



Whitepaper

Moving LISTSERV® to a New Server

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Introduction

This paper provides the procedure for moving an existing LISTSERV installation to a new server without losing existing mailing lists and settings. The steps detailed in this document presume that the version of LISTSERV that is being moved will remain the same on both servers. If you are running an old version of LISTSERV and want to install the latest version on the new server, upgrade the installation on the old server before moving to the new one.

The steps also presume that the operating system of both servers will remain the same. The only exception is moving LISTSERV from one version of Windows[®] to another, in which case these instructions are still valid.

Pre-Moving Tasks

Before you start copying lists and files to the new server, complete the following tasks:

1. On the old server, if necessary, upgrade to the newest version of LISTSERV. After the upgrade, make sure the upgrade was successful by restarting LISTSERV, checking the log file, and sending SHOW LICENSE and SHOW VERSION commands.
2. On the new server, install LISTSERV as well as any other software you will need, such as LSMTP or a Web server. For Windows NT systems, this is necessary so that the required changes to the registry are made.

This is good practice on any system so that testing can be performed beforehand and make sure that everything is working properly on the new server before the move. If you are going to use the Web interface on the new server, it should be tested as well.

3. If your new server is going to be run in NETWORKED mode, make sure that your new LISTSERV installation has the latest network tables. Instructions on how to download the latest tables can be found at:
ftp://ftp.lsoft.com/listserv-data/00-READ_BEFORE_DOWNLOADING.TXT
4. Check to see if any paths explicitly specified in mailing list configurations on the old server are the same as on the new server. Mailing lists with archives will have a specific path listed in their Notebook= settings [2]. A path may also be specified in the Digests= setting [2], though this is less common.

Keeping the paths the same from the old server to the new server will save time and make copying the installation much easier. However, this is not always possible. For example, paths might change, if your old LISTSERV was set up on a single-drive system where everything was installed on the C: drive, and your new system is connected to a fast RAID drive located on the E: drive. In this case, the old path might be

```
C:\LISTSERV\Archives\listname\
```

and the new one

```
E:\LISTSERV\Archives\listname\
```

If the paths change from the old server to the new, each mailing list configuration will have to be edited to reflect the path change before it is copied to the new server. If this is not done, problems will occur when LISTSERV tries to find the archives using the old path. Follow these steps to change the path name:

- a. Issue a "HOLD listname" command (where listname is the name of one of the affected mailing lists) to LISTSERV and confirm it, if necessary. This will prevent

new messages to the listname mailing list from being processed while you are moving the list.

- b. On the old server, modify the path in the Notebook= setting [2] to the new value (from the new server).
- c. Repeat the above steps for each affected mailing list.
- d. Move the installation over as described below.
- e. Issue "FREE listname" commands to the new LISTSERV installation for each of the affected mailing lists, and confirm the commands as necessary.

Copying the Files to the New Server

After all the "pre-moving" tasks are completed, you can begin copying files to the new server. Follow these steps:

1. On the old server, stop the mail server software that handles incoming mail for LISTSERV. This may be LSMTP® or the SMTP "listener" service that is installed with LISTSERV on Windows®, or it may be Sendmail®, Qmail, Postfix, or a different mail transfer agent on Unix. This will prevent any mail from getting lost; the concern being that mail will queue up for LISTSERV on the old machine before you complete the switch over and will be lost once the switch over is completed.
2. Stop LISTSERV on both the old and new servers. You can now start copying the appropriate files over to the new server. Here is a list of the files that should be copied:

- a. Everything in the LISTSERV directory tree. This includes the configuration file, the spool directory, the ~LISTSERV/MAIN or ~LISTSERV/HOME directory, the listname.* files, the LOG and TMP directories, and everything else [1].

LISTSERV generates *.ERROR and *.MAIL-ERR files when it encounters an error with a JOB or MAIL file respectively [1]. If you are investigating the cause of the problems recorded in these files, you may wish to save them; otherwise, they are not necessary and may be deleted.

Note: If your notebook archive files are located in a subdirectory of the LISTSERV directory, some files related to them should not be copied over (or should be deleted after copying). See step "b" for complete details.

Important: The *.LIST, *.OLDLIST, *.JOB, *.JOBH, and *.ERROR files are all binary files[1]. If you are copying the files using FTP, make sure to transfer them in binary mode because using ASCII mode will corrupt them. If files are transferred incorrectly, LISTSERV will generate an error when it attempts to read the files and may even crash on startup.

- b. All notebook archive files (files of the form listname.LOGgyymm) need to be copied to the new server. The location of these files is dictated by each individual mailing list's Notebook= setting. Often these files will be in a subdirectory of LISTSERV, or in LISTSERV's main or home directory. A common configuration is to have them stored in directories with names like
x:\LISTSERV\LISTS\listname\

If a mailing list has a digest available it will usually be kept in the same directory as the archives. Digest files will be of the form listname.DIGEST and need to be copied over.

Do **NOT** copy archive index files, which are generally of the form `listname.DB*` or `listname.ind*`. They will be regenerated after the move. Copying the archive index files over can cause serious problems because they point to the absolute location of the archive files that they index, and thus LISTSERV and wa.exe may expect to find the archive files in a different location from where they actually are. If, after the move, you attempt a search in the archives resulting in an error that says the archive files do not exist or cannot be accessed, it can be a sign that the archive index files were inadvertently copied. Index files that are reported as inaccessible may be in the process of updating. To be sure, try the search again in a minute or two.

- c. Recreate the Web archives directory structure on the new server leaving the directories empty, allowing LISTSERV to recreate the files for you. For the best results, create the appropriate subdirectories of the Web archives directory on the new server **before** you start the new LISTSERV installation.

Do not copy over any files from the Web archive folders. Specifically, do not copy any `listname.INDyymm` files because doing so will cause problems.

Note: This may result in some delay when you start up LISTSERV for the first time on the new server because the Web files will have to be created.

- d. Check the site configuration file. This file will have a different name, depending on the operating system [1]. Make sure that all of the settings are appropriate for the file's new location. In particular, check all the settings in which a domain name or path is explicitly set.

Operating System	Site Configuration File Name
VMS	SITE_CONFIG.DAT
UNIX	go.user
Windows NT or 95	SITE.CFG

- e. Make any changes that are necessary for the new server to be treated as the main LISTSERV machine. This may be no more than changing the server's name and/or IP address, or it may require some reconfiguring of other software installed on the server (such as the mail software). Unix sites must create sendmail aliases for LISTSERV and for the lists on the new server [1]. They must also create the `/etc/lsv-wa.config` file on the new server [1].
- f. Once this is completed, start up LISTSERV, start up the program that handles incoming mail for it, and test them to make sure that everything is operating correctly.
- g. If you made changes to the `Notebook=` paths as described in the Pre-Moving Tasks section, issue the command to FREE the affected mailing lists now.
- h. If the move coincides with a change in the fully-qualified domain name of your LISTSERV installation, and you have previously registered your LISTSERV site, you will have to submit an updated registration. See <http://www.lsoft.com/products/regform.asp> for information on how to do this.

Post-Move Troubleshooting

You may wish to keep the files on the old server for a short time after the move to a new server has been completed in case any problems develop. You can look at the old files and lists to assist trouble shooting. To make sure the moved LISTSERV installation on the new server is in working order:

1. Issue a “SHOW POINTS ALL” command in the body of an e-mail message sent to the LISTSERV command address. If your move has succeeded, LISTSERV will respond with a list of all the mailing lists on the server. If some lists are missing, if an error is generated, or if LISTSERV does not respond at all something went wrong during the move.
2. If the “SHOW POINTS ALL” command returns a complete list of the mailing lists on the server, pick a list and try to retrieve its configuration. Issue a “GET listname (HEADER NOLOCK)” command to LISTSERV. If this is successful, proceed to step 3.
3. Attempt to use the Web interface (if this is part of your installation). Check to see that the archives page, <http://.../archives/> and the home page, <http://.../wa.exe> are both accessible.
4. If all of the first three steps are been successful, go to the archive pages of a selection of lists to make sure you can access individual messages.

If all of these tests were successful, moving your LISTSERV installation to a new server has succeeded. Backup the old server for added security. It is now safe to delete your old installation from the old server.

References

[1] LISTSERV Site Administrator's Manual
<http://www.lsoft.com/resources/manuals.asp>

[2] LISTSERV List Owner's Manual
<http://www.lsoft.com/resources/manuals.asp>