LISTSERV 17.0 is the latest major release of L-Soft’s email list management software. The main new features include:

**Brand New Web Interface**
The web interface has been completely redesigned for dramatically improved user-friendliness and supports all types of devices, including tablets and smartphones.

**Seamless List Archives**
The list archives are now completely seamless and offer a continuous access experience with three viewing modes to choose from: classic, forum and blog view.

**HTML Newsletter Builder**
The newsletter template builder allows list owners to design and send eye-catching and fully responsive HTML newsletters and announcements without coding experience.

**HTML Newsletter Library**
The new template library comes with more than 75 responsive newsletter templates, offering a variety of layout styles and color schemes that can be used as-is or modified as needed.

**Easy Customization**
The customization interface makes it easy to customize the appearance of the web interface and list archives to reflect an organization’s brand and graphic profile.

**Improved Reports**
The server, list and subscriber reports have been improved with instant filtering and sorting options as well as new graphing capabilities.
Please Read The Following Notices Before Beginning

**IMPORTANT: LISTSERV 17.0 requires a valid version 17.0 LAK!**
This release also requires valid Maintenance expiring on 8 Jun 2019 or later!

You must obtain and install a LISTSERV version 17.0 product LAK and (for sites with perpetual licensing) an appropriate maintenance LAK, or LISTSERV will not start after the upgrade.

**IMPORTANT: LISTSERV 16.x web interface customizations and branding are NOT COMPATIBLE with LISTSERV 17.0!**

**Before upgrading to LISTSERV 17.0, please be sure to back up your LISTSERV installation.**

LISTSERV 17.0 is a major upgrade to the traditional LISTSERV web interface, bringing it in line with present day standards with responsive templates designed to display on both desktops and hand-held devices. While there is a backward-compatible interface mode that allows both the server interface and individual list interfaces to fall back to the non-responsive 16.x "look and feel," customizations made to the 16.x web templates are **not compatible** with the 17.0 web interface and will have to be retooled to fit into the new responsive interface. If your LISTSERV server has heavily-customized or branded templates, **L-Soft strongly recommends that this retooling be done in a test environment before upgrading your production server.**

Before installing any upgraded files, the LISTSERV installer scripts for both Windows and unix will copy SITE.WWWTPL (if it exists) to SITE165.WWWTPL. This is a requirement for the "compatibility mode" previously mentioned, and preserves any customizations made to the 16.x web templates for use by that mode.

LISTSERV sites that normally upgrade using manual methods rather than using the installer kits MUST perform the SITE.WWWTPL -> SITE165.WWWTPL operation manually. Unix LISTSERV sites performing this manual operation MUST ensure that the resulting site165.wwwtpl file is named in lower case, is owned by 'listserv', and has the same permission settings as site.wwwtpl.
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Changes for LISTSERV 17.0

Responsive Web Interface and Seamless Indexing

LISTSERV 17.0 introduces a **modern, responsive web interface** that works on all devices, including tablets and phones. This new interface represents a significant departure from the 16.x interface, which was introduced in 2009.

LISTSERV 17.0 also introduces a **new indexing scheme**, which allows **seamless threading of discussions** to continue across two or more separate list archive notebooks. For instance, consider a discussion that begins at the end of March and continues into April on a list that has monthly archives. In earlier versions, the "Topic" navigation buttons for individual messages (which thread messages by subject line) would allow a reader to advance only to the last matching message in the March archive, at which time the reader would have to switch to the April archives, find the thread and continue navigating by topic. With LISTSERV 17.0, after re-indexing the list's archives, the discussion thread will appear seamless to the reader, who will no longer be interrupted by the need to switch archive notebooks in order to continue reading the thread.
These two features are arguably inseparable as they work hand-in-hand to provide the new access experience, and they will therefore be discussed together in this section.

It is important to note that because the LISTSERV 17.0 web interface and templates are radically different than before, customizations made to 16.x templates will not carry over to the new 17.0 interface. However, when upgrading to 17.0 from an earlier version or installing 17.0 from scratch, LISTSERV does allow you to run the web interface in "compatibility mode", which will preserve your existing "look and feel" as well as any branding or other template customizations you have made in the earlier version. Additionally, the seamless message threading change will be disabled by default until a list is re-indexed. These design decisions allow a staged migration to the new 17.0 interface that can be accomplished on the customer's own timeline.

**Server-Level Settings**

There are two new site configuration variables that control the implementation of the new interface. The set two variables are:

OLD_WEB_INDEXES=0|1|2
WWW_ALLOW_LEGACY_INTERFACE=0|1|2

The defaults for these variables in LISTSERV 17.0 are indicated by the underlined values, in other words:

OLD_WEB_INDEXES=0
WWW.Allow_LEGACY_INTERFACE=1

In this configuration, LISTSERV operates in 17.0 "native mode" but allows site administrators or individual list owners to switch to 16.5 "compatibility mode" if they so choose. The seamless message threading will not take effect until a list is re-indexed.

The setting of OLD_WEB_INDEXES determines at what level LISTSERV indexes lists. The options are as listed in the following table (the default value is in **bold**):

| OLD_WEB_INDEXES=0 | LISTSERV will create and maintain only new-style single indexes after a list has been indexed from scratch. Old-style indexes are used until the list is re-indexed and are then removed permanently.  
*This is the "normal" setting for 17.0 and the default.* |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OLD_WEB_INDEXES=1</td>
<td>Both types of indexes are created when indexing the list from scratch and are maintained in parallel. In other words, re-indexing a list adds a new-style index without losing the old-style index.</td>
</tr>
</tbody>
</table>
This is a hybrid mode for testing only.

OLD_WEB_INDEXES=2

A new-style single index is never created. This setting is supported only with WWW_ALLOW_LEGACY_INTERFACE=2.

This is a compatibility mode only.

WWW_ALLOW_LEGACY_INTERFACE allows the site administrators to decide whether the site, and by extension, individual lists, may continue operating in legacy 16.5 "compatibility mode". The options are as follows (the default value is in bold):

<table>
<thead>
<tr>
<th>WWW_ALLOW_LEGACY_INTERFACE</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>The web interface operates in 17.0 &quot;native mode&quot;, and the 16.5 legacy interface is not allowed. This should be the standard setting once migration to the new interface is complete. This will be the default in the next version of LISTSERV.</td>
</tr>
<tr>
<td>1</td>
<td>The web interface operates in 17.0 &quot;native mode&quot;, but the 16.5 legacy interface is allowed, either for the whole site or on a list-by-list basis. This is the default for 17.0.</td>
</tr>
<tr>
<td>2</td>
<td>The web interface operates in 16.5 &quot;compatibility mode&quot;. The 17.0 interface is not allowed, and all new 17.0 features in the interface are disabled. This setting is supported only with OLD_WEB_INDEXES=2. This is a compatibility mode only.</td>
</tr>
</tbody>
</table>

While there are three available settings each for the two new variables, it should be noted carefully that not all combinations are supported. Following is a compatibility matrix indicating which combinations are supported (green), supported for special situations (yellow) and unsupported (red):

<table>
<thead>
<tr>
<th>OLD_WEB_INDEXES=0 (default)</th>
<th>WWW_ALLOW_LEGACY_INTERFACE=0</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Standard setting once migration to the new interface is complete. This will be the default in the next version.</td>
</tr>
<tr>
<td>WWW_ALLOW_LEGACY_INTERFACE=1</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default setting for 17.0. This setting allows staged migration to the new interface.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WWW_ALLOW_LEGACY_INTERFACE=2</th>
<th>Unsupported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Degraded functionality.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OLD_WEB_INDEXES=1</th>
<th>WWW_ALLOW_LEGACY_INTERFACE=0</th>
<th>Unsupported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Maintaining both old and new indexes only makes sense if both interfaces are allowed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WWW_ALLOW_LEGACY_INTERFACE=1</th>
<th>Special Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This setting can be used if some lists need to use the old interface for a long time. However, rebuilding both sets of list indexes for lists with very large archives can slow down the server.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WWW_ALLOW_LEGACY_INTERFACE=2</th>
<th>Unsupported.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maintaining both old and new indexes only makes sense if both interfaces are allowed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OLD_WEB_INDEXES=2</th>
<th>WWW.Allow_LEGACY_INTERFACE=0</th>
<th>Unsupported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Degraded functionality.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WWW_ALLOW_LEGACY_INTERFACE=1</th>
<th>Unsupported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Degraded functionality when selecting the new interface.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WWW_ALLOW_LEGACY_INTERFACE=2</th>
<th>Level Set Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New features are disabled and 17.0 is used as a bug fix update only.</td>
</tr>
</tbody>
</table>
The combinations highlighted in red are not supported and will not be discussed further. The combinations highlighted in yellow are supported but not recommended for general use.

**Note for Unix:** Both of the new variables have been pre-exported in the "go" script which ships with LISTSERV 17.0 and do not need to be exported separately in go.user.

**List-Level Settings**

There is a new option for the list keyword setting "Misc-Options=" that controls whether the 16.5 legacy interface (or "compatibility mode") is used for an individual list. This would be used in a case where the site administrators have enabled the 17.0 web interface sitewide, but a particular list, either for user-friendliness or because of significant list-level customizations (or both), prefers to remain at the 16.5 legacy interface for a while. This would be set in the list header with:

Misc-Options= LEGACY_INTERFACE

Note that in order to use Misc-Options for this purpose, WWW_ALLOW_LEGACY_INTERFACE cannot be set to 0. If it is set to 0, "Misc-Options= LEGACY_INTERFACE" is ignored.

It is possible to set LEGACY_INTERFACE as the default for "Misc-Options=" globally, which would apply to all lists that do not have a "Misc-Options=" keyword. To do this, simply set the following in LISTSERV's site configuration and restart LISTSERV:

DEFAULT_MISC_OPTIONS=LEGACY_INTERFACE

Note, however, that this can be overridden at the list level with a "Misc-Options=" keyword setting that does not include "LEGACY_INTERFACE".

If you need to force all lists to the legacy interface for some reason, regardless of whether they have a "Misc-Options=" keyword setting, this can be done with the following site configuration setting, which cannot be overridden by list owners:

DEFAULT_MISC_OPTIONS=+LEGACY_INTERFACE
New LISTSERV Web Interface Mini-FAQ

1. We changed the value of OLD_WEB_INDEXES, but why did nothing change on the server?

Changing the site configuration setting itself does not force any change to the indexing system because re-indexing is a resource-intensive operation that could take hours, depending on the volume of archives on your server. Re-indexing is probably something you will want to schedule for off-hours when the server is not busy.

2. How do I allow the 17.0 interface but make the 16.5 interface the default?

Setting DEFAULT_MISC_OPTIONS=LEGACY_INTERFACE in the site configuration will do that for all lists that have no "Misc-Options=" keyword. Other lists presumably have a sophisticated list owner who can make the change manually.

Alternately, setting DEFAULT_MISC_OPTIONS=+LEGACY_INTERFACE will force all lists to the 16.5 interface whether they have a "Misc-Options=" keyword or not, which could give list owners the time to change their list configuration. However, this should be done before the upgrade, so the interface remains at the 16.5 level throughout.

3. We changed DEFAULT_MISC_OPTIONS like you said above, but why does it not work?

As with OLD_WEB_INDEXES, a site configuration change does not automatically cause files to be rebuilt. In this case, the listname.WWWTPL files under the web interface need to be rebuilt before the interface change will go into effect. While there is no command that specifically rebuilds these files, they will be rebuilt when you rebuild the web indexes. Rebuilding the web indexes can be done with the command:

```
REINDEX WWW *
```

Note that this will schedule the rebuild in the background, which may be the best solution if you have many lists or lists with very large archives (or both). If it is desired to rebuild the web indexes immediately, use the command:

```
REINDEX WWW IMMEDIATE *
```

4. Can I have WWW_ALLOW_LEGACY_INTERFACE=2 but with the 17.0 interface for the site administrator?

Yes, this is done with:

```
WWW_ALLOW_LEGACY_INTERFACE=1
DEFAULT_MISC_OPTIONS=+LEGACY_INTERFACE
```
New Archive Views Available for Your Lists

The new single-index feature enables new ways to present and view the list archives. There are now three modes available: Classic View, Forum View and Blog View.

**Classic View** is the default view. Assuming you are not using the legacy interface, the main difference you will see is that, rather than being presented with a list of monthly or weekly archives to click on to view the list of messages they contain, now all messages are displayed on the archive index page for the list. The display looks much like an email inbox. You can sort messages by author, date and subject as before, but now the sorting takes place on the entire archive – not just a single month's or week's worth of messages. As already noted above, this means that you will be able to filter and sort on a particular subject line and thread messages regardless of which individual archive file they happen to reside in.
Forum View is an option that can be selected by clicking on the "Use Forum View" link at the top of the list of messages. If you are logged in, your choice of archive viewing mode will be saved in your personal preferences. This option displays messages in a manner that will be immediately familiar to users of online forums. Replies are threaded inline and can be expanded or collapsed at the user's preference.
Finally, **Blog View** presents list posts in a manner similar to Forum View, but in a format that has the look and feel of a weblog (or "blog"). This is accomplished with a custom stylesheet that can be modified to suit by the list owner, and because the custom stylesheet is at the heart of this view, the list owner must explicitly enable it in the **List Customization** interface.
It must be noted that Blog View is not an optional view like Forum View or Classic View, where the individual subscriber can switch back and forth between views – if it is enabled, the list archives will be available only in Blog View. Also note that list owners can configure their list archives to always display in Classic View or Forum View as well by making the selection in the List Customization interface if they so choose.

For more information on the three new archive views, and some additional screenshots of each viewing mode, please visit the LISTSERV At Work newsletter preview article found at: http://www.lsoft.com/news/preview170-issue5-2018.asp

**HTML Newsletter Builder and Library**

The newsletter template builder allows list owners to design and send eye-catching and fully responsive HTML newsletters and announcements without coding experience. This editor is found under both the Server Management and List Management sections of the LISTSERV web interface. Using the server-level editor allows LISTSERV administrators to use or modify templates at the server level; using the list-level editor restricts list owners to using or modifying templates only for the lists they own. List owners who are not LISTSERV administrators will see only the list-level version of the editor, as usual.

The new template library comes with more than 75 responsive templates, offering a variety of layout styles and color schemes that can be used as-is or modified as needed.

When entering the Newsletter Template Editor from either the server-level or list-level menu, the following page is displayed:
The HTML templates are divided into two categories. **Announcement Templates** are simpler and contain just a single one-column content block. **Newsletter Templates** are more elaborate and contain a combination of multiple content blocks and layout styles. Announcement templates all begin with the A- prefix, while newsletter templates begin with the N- prefix. To narrow the list of templates shown in the pulldown menu and the index, simply select the type of templates that you want to view.
From here, you can either create a brand-new template using the editor, or you can select a template from the pulldown menu or click on one of the thumbnails to make a copy or to modify an existing template.

In the editor, modifying the template is done by simply clicking on any of the newsletter parts or using the menu at the top and making changes to the layout, fonts and colors using pulldown menus and text boxes.
All the HTML code generated by the template builder is fully responsive, which ensures that it displays properly in all devices, including smartphones. A plain text part of the newsletter is always created automatically.

For more information on the newsletter template editor, please visit the LISTSERV At Work newsletter preview article found at: http://www.lsoft.com/news/preview170-issue4-2018.asp
New Web Customization Interface

The new web customization interface makes it easy to customize the appearance of the web interface and list archives to reflect an organization's brand and graphic profile. The interface is available both at the server and the list level.
For server-level customizations, the interface is reached via the "Site Customization" link found in the Server Administration section. For list-level customizations, choose "List Customization" from the List Management section.

The main difference between the server-level and list-level customization pages is that the list-level section requires you to choose a specific list to customize and only applies to that list. The server-level page sets server-level defaults, but all of these can be overridden at the list level (as was the case in previous versions of LISTSERV).

As with the newsletter template editor, the customization can be done using simple pulldown menus and text boxes. You can choose from 24 existing color schemes or you can select your own colors to perfectly match your organization's graphic profile. You can also insert a custom logo in the main navigation bar and make any changes that you would like to the fonts, their sizes, the navigation menus and the archives.

For more information on the site and list customization feature, including more screenshots, please visit the LISTSERV At Work newsletter preview article found at:
Improved Reporting Interface

The server, list and subscriber reports have been improved with instant filtering and sorting options as well as new graphing capabilities.

In addition to the on-screen "Table" and "CSV Format" display options that were present in previous versions, LISTSERV 17.0 also adds the following on-screen chart formats:

- Bar Chart (Vertical)
- Bar Chart (Horizontal)
- Line Chart (Filled)
- Line Chart (Not Filled)
- Radar Chart

Instant filtering is an exciting new feature that allows the user to instantly filter out data not considered important and drill down to the data they really want to see. For instance, a Server Usage Report without any filtering might look like this:
But if you only want to see data for 2019 and only the months with more than 6000 postings, you can type **2019** into the "Year and Month" filter box and **>6000** into "Postings" filter box:
And immediately, the on-screen table reduces to show the matching data points.

As in previous versions, the report columns and the report period can be changed by using the "Customize Report" link at the top right of the report and making changes in the pop-up configuration window, which will then be saved in your personal preferences for the next time you return to the report screen.

The graphing features are available for Server Usage Reports and Server and List Activity Reports where "Statistics" is chosen as the reporting type. They are also available on the List Owner Dashboard and for List Reports for numerical columns, including subscriber counts and changelog data.
**Important Reminder:** Fix: DMARC SP= Tag Now Correctly Handled

**IMPORTANT:** This release is a "must have" for organizations that publish a DMARC record with "p=reject" or "p=quarantine" and which did not previously upgrade to LISTSERV version 16.5-2018a. Organizations running LISTSERV versions anterior to 16.5-2018a MUST upgrade to the latest generally available version of LISTSERV, which is now 17.0, in order to obtain this fix.

This fix was made and announced for version 16.5-2018a. It was considered extremely important because in previous versions, if a subdomain did not have its own DMARC record, LISTSERV would (correctly) search "up" the chain to see if a subdomain actually was covered by the domain-level DMARC record, but would **not** rewrite the RFC822 "From:" line when "p=reject" or "p=quarantine" **unless** an "sp=" tag was present in the DMARC record. This required a fix because the "From:" line should have been rewritten **regardless** of the presence of an "sp=" tag.

From version 16.5-2018a, LISTSERV correctly rewrites the "From:" line even in the absence of an "sp=" tag. Organizations running LISTSERV versions anterior to 16.5-2018a **must** upgrade to LISTSERV 17.0 (the latest generally available version) in order to obtain this fix.

**LISTSERV 17.0 Changes for WA**

The current WA version at the version 17.0 release is "17.0 (Build Date: 8 Jun 2019)".

WA continues to undergo improvements and optimizations. L-Soft also continues to quash XSS and similar vulnerabilities as they are reported. Because these issues remain exploitable in older versions of WA, L-Soft will not discuss the specific changes made in this regard, other than to state that all those vulnerabilities that have been found during the course of a comprehensive code review have been fixed in the current release of WA.

**WA Optimization with GLOBAL_A1_LINES and GLOBAL_A1_SCAN**

LISTSERV 17.0 introduces two WA preferences that are of critical importance to large sites. These preferences relate to web archive indexing and how much data is returned on an archive index query (for instance, the main web archive index page for a list). Both preferences may be changed in the DEFAULTS web template if the default values are unsatisfactory:

```plaintext
+***************************** Messages Displayed/Page on List Index *****************************
+*
+SEP GLOBAL_A1_LINES 250
+*
+***************************** Archived Messages Scanned on List Index *****************************
+*
```
Old-style indexes are typically weekly for high-volume lists and rarely contain more than a couple hundred messages. When using an old index, WA ignores the new preferences and always returns the entire index to the user’s browser. It can get voluminous at times if there are long RSS abstracts, but it will never get out of hand. However, the new 17.0 indexes are a different story. Imagine a 17.0 index of 250k messages with 1k abstracts each. With HTML encoding, you could be serving 512M to the browser.

**GLOBAL_A1_LINES** determines the number of index lines (messages) returned to the user’s browser; a value of 0 returns everything. The default for **GLOBAL_A1_LINES** is currently 250. It is likely that this setting will be fine for all but the very largest sites, or for sites that have a significant number of subscribers who access the server over limited-bandwidth connections.

**GLOBAL_A1_SCAN** (HPO only) is the number of index lines to read and process before returning **GLOBAL_A1_LINES** entries, or 0 to scan the entire index. The default setting is currently 2500. **GLOBAL_A1_SCAN** is ignored when you manually select a date range, as results would otherwise be incorrect.

Note that WA will increase **GLOBAL_A1_SCAN** if it is less than **GLOBAL_A1_LINES** and **GLOBAL_A1_LINES** is not zero.

**IMPORTANT:** Increasing the value of **GLOBAL_A1_SCAN** can increase RAM usage significantly if the index is large, and can also increase I/O. On systems where RAM is at a premium, for instance on virtualized servers, it will be necessary to tune this value carefully to prevent WA instances from exhausting available resources. **L-Soft’s recommendation** is that the default value should be used for all but the largest sites or those sites with large numbers of limited-bandwidth users.
Important: Anti-Virus Support

Beginning in January 2022, the long-running agreement between L-Soft and F-Secure to provide free licenses for F-Secure for use with LISTSERV Classic and LISTSERV HPO running under Microsoft Windows Server and various flavors of Linux was cancelled. L-Soft no longer provides license keys for F-Secure products and does not support newer versions of F-Secure Anti-Virus products. F-Secure no longer provides virus signature updates for its older versions.

For Windows, LISTSERV Classic and LISTSERV HPO sites currently running F-Secure Anti-Virus should uninstall the F-Secure product, ensure that Windows Defender Anti-Virus is installed and enabled on the machine, and use Windows Defender Anti-Virus as the L-Soft-supported Anti-Virus platform. (If not already installed, Windows Defender can be installed as a Feature from the Server Manager application, viz.,

For Linux, unfortunately there is no native, supported replacement for F-Secure Anti-Virus. Note, however, that L-Soft’s Anti-Virus Station (AVS) product, which runs on a dedicated Windows server, can be used to scan email for LISTSERV on Linux. The AVS can run on a virtual Windows server if necessary. Please see https://lsoft.com/manuals/17.0/LISTSERV17.0_AVS.pdf for more information about the AVS, and contact your L-Soft sales representative for pricing.
Applying LISTSERV 17.0

**IMPORTANT:** Please be sure to read Preliminary Setup for Upgrades above before attempting to upgrade to LISTSERV 17.0.

**IMPORTANT:** Install (or ensure that it is installed) your LISTSERV 17.0 product LAK before upgrading!

A valid product LAK (License Activation Key) with "REL=17.0" must be installed before upgrading or LISTSERV will not start after the upgrade.

Also, a valid maintenance LAK expiring no earlier than 8 Jun 2019 is required in order to apply this release.*

If you have not received a LISTSERV 17.0 product LAK, please contact your sales representative or sales@lsoft.com before upgrading!

To find out if you can upgrade to LISTSERV 17.0 with your current license key, please issue a SHOW LICENSE command to LISTSERV and examine the response. It will be similar to this:

```
License type:       Permanent
Expiration date:    None - perpetual license
Maintenance until: 26 Nov 2019, serial number MNT-XYZ-1
Capacity:           Unlimited
Version:            17.0
Serial number:      XYZ-1
Build date:         8 Jun 2019
```

Your license key will be valid for the 17.0 upgrade if your current product LAK is for version 17.0 or higher, and your maintenance LAK is valid until at least 8 Jun 2019.

* LISTSERV Lite Free Edition installations require only the 17.0 product LAK.

Sites running LISTSERV 14.4 or later may use the LAK input tool in the web interface to apply and check their new LAK before upgrading.

The installation kits found on L-Soft's website are used either to install a new copy of LISTSERV or to upgrade an existing installation. L-Soft does not provide patch kits or dedicated upgrade kits; to upgrade to LISTSERV 17.0, simply go to L-Soft's website and download an evaluation copy of LISTSERV or LISTSERV Lite, then follow the installation instructions for your operating system. The kits can be found at:
http://www.lsoft.com/download/listserv.asp
http://www.lsoft.com/download/listservlite.asp

All LISTSERV installation guides are found on our documentation page at:
http://www.lsoft.com/resources/manuals.asp
Special Notes

Upgrade Instructions

This document does not include upgrade instructions. Please see the installation guide specific to your OS platform for upgrade instructions. Installation guides are available at:
http://www.lsoft.com/resources/manuals.asp

Supported Operating Systems

LISTSERV version 17.0 is available only for operating systems currently supported by L-Soft. L-Soft no longer maintains development systems for unsupported operating systems and is not in a position to compile LISTSERV 17.0 for those systems. A list of supported operating systems is available at:

Please note the following:

- Support for 32-bit Windows and Linux was withdrawn as of the release of LISTSERV 16.0-2017a.
- Support was withdrawn for OpenVMS as of the release of LISTSERV 16.0-2017a.
- A separate build for Linux 2.6 that was built on RHEL 5 was withdrawn with the release of LISTSERV 16.5-2018a.

Sites running LISTSERV for Microsoft Windows should also note that Microsoft no longer supports versions of Windows Server prior to Windows Server 2016. If you are running LISTSERV on an older version of Windows Server, please make plans to migrate to a supported version.

Support for GDPR Compliance

L-Soft has made available, at no charge, a comprehensive EU General Data Protection Regulation (GDPR) reporting script written in the Microsoft PowerShell scripting language, which can be used in conjunction with L-Soft’s LCMD or LCMDX utilities on Microsoft Windows, Linux, and MacOS systems. For more information, please see our GDPRSCAN Installation and Operating Guide for Windows, Linux, and MacOS at:
http://www.lsoft.com/manuals/17.0/GDPRSCAN_Installation_and_Operating_Guide.html