

## RESULTS : MACE-MLIST Survey of Mailing List Administrators November 2004

### INSTITUTION:

- Brown University
- Carleton College
- Central Queensland University
- George Washington University
- Georgetown University
- Harvard University
- Indiana Purdue University Ft. Wayne
- Indiana U. Purdue U. at Indianapolis (IUPUI)
- Kansas State university
- Medical University of South Carolina
- Michigan Technological University
- Oakland University
- Penn State University
- RedIRIS (Spanish Academic & Research Network)
- Texas A&M University
- Universidad de Malaga
- University of South Florida
- University of Chicago
- University of Notre Dame
- University of Texas at Dallas
- University of Wisconsin
- Washington University

### INSTITUTION TYPE

Private:	8	36%
Public:	14	64%
USA:	20	90%
Int'l:	2	10%

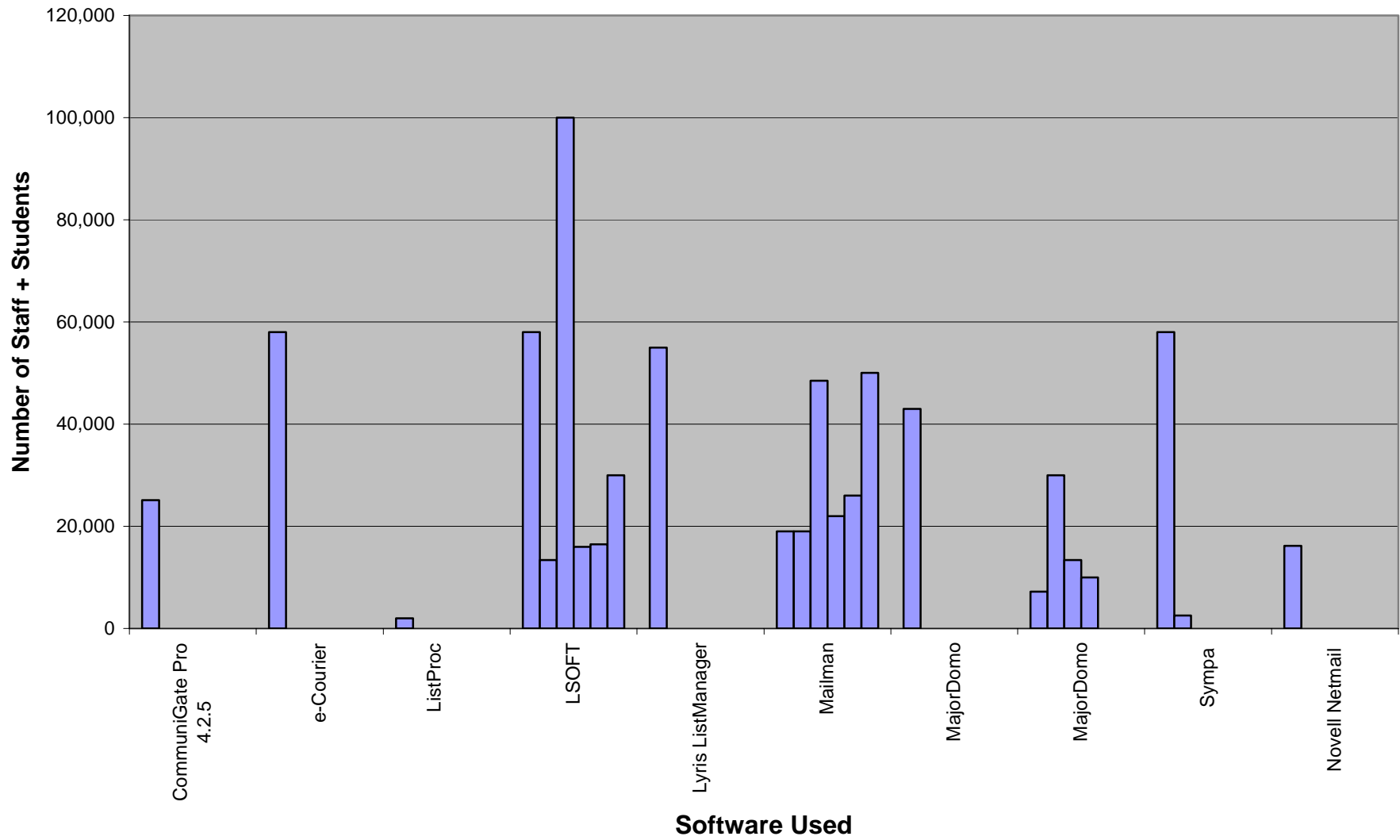
### TITLE/DEPARTMENT

- Administrator, ITD
- Chief Technologist, UNIX Services
- Corporate Systems
- Information Technology Services
- IT Services
- Lead Network Engineer-Computer Science
- Lead Systems Programmer, Computing and Information Services
- Legacy Applications Monkey / Chief Information Curmudgeon
- OCIO-IS Network and Technical Services
- professor and director of computing resource
- Research Associate, Information Technology Services
- Senior Systems Administrator, Messaging Services Team, Operations & Engineering Office of Information Technologies
- Sr. IT Manager
- System Administrator, Academic Computing
- System Administrator - University Information Systems
- Systems Manager, Central Computing Facility
- Systems Programmer II, University Technology Svcs.
- Systems Analyst, Information Technology
- UNIX system admin
- Unix System Admin

### SERVICE LEVEL PROVIDED

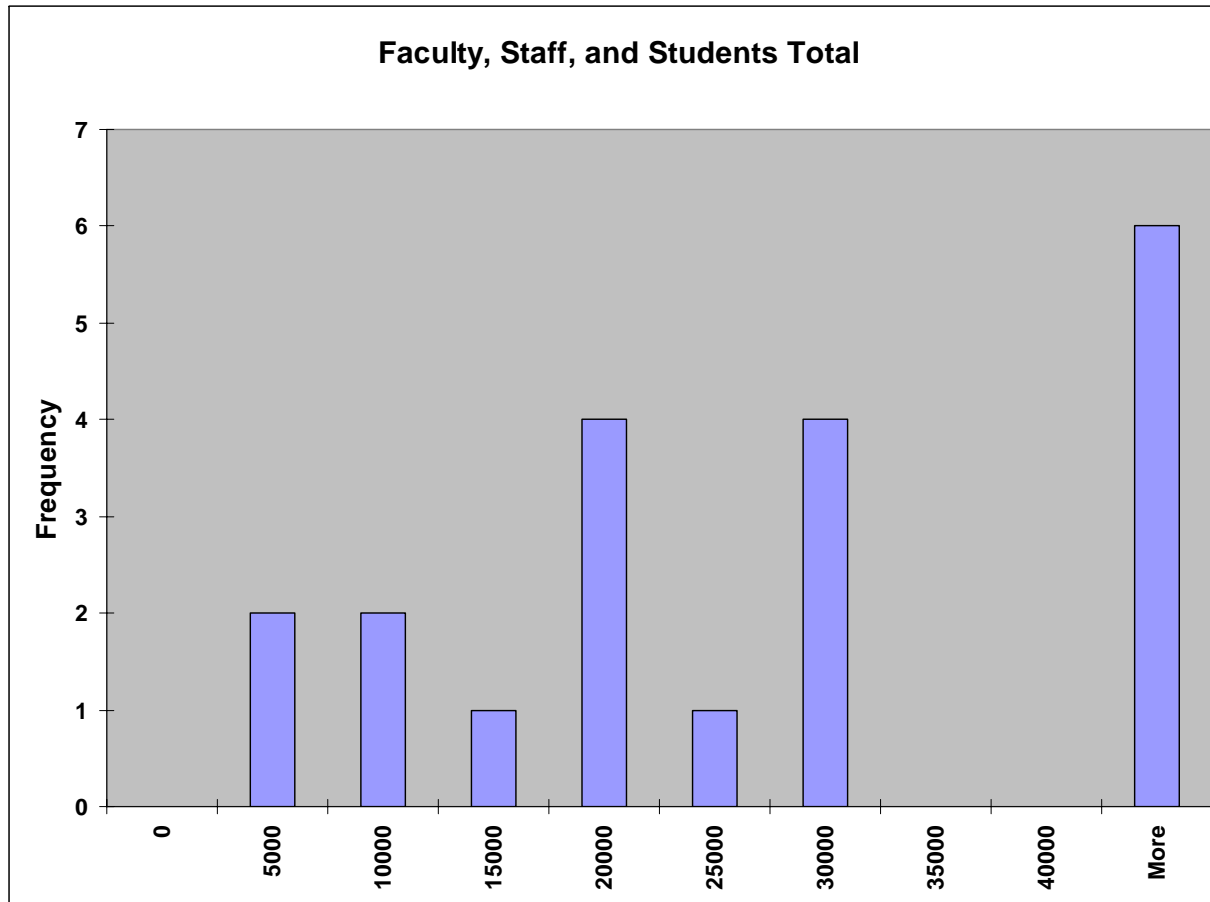
Entire Institution	87%
School /Dept. Level	13%

### Mailing List Selection by Institution Size



**INSTITUTION SIZE:**

# STUDENTS			#STAFF		TOTAL#	
Bin	Freq.	Cumul. %	Freq.	Cumul %	Freq.	Cumul %
0	0	0.00%	0	0.00%	0	0.00%
5000	3	15.00%	11	55.00%	2	10.00%
10000	3	30.00%	5	80.00%	2	20.00%
15000	4	50.00%	2	90.00%	1	25.00%
20000	3	65.00%	2	100.00%	4	45.00%
25000	1	70.00%			1	50.00%
30000	0	70.00%			4	70.00%
35000	0	70.00%			0	70.00%
40000	1	75.00%			0	70.00%
>40,000	5	100.00%			6	100.00%



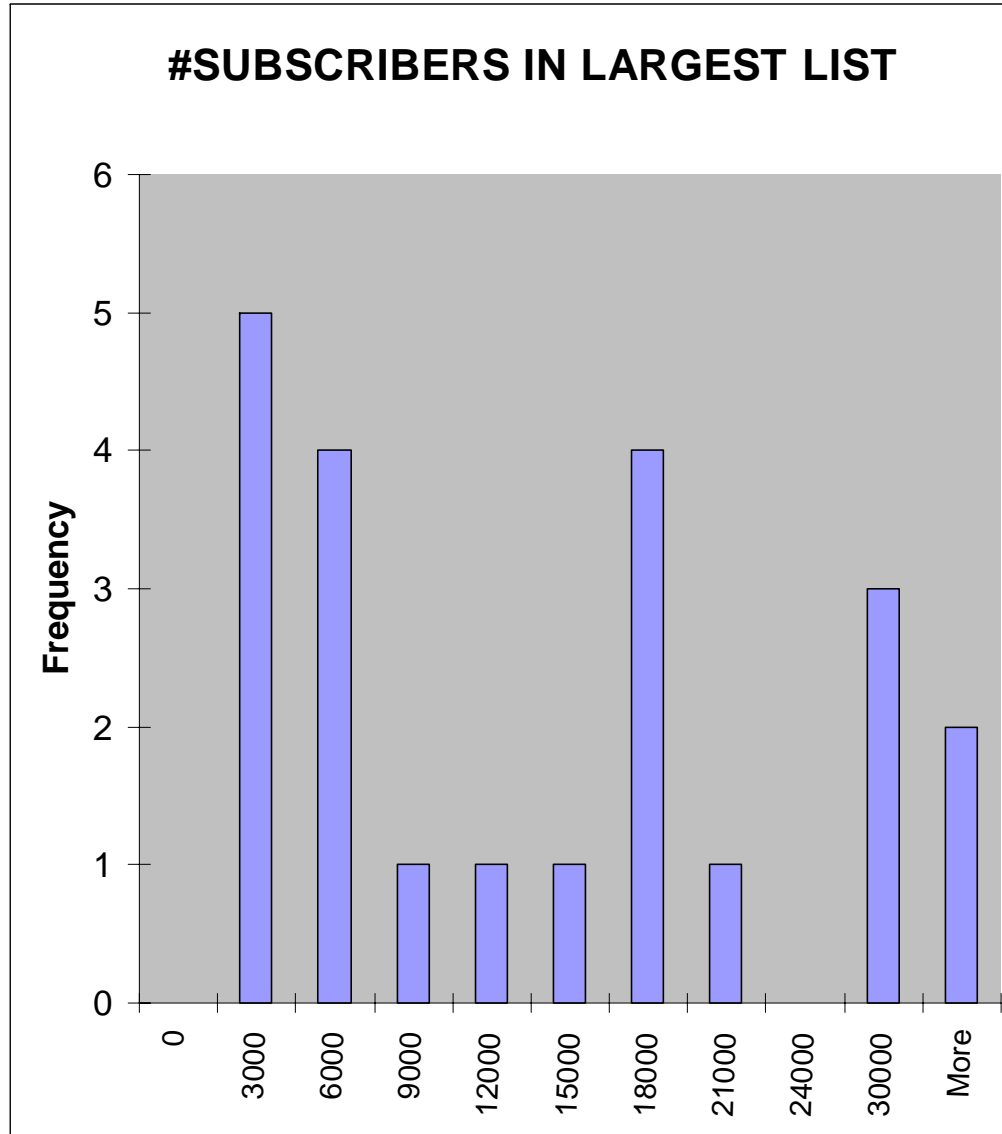
**MAILING LIST SERVICE SIZE:**

**NUMBER OF LISTS MANAGED**

<i>Bin</i>	<i>Frequency</i>	<i>Cum%</i>
0	0	0.00%
1000	13	56.52%
2000	3	69.57%
3000	2	78.26%
4000	0	78.26%
5000	2	86.96%
6000	1	91.30%
>6000	2	100.00%

**#SUBSCRIBERS IN LARGEST LIST**

<i>Bin</i>	<i>Frequency</i>	<i>Cumul%</i>
0	0	0.00%
3000	5	22.73%
6000	4	40.91%
9000	1	45.45%
12000	1	50.00%
15000	1	54.55%
18000	4	72.73%
21000	1	77.27%
24000	0	77.27%
30000	3	90.91%
>30,000	2	100.00%



## USES OF MAILING LIST SOFTWARE

[One mgr. noted course comm. moving into Blackboard.]

Admin. Comm.	Comm. W. Students	Course Related	Virtual Org.	Comm. Svc.
21	19	17	19	19

## MAILING LIST SOFTWARE USED

### Software Used (Frequency, Used by % of Institutions)

- CommuniGate Pro (1, 5%)
- eCartis (1, 5%)
- e-Courier (1, 5%)
- Listproc (2, 9%)
- LSOFT Listserv (6, 27%)
- Lyris ListManager (1, 5%)
- Mailman (6, 27%)
- MajorDomo (6, 27%)
- Novell Netmail (1, 5%)
- Sympa (2, 9%)

## REASONS FOR COMBINED USE

### ▪ Mailman + MajorDomo + ListProc

We are retiring Listproc in favor of Mailman. Majordomo is the mailing list manager for automated systems that dump to flat files their lists from administrative data.

### ▪ LSOFT ListServ + e-Courier + Sympa

Listserv has served well for general use listserv services for the campus. Sympa is used for special bulkmail services - such as one time distributions to a specific category of students, general announcements to all employees, etc. e-Courier is an electronic document delivery service.

### ▪ LSOFT ListServ + MajorDomo

We use Listserv for all our ordinary lists. However we also provide a service called "bulk email" for announcement mailings to all or part of the community. some courses use that facility. The recipients for those mailings come from our directory, and we had no way to integrate Listserv with the directory. Instead we use a locally-modified version of Majordomo.

## BULK EMAIL POLICY?

- o generic "appropriate use";
- o Groups pay to use lists w. "everyone"
- o "in the works"
- o **University of Wisconsin:** <http://www.doit.wisc.edu/lists/massemail/criteria.asp>
- o **Texas A&M:** <http://www.tamu.edu/neo/procedures/BulkEmail/guidelines.html>
- o **Brown Bulk Email:** [http://www.brown.edu/Facilities/CIS/Doc/be\\_guidelines.html](http://www.brown.edu/Facilities/CIS/Doc/be_guidelines.html) and Morning Mail guidelines: <http://morningmail.brown.edu/files/mmail/>
- o **Georgetown:** <http://uis.georgetown.edu/broadcastcommunications/broadcast.email.html#criteria%20and%20standards>
- o Penn State: <http://guru.psu.edu/policies/AD56.html>

## ADMINISTRATORS' EVALUATION OF MAILING LIST SOFTWARE

MLM	SELECTION CRITERIA	STRENGTHS	WEAKNESSES	BULK E-MAIL?
<b>CommuniGate Pro</b>	Integration with the CommuniGate Pro messaging server software.	* Tight integration with the messaging server software; <b>users in local domains cannot be created with erroneous addresses.</b> * <b>Automatic unsubscribe of addresses that are bouncing messages.</b> List module is very polite.	* Would like hierarchical Lists with inherited posting preferences, such that a global list will permit posts from any subscriber of the Staff list but not from any subscriber of the Student list and messages sent to the global list go to all subscribers of both lists only once	Since it's also the SMTP server, CGP's List module uses what SMTP flow-control settings are in place.
<b>eCartis</b>	* speed; * convenient security; * multiple admins/list;	* <b>mutiple list admins;</b> * <b>Vacation flag;</b> * <b>union-list;</b> * <b>cc-list</b>	* poor documentation; * poor web integration; * unclear development future	yes; set "chunk size" and # recipients per batch; it's fast!
<b>e-Courier</b>		* content-rich, <b>secure</b> document delivery	not much in the way of management tools provided.	
<b>Listproc</b>	It was free.		* We are actually looking into other software given the dearth of features.  * Lack of elimination of bogus addresses.  * Automatic approval for moderated list	Listproc budgets it in "groups" of emails. As a result, listproc can be slowed by a single email address being down.

			<p>from owners/moderators based on email instead of pwd.</p> <ul style="list-style-type: none"> <li>* Bad/Lack of web interface for owners/subscribers.</li> <li>* Lack of web interface for creating and deleting lists</li> <li>* Poor processing of large lists.</li> <li>* Unfortunately only one common email is responsible for the entire groups of lists as an administrator so shared pwd are required for list creation.</li> </ul>	
<p><b>LSOFT Listserv</b></p>	<p>* It was <b><u>selected 10 years ago</u></b>. It has created a culture in commands and about all the main tool in work collaborative in technical and scientific environments very successful. His systems of authentication have come being useful during these years.</p> <p>* Listserv has been a part of our service offerings for many years, so <b><u>inertia</u></b> plays a big part in why we still run it. It is, however, <b><u>still serving our mission very well</u></b>.</p> <p><b><u>We started using Listserv when it ran over BITNET</u></b> and had no competition. We</p>	<ul style="list-style-type: none"> <li>* <b><u>web interface</u></b> to manage lists web archives;</li> <li>* <b><u>web interface</u></b> for owners to manage lists. most list owners use this feature as opposed to the email interface .</li> <li>* By far the most desirable feature is the <b><u>web interface</u></b> for list management including: access to list archives; subscriber self-management; list owner management; ListServ mgt. functions.</li> <li>* The <b><u>web interface</u></b> for list management is used by almost all of our list owners. Few, if any, use email as the primary tool for list management.</li> <li>* <b><u>security</u></b>, validation using email address;</li> <li>* <b><u>file transfer system</u></b> between subscribers ListServ:</li> <li>* <b><u>subscription renewals and probing</u></b> used frequently by all list confirmations.</li> </ul>	<ul style="list-style-type: none"> <li>* need global change of owner address The main problems are due to the attributes of the manager/owner to eliminate certain subscribers for incorrect behavior. There should be two managers' levels: technical and administrative</li> <li>* No LDAP support.</li> <li>* Missing a general ability to have "dynamic" lists. We'd like Listserv to have a supported API for that purpose, with interfaces provided for LDAP and other common directories.</li> <li>* No LDAP support - We have a number of mandatory subscription lists, where subscription is based on demographic attributes that are available in our LDAP directory, however, LISTSERV does not have LDAP support, so we must periodically extract the subscribers' email addresses and refresh the lists.</li> <li>* No S/MIME support</li> <li>* no list request form. we had to grow our own.</li> </ul>	<p>We use L-Soft's HPO product. It provides multi-threading capabilities allowing multiple concurrent deliveries. It does not do rate limiting. We typically don't limit the rate of bulk. In the case of students where primary accounts reside on our central mail server we leverage the ability to use direct injection into our mailstore.</p> <p>No special controls for large lists. When we spam all the students or faculty, we typically create lots of lists with about 5,000 subscribers and then control their delivery by setting prime time parameters in the list headers.</p> <p>LISTSERV has no rate-limiting features. LISTSERV supports a "Prime=" list keyword configuration statement which enables the list owner to prevent messages from being distributed during "prime time".</p>

	<p>continue to use it due to our <b>familiarity</b> with it, it's <b>extensive feature set</b>, and <b>excellent support</b>.</p> <p><b><u>When we started, it was the main one we were aware of for our system</u></b> - VM/CMS at the time.</p> <p><b><u>The list service was originally implemented on IBM VM/CMS during the BITNet era.</u></b> At the time, LISTSERV was the only MLM product available for that platform. <b><u>The service was migrated to Solaris in 1998.</u></b> At the time, we compared features of several products and came to the conclusion that LISTSERV still met our needs better than any other product we evaluated. LISTSERV <b><u>provided greater flexibility in list configuration options</u></b> and a <b><u>higher level of automated list management.</u></b></p>	<p>* <b><u>Extensive set of configuration options</u></b> available for lists.</p> <p>* In contrast to some other MLM products, LISTSERV <b><u>supports digest and index as subscription options</u></b>, rather than requiring individuals to unsubscribe from one list and subscribe to another in order to switch from non-digest to digest, or vice-versa.</p>	<p>* Many Listserv subscribers and list owners have multiple e-mail addresses, and fail to realize that Listserv must be made aware of all the addresses they intend to use with a list. Subscribers must subscribe all the addresses they plan to use, and then set all but one address to "nomail" to avoid receiving multiple copies.</p>	<p>Most of our very large announcement lists are configured to allow message distribution only between midnight and 5:00 a.m. Messages which arrive between 5:00 a.m. and midnight are held until midnight.</p>
<p><b>Lyris ListManager</b></p>	<p>Most features are used.</p>			<p>Sending rates can be controlled and/or scheduled. Also, we can set a server config to control the max number of sends per hour. We do not have capacity/flow</p>

				<p>problems with our campus mail service though so we do not limit sending at the present time. We closely monitor queue levels on the campus mail system. If we were to ever need to limit flow from our list engine we would do so.</p>
<p><b>Mailman</b></p>	<ul style="list-style-type: none"> <li>* <b>Open Source</b>; ease of integration w. other systems; ease of installation.;</li> <li>* When selected, it alone had <b>decent web interface</b>. Now involved in GNU development team (Universidad de Malaga)</li> <li>* <b>Web based interface</b></li> <li>* <b>Web interface</b> and features.</li> <li>* <b>ease of use</b> by subscribers and list administrators;</li> <li>* Product is <b>maintained</b> (moved from majordomo)</li> <li>* <b>Free</b> software actively being <b>maintained</b>.</li> <li>* <b>Password management</b>.</li> <li>* Other Harvard schools are also using</li> </ul>	<ul style="list-style-type: none"> <li>* <b>mass subscription</b>;</li> <li>* <b>web interface</b> for mgt.; subscribers, moderators, &amp; admins.</li> <li>* <b>Web Interface</b></li> <li>* Easily <b>web-accessible</b> for most purposes;</li> <li>* Easy <b>multilingual support</b>.</li> <li>* supports <b>MIME digests</b> and both <b>exportable (UNIX v7) and HTML archives</b>.</li> <li>* <b>Scriptable using python</b>.</li> <li>* <b>Customization</b>. We have been able to modify Mailman to suit our needs and the needs of our users.</li> <li>* <b>Many list and subscriber options</b>.</li> <li>* <b>Ease of administration and controlling postings</b>.</li> </ul>	<ul style="list-style-type: none"> <li>* queued delivery hard to manage under spam load</li> <li>* Using a separate user database has caused problems with staff and students not knowing what password to use</li> <li>* Automated class lists (data from university database updated nightly).</li> <li>* Does not integrate with directory services such as LDAP for on-campus subscribers.</li> <li>* Largely web-dependent for most end-user purposes.</li> <li>* Requires much scripting using python.</li> <li>* Mass replacement of list members.</li> <li>* List manager should allow enforcement of posting policy (members only, moderator only).</li> <li>* Should Screen spam;</li> <li>* automatic unsubscribe for frequent bounces; no manual handling of bounced messages</li> </ul>	<p>No apparent threading or parallelism; performance is OK sorts destination domain; recipient 'chunks' by domain Mailman is configured to split up outgoing mail into smallish chunks, and hand it off to our MTA</p> <p>Badly. Mailman provides some internal queuing, but when it's engaged trouble ensues. Mostly we depend on sendmail queue management. No external smtp relay dedicated to lists, so in cases of large mailings or mail loops (which Mailman has been particularly vulnerable to), the list server plows into the ground. However, it's quite reliable about not losing messages.</p> <p>Mailman sends through the Postfix mail server, which handles the rate-limiting by monitoring the response times of the receiving server and adjusting the rate accordingly. 1000 in SMTP batches.</p>

Internet2 MACE-MLIST Mailing List Administrator Survey RESULTS

	it, allowing for consistency.			
<b>MajorDomo</b>	<p>* n/a I was not involved</p> <p>* long time experience;</p> <p>* <b><u>email command interface</u></b> for mgt</p> <p>* <b>Open source</b> and at the time of selection was the <b>best supported</b> Open Source solution</p>	stability; administration via email;	<p>* issues w. attachments on moderated lists</p> <p>* No new release or update in several years.</p>	Not an issue No. rely on procmail to manage queue We have Precedence=Bulk set in Majordomo
<b>Novell Netmail</b>	<p>included in email software.</p> <p>Integrated into Novell Edirectory.</p>	<p>* List <b><u>data</u></b> all <b><u>stored in</u></b> Novell <b><u>edirectory</u></b>. Does not require yet another proprietary database to store its info.</p>	<p>* lack of features for bounce control, verify subscription.</p> <p>* Lack of user web interface.</p>	none, just sends.
<b>Sympa</b>	<p>* Sympa was selected for bulkmail services primarily due to <b><u>its flexibility to use various databases and LDAP.</u></b></p> <p>* <b><u>LDAP integration</u></b></p> <p>* <b><u>Single sign-on</u></b> to all lists</p> <p>* Familiarity of underlying technology</p> <p>* <b><u>Performance with large numbers of lists</u></b></p>	<p>* the biggest advantage here for us was the <b><u>capability to use Oracle and LDAP to construct on-demand lists.</u></b></p> <p>* <b><u>LDAP-driven list membership</u></b> Automated lists are generated for courses, groups of majors, residents of buildings, and other collections of people, all dynamically maintained out of LDAP data without any human intervention required.</p> <p>* <b><u>Single service / one login.</u></b> This is a key feature.</p>	<p>* not much in the way of management tools provided.</p> <p>* We have improved the interface somewhat, but the sheer number of options makes it difficult for casual users to manage list settings. The overall interface needs a complete usability review.</p>	The software controls the sending rate, and batches by destination host where appropriate.

## DOES YOUR INSTITUTION HAVE A POLICY ON USE OF MAILING LISTS?

### SPECIFIC TO MAILING LISTS:

- **Notre Dame:** <http://listserv.nd.edu/policies.html>
- official campus org. or sponsored by faculty/staff
- Submit Request via web form; <http://www.ksu.edu/cns/forms/>
- related to teaching, research, or admin mission
- **Oakland:** Service sold at \$100/list to faculty & staff; <http://www2.oakland.edu/audit/POLCY890.HTM>
- Malaga: (In Spanish)  
[http://www.sci.uma.es/index.php?option=com\\_servicios&task=ayu&title=Listas%20de%20distribuci%F3n&itemid=15&clave1=99&men=ya&leer=no&colum=no](http://www.sci.uma.es/index.php?option=com_servicios&task=ayu&title=Listas%20de%20distribuci%F3n&itemid=15&clave1=99&men=ya&leer=no&colum=no)
- Must be related to the university; List owner must be a current student or employee.
- almost all are granted
- We really only ask basic questions to make sure the user realizes what a listserv does and to make sure it will fit their needs.
- Staff can request mailing lists
- Anyone can subscribe
- List admin must be eligible for campus
- IT services provided by EAUP. <http://www.uchicago.edu/docs/policies/eaup/> Lists must be elective; complaints of subscription against the subscriber's wishes are treated as an AUP violation and subject to disciplinary action by one's management or dean. Large numbers of subscribers are subject to administrative review.
- We make an effort to prevent students from creating mailing lists, but we have no stated policy against it. We manage this by asking for the applicants departmental code in the application form. It has served us well so far, but is not scalable. We will likely be developing a new method to deal with the creation of lists and sites eventually.
- Only restriction is that all lists must have a faculty sponsor.
- Main criteria are: contents of scientific interest and the petitioner comes from an affiliated institution. The subscribers are people interested in matter, could be people from universities or private institutions.
- Lists are for administrative purposes only.
- Web request form for new lists requires a valid TAMU NetID.
- At least one list owner must be affiliated with the university. The list must not duplicate an existing list. The topic of the list must be consistent with appropriate use of university resources.
- Lists may only be created by current students, faculty and staff. Any lists that are not intended primarily for on-campus communication must receive special approval; anything else is generally fine.
- GWU does have a policy outside the scope of our own list setup.
- As long as the list is for university business it is acceptable. Lists requested by students must have a faculty "sponsor"
- <http://uis.georgetown.edu/email/listproc/listproc.request.list.html>
- Just about anyone can get a list. I suppose I would refuse if it was clearly for profit.
- List subscription policy: Determined by individual list owners.

## ALLOW BULK EMAIL?

### NO (5%)

- Not allowed, unless emergency.

### YES, but ONLY by small number of special people (45%)

- Recipients are pulled from SCT Banner through specially moderated lists; build recipient lists from university directory
- Lists generated by in-house system (22%).
- Managers of our bulk mail services distribute email on behalf of customers.
- Implemented via specially moderated lists (10%)

### YES, anyone can request but must be APPROVED by someone (27%)

- Email policy group sets the policy on other bulk mail.
- Messages to institution-wide lists require approval by appropriate administrators. (10%)
- Windows Policy used to manage sending to large groups, but no "everyone" (5%)

### YES, but have SPECIAL BULK EMAIL SERVICE (22%)

- for a annual basic fee per list + per-address charge
- We build these lists by querying for the specific criteria the customer wants to target. The data is collect from university data sources;. These services use a locally-written program called "grouper" to get the membership of a recipient group. Grouper is provisioned as part of our provisioning system.
- The bulk e-mail service (modified Majordomo) is used for this purpose.
- Morning Mail"" allows users to submit messages for various groups in the university. Once each day a digest is mailed to each group with all the messages designated for them.

## L ISTS BUILT BY HOMEGROWN SYSTEM FROM HR/Student SOURCES (36%)

## LIST BUILT DYNAMICALLY VIA LDAP / SCT BANNER / OTHER STANDARD DB (23%)

## EMAIL WORKFLOW MGT?

- severely restrict posts; force some sort of moderation;
- want to use S/MIME
- we build these lists from our authN server; prohibit others.
- The person who wishes to have the message sent, must send the message to the <appropriate office, President's Office, Computing Services staff member> and have them forward the request to me.
- We provide a web-based request form for requesting a bulk mail service. The bulk mail office reviews each request.
- Certain university officials are approved to send mail directly.
- Morning Mail uses an automated workflow system.
- Messages are automatically forwarded to the list moderators for approval.

## ARE YOU EVALUATING OTHER MAILING LIST SOFTWARE? WHICH ONE & WHY?

YES	50%
No	50%

- Sympa; worried about future development of current solution;
- S/MIME support desired
- Mailman; nice web interface -> better self admin. By list owner and subscriber
- Interested in Sympa
- Mailman. To see if it has web-based management.
- lack of features for bounce control, verify subscription. Lack of user web interface.
- We evaluate other list management software regularly and ongoingly. It's all quite bad.
- L-Soft listserv seems to be the best out there, but pricy.
- We moved to Sympa from Mailman 18 months ago and are very content.
- Yes, we would like a better user interface, web based
- Hopefully in the next 6 months
- We intend to evaluate Sympa, because it includes support for both LDAP and S/MIME.

## WOULD YOU FIND INTEGRATION WITH LDAP FOR DYNAMIC LISTS USEFUL?

Yes 80%  
No or no comment: 20%

### Comments:

- We'd love to be able to integrate such functions, but without massive loss of features (cf. Sympa).
- This is something we are looking to do in the near future
- I would like to see is integration with our central LDAP server, but this integration would need to be on a per-user basis, as not all of the subscribers are part of our university and therefore do not have an LDAP entry.
- It does and it is (Sympa user)
- Our LDAP doesn't contain enough information to build a list dynamically."

### Concerns:

- Load!
- difficulties using LDAP ACL's to correctly implement FERPA
- Hierarchical rules for who could post to lists.
- making sure updates are promptly propagated
- It would need considerable governance of usage on such ""lists"
- Other university groups would need to be involved to approve our use of the data and the methods for building the lists ( access levels, etc).
- Concerns and concerned parties would be many.
- It should only allow postings from a select group of addresses
- Security concerns about authorization.
- Many people who post don't understand details of sending e-mail
- Our biggest concern with this approach is the sheer numbers of groups we would end up with.
- if dynamic lists are to be used more extensively, some way to support list settings for each subscriber could be valuable.
- Ease of Use; Security of List; Integrity of List; Ability to control to only "internal"users.

## INCORPORATION OF AUTHN/Z USEFUL? (EG: WEBISO/ SHIBBOLETH)

**YES 50%**

- Identity consolidation most beneficial
- List owners would not need to remember separate password for list management.
- as long as we can authenticate against Novell eDir.
- we're going to need Shibboleth (backed by a WebISO) anyway. It's a sad new world we live in
- We are doing single sign-on for many other services soI would say that it would be useful.
- Bit users who do not have the ability to be authenticated through the single sign-on system also need to be addressed, (i.e. users from outside ISPs)
- Valuable for all the uses of the Listserv web interface; We have many lists with participants at various universities and other institutions so that Shibboleth would be useful. Also, it would be less confusing and more convenient for users if they could use the same sign on for Listserv as for other services we provide.

**MAYBE 23%**

- Harvard currently has a homegrown web authentication system called the Harvard PIN system. <http://www.pin.harvard.edu> PIN doesn't work for non-web applications and relies on the user's Harvard ID number to be their login, not a more meaningful one based on the name of the user.
- IF we could determine an accurate provisioning model. Lacking a strict heirarchy or chain of command makes this difficult. Our list software already authenticates through LDAP, so we have single password access (Sympa). If we deploy Shibboleth, we would certainly want our list software to be included.
- Would depend on ease of setup and use. Assuming both were "doable", it would be quite useful.

**NEED MORE INFO 10%**

**NO 5%**

## OTHER IMPORTANT FEATURES

- web interface to list archives
- file/attachment management w. proper access control;
- Portal Integration
- ability to handle cryptographic signatures
- We still value non-web access to mailing lists
- Distribution lists are the principal tool of collaborative work and it is necessary to add other tools allowing exchange of files, videoconference, IM etc. to have an advanced platform
- More robust reporting capabilities.
- An advantage of Listserv is its extensive set of list configuration options. Perhaps 90 to 95% of our lists don't use any special options, but some of our list owners take full advantage of the more sophisticated options. Having a full set of options is one thing which separates an outstanding mailing list program from an average one.
- Broadcast lists that can be sent in a spoof-proof manner (eg via the web)

## COMMENTS

- I would love to see a new MLM that suits our needs, and I'd even be interested in contributing to development. But I can't take it on alone, and I can't (now) initiate such a project.

*If you are a mailing list administrator, we are interested in your comments on this survey and its results.*

*Send comments by email to: [mace-mlist-contact@internet2.edu](mailto:mace-mlist-contact@internet2.edu)*

*If you would like to complete this survey for your institution, (new information will be integrated with these results periodically), you can find the survey form here:*

*<http://middleware.internet2.edu/mlist/docs/internet2-mace-mlist-campus-survey-200409.html>*