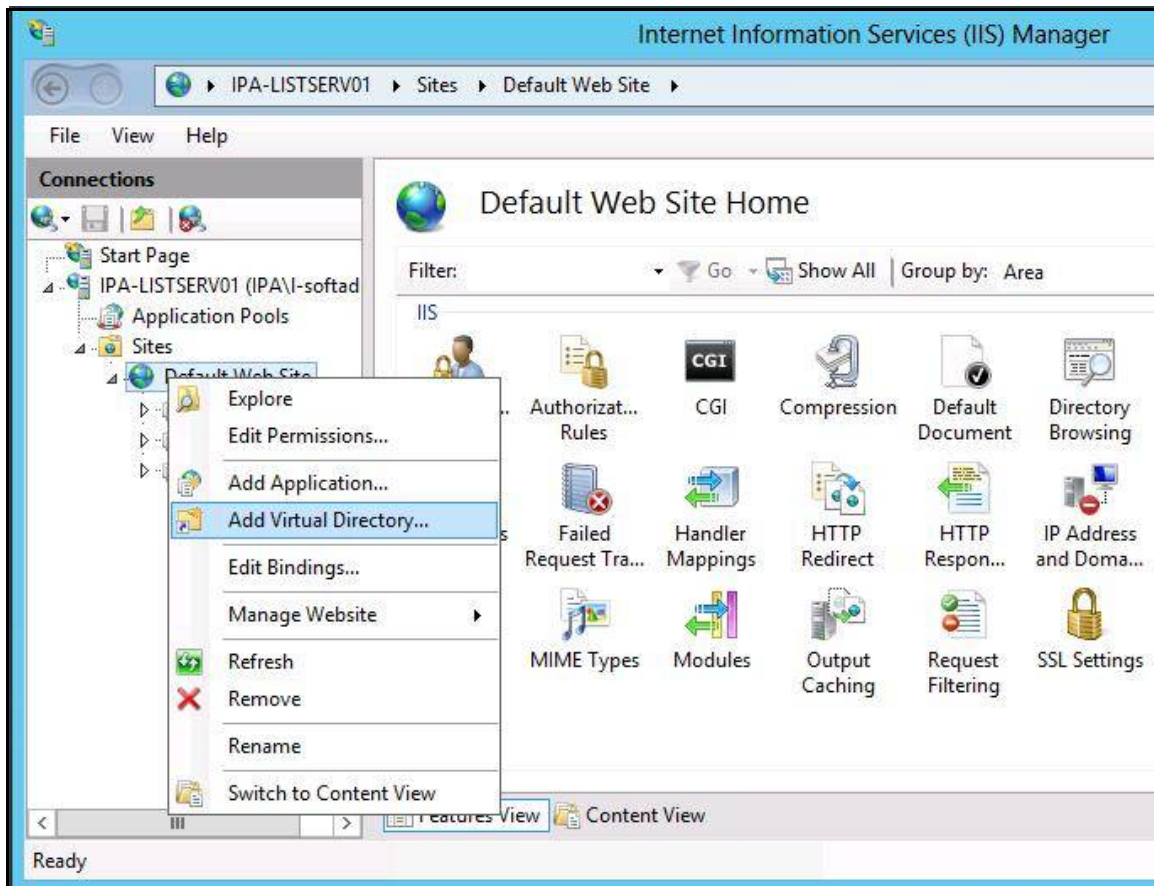


If this does not happen, then there is a problem. You should check the LISTSERV log file (x:\LISTSERV\LOG\LISTSERV-yyyymmdd.LOG) for any error messages. You may ask L-Soft Support for help interpreting the log file. Repeat the steps leading to this point to verify all settings. Do NOT pass here until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



Set Alias: to 'ARCHIVES' (without quotes, without '/')
Browse (... button) to select the directory path to x:\LISTSERV\WWW\ARCHIVES
Click Ok



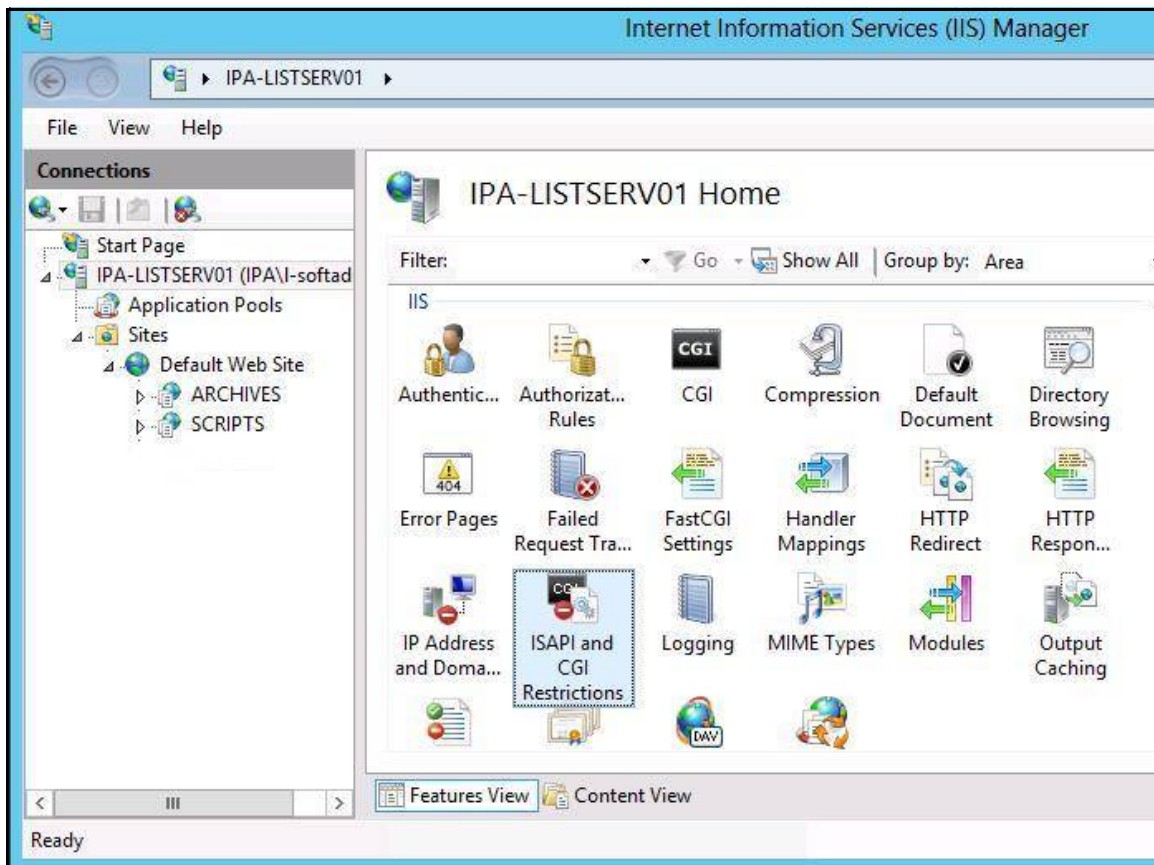
Select 'Default Web Site' and Right Click (sometimes you may need to select the name)
Select 'Add Virtual Directory'
Set Alias: to 'scripts' (without quotes, without '/')
Browse (... button) to select the directory path to x:\LISTSERV\WWW\SCRIPTS
Click Ok



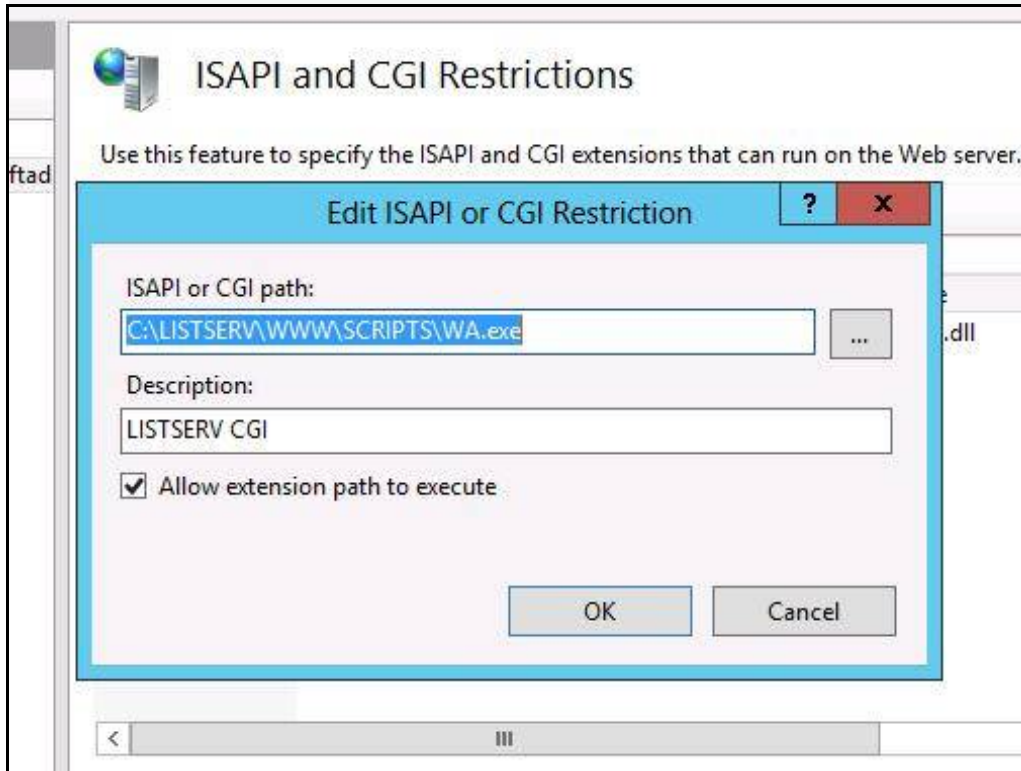
4. Set IIS Web Extension Properties

IIS 8 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 8 main screen, double-click on 'ISAPI and CGI Restrictions':



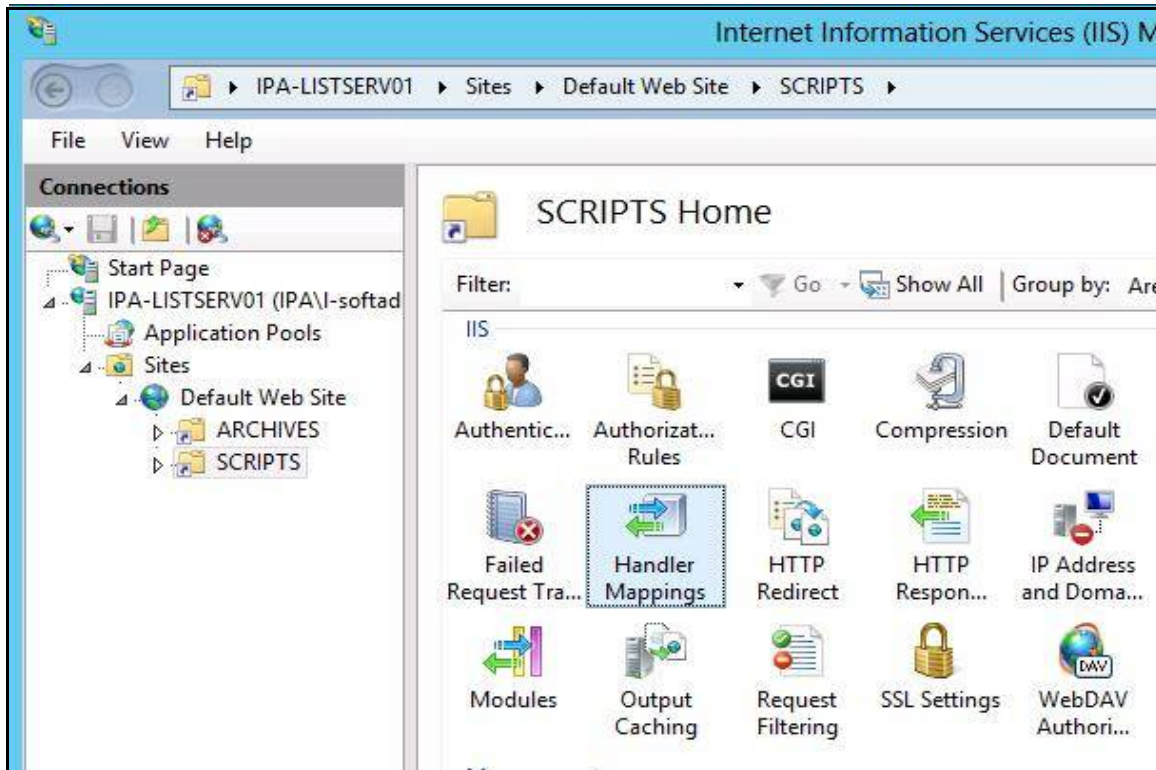
- Click on the 'Add...' link in the Actions box on the right side.
- For Path: click the '...' button and browse to find
x:\LISTSERV\WWW\SCRIPTS\WA.exe
- For 'Description:' enter 'LISTSERV-CGI' (without quotes)
- Check the box 'Allow extension path to execute'
- Click OK



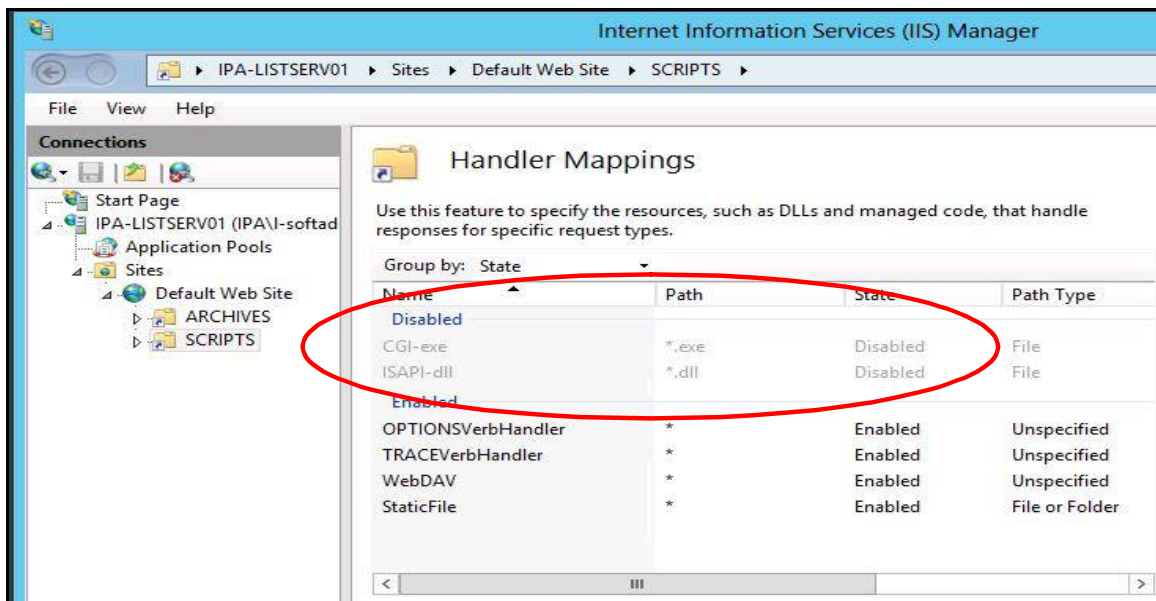
To allow the execution of WA.exe in the x:\LISTSERV\WWW\SCRIPTS directory:

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

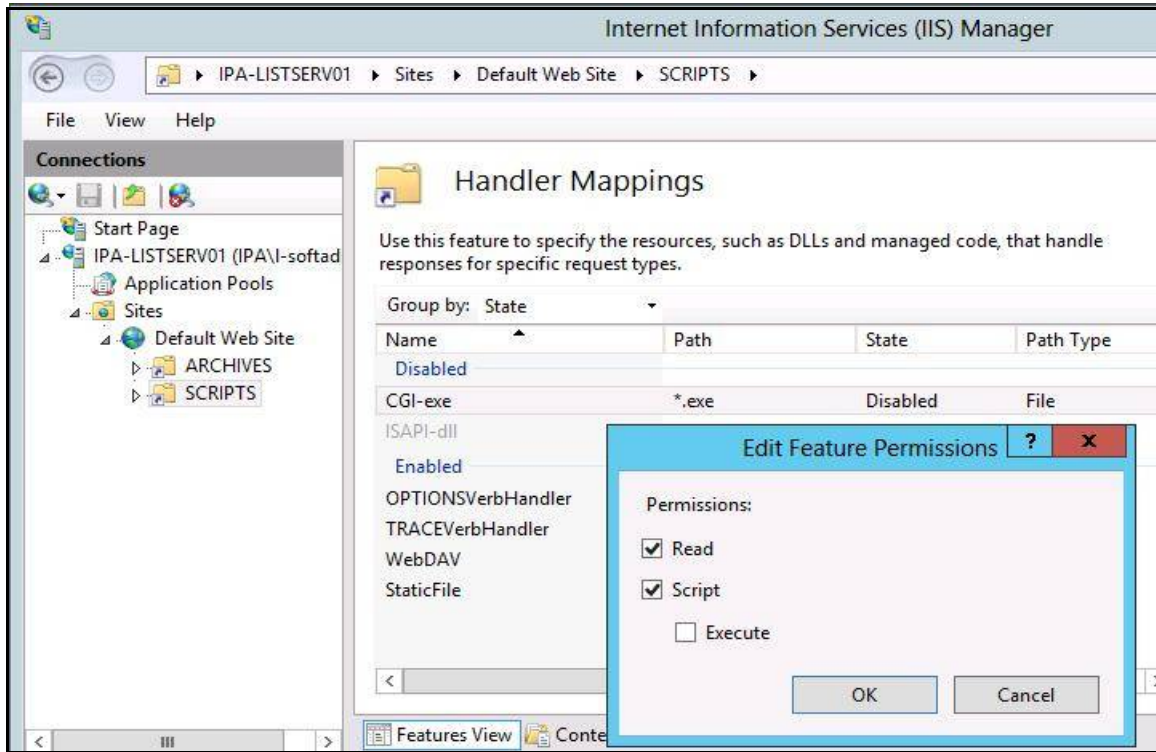
Double-click on "Handler Mappings" (Middle window)



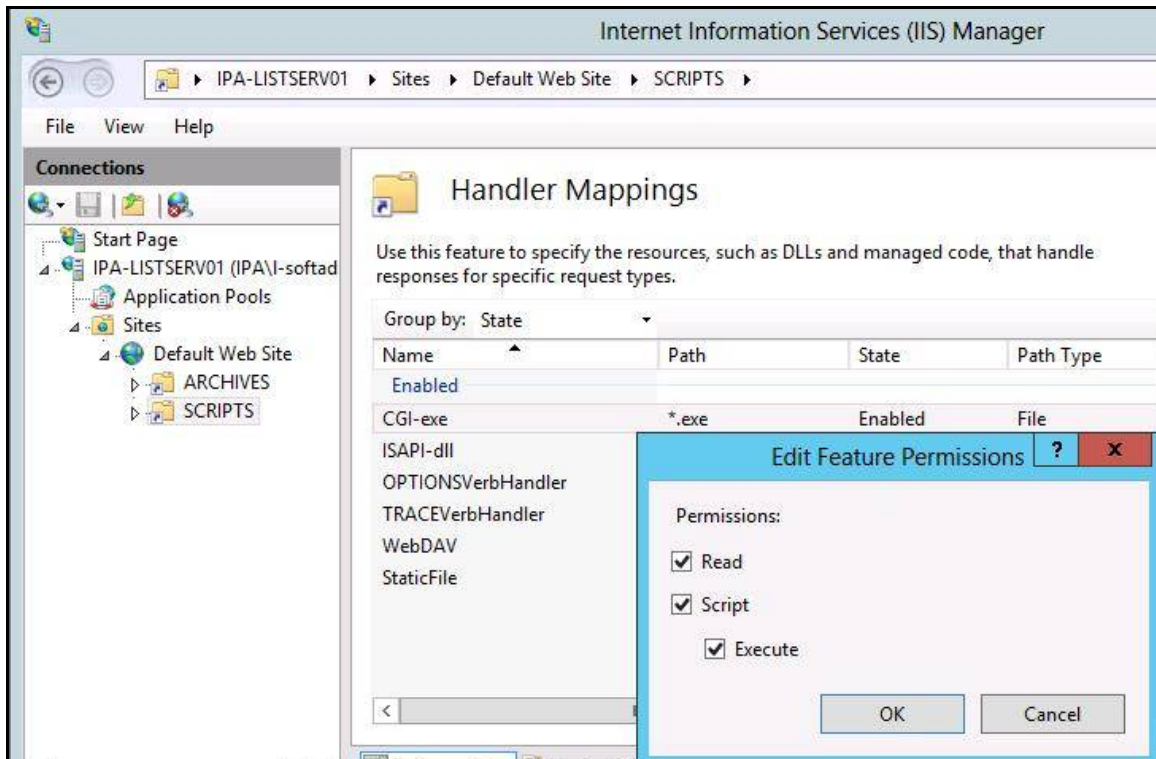
Find and click on 'CGI-exe' in the (grayed out) list of Disabled extensions,



click 'Edit Feature Permissions' (Right Window):



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 2012 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 from a local web browser (preferably not the browser on the LISTSERV machine itself).

You should see a page titled 'LISTSERV Archives':



If this does not work or if you get a 'page cannot be displayed' or other error, try the link http://your_server_name/archives/header.html :



(note: this is a static page link which should always work.)

If you get the 'LISTSERV Archives' page, 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 "Get a new LISTSERV Password"



LISTSERV 16.0

Subscriber's Corner Email Lists

Login Required

Please enter your email address and your LISTSERV password and click on the "Log In" button. If this is the first time you see this prompt, or if you have forgotten your password, you will need to [get a new LISTSERV password](#) first.

Email Address:

Password:

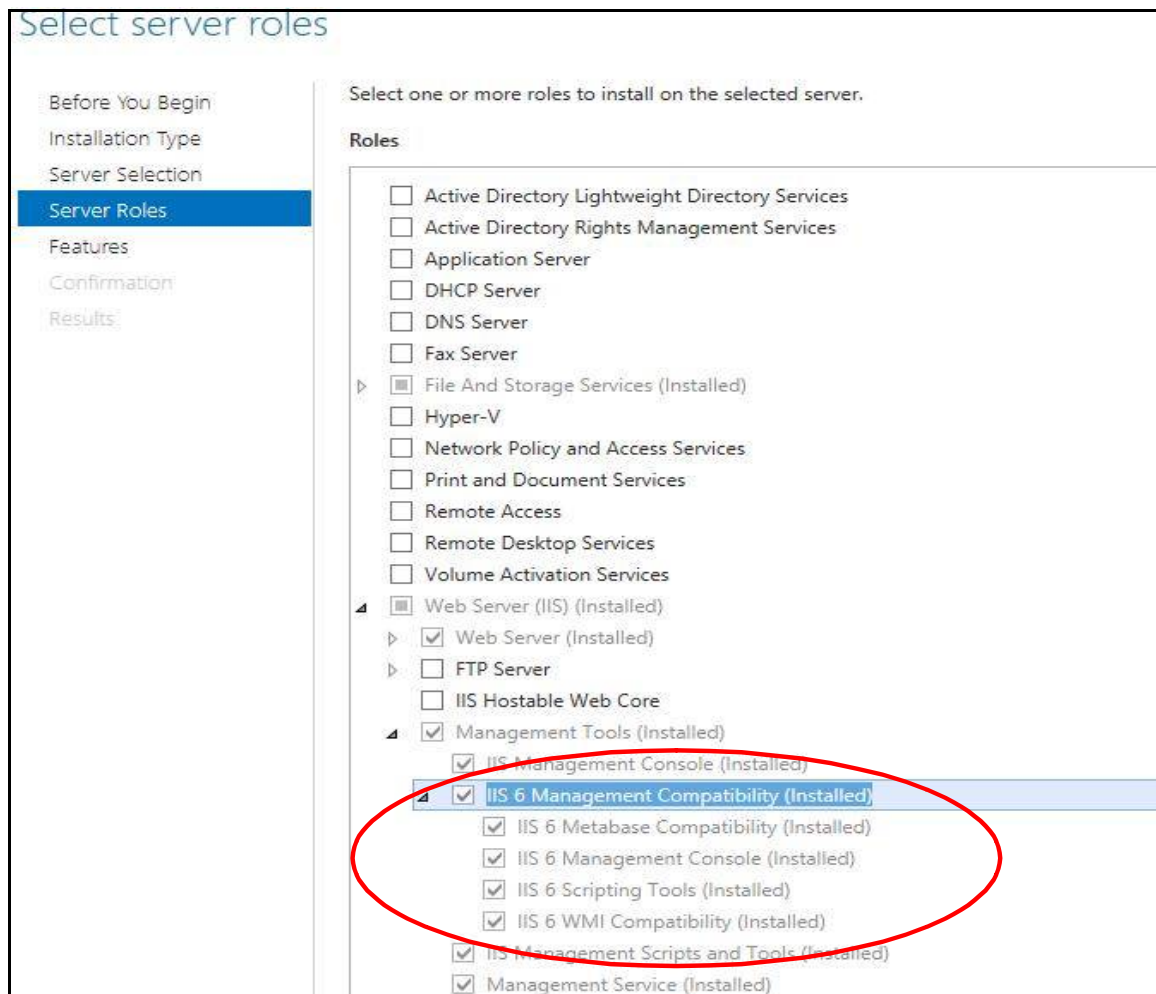
If either URL doesn't work, then check network access permissions between your desktop machine and the LISTSERV machine. Your network rules may prevent access to that machine. Also, be sure the Fully Qualified Domain Name of your server has been entered in local/internal DNS and points to the correct 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 the above section 2 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>.

Special note for users of IIS SMTPSVC. IIS 8 Manager does not implement any means to configure the SMTPSVC. Instead you need to install the IIS 6 Management Console from the Windows 2012 Installation Media and then use that to configure SMTPSVC in the same manner as for Windows 2003/IIS 6.

Microsoft also says this arrangement is temporary and the IIS 6 Management console is subject to removal. If so, they will need to provide an alternate means to configure the SMTPSVC.



After installing this role, the IIS6 Manager now appears on the Administrative Tools menu, and it can be used to configure SMTPSVC.

See our separate paper [Configuring IIS SMTPSVC for use with LISTSERV](#) for details.

