The main part of this manual tells you how to use Lafite at client companies. However, Lafite may be used somewhat differently at the Xerox site where you work. For example, you may use a message transport system known as Grapevine instead of the NS system; or you may use both systems. Or your site may use both Lafite and Laurel (a mail system similar to Lafite that was written for the Xerox Alto). This appendix gives you the specialized information you may need to use Lafite within Xerox.

Lafite use at Grapevine sites is described first. This section includes the documentation for Maintain, the program used to maintain Grapevine public distribution lists. It also tells you how to send Lafite messages to ARPANET recipients. Next described is Lafite use at sites having both the Grapevine and NS systems. Then there is a short description of some Lafite-related packages currently available only within Xerox. The final section describes the differences between Laurel and Lafite.

Note: this appendix was not indexed due to the difficulty of creating and maintaining separate customer and internal indexes.

# The Grapevine Mail System

For about five years most Xerox sites have used the Grapevine electronic message transport system; it was for this system that Lafite was originally developed. At the present writing, Xerox is in the process of converting from Grapevine to the NS system. Some sites use only NS mail, some Grapevine, and some both. For the most part, you use Lafite with the Grapevine system in exactly the same way as with the NS system. The four major differences are the mail protocols, the forms of recipient addresses, the ability to send mail to ARPANET recipients, and the way in which public distribution lists are maintained.

## **Grapevine Protocols**

The Grapevine system uses its own set of mail protocols, which you can obtain by loading the Library package file MAILCLIENT.DCOM. Simply type (LOAD '{FILESERVER}<DIRECTORY>MAILCLIENT.DCOM in the executive window.

# **Grapevine Recipient Addresses**

A Grapevine recipient address has two parts separated by a period, in the form *Recipient.Registry*. The first part is the identifier for the recipient, usually that person's last name. If there are two or more people with the same last name in the same registry, each is usually identified by his or her first initial plus the last name.

The second part of a Grapevine address is the registry name. A registry is no more than a device for grouping related names. The registry name helps the mail system determine which mail server has the in-box for the recipient. Most registry names correspond roughly to "campuses" of activity within Xerox, which should make them easier to remember.

Lafite allows you to omit the registry name for recipients who are in your registry. You can find out what your local registry is by typing DEFAULTREGISTRY at the prompt in your executive window. DEFAULTREGISTRY is the global variable that names your local Grapevine registry; it is used if your log-in name does not include a registry. This variable is normally set in your initialization file.

## **Grapevine Registries**

At present, the following registries exist:

ARPA A pseudoregistry used to forward mail to people

on the ARPANET and points beyond.

AUTO A registry for software-driven functions requiring

automatic access and Grapevine authentication.

CHOLLA A registry for PARC/ICL, Palo Alto, California

(no individuals in this registry).

DC A registry for the District of Columbia.

DLOS A registry for Dallas, Texas.

EOSA and EOS A registry for associates or affiliates.

ES A registry for El Segundo, California.

FX A registry for Fuji Xerox, Japan.

GUEST A registry for Palo Alto, California.

HENR A registry for Henrietta, New York.

LB A registry for Leesburg, Virginia.

OGC A registry for the Office of the General Counsel.

OSDA and OSD A registry for associates or affiliates.

PA A registry for Palo Alto, California.

PASA A registry for Pasadena, California.

RX A registry for Rank Xerox, Great Britain.

SIEMENS A registry for the Communications and

Information Systems Group, Private and Special-Purpose Networks Division at Xerox

XSG, OSD, Palo Alto, California.

STHQ A registry for the Xerox Corporate Headquarters,

Stamford, Connecticut.

SV A registry for Sunnyvale, California.

WBST A registry for Webster, New York.

X A registry to be used by people in many

geographic locations.

XRCC A registry for the Xerox Research Centre of

Canada, Toronto, Canada.

## **Grapevine Distribution Lists**

The Grapevine system supports over 1,500 distribution lists, some of which are work related and some of which are purely for fun. You can obtain a complete distribution list directory, giving the name of each list plus a short description of its purpose, by printing {Indigo}<Registrar>GV>DLMap.Txt.

Grapevine distribution list recipient names end with the character "^," in the form AISBU^.PA.

The public distribution lists for each registry are stored on mail servers and are maintained by the administrators of that registry, by the owners of the lists, and in some cases by the members of the lists. To create a public distribution list you must contact an administrator for your registry, who will make sure that your proposed name does not conflict with any others, and who will create the list for you. You can get your name added to appropriate lists by contacting the owners of those lists or by using the Maintain program (see below). If you cannot make a desired change to a public list yourself, send a message to the owners of the list. In Grapevine registries, by convention, the owners of a list named List\*. Registry are listed in the companion list Owners-List\*. Registry.

**Delivery to Distribution Lists.** If a recipient list includes public distribution lists, you must confirm the delivery by including a Reply-To field in the message (see chapter 9). If you do not include a Reply-To field before selecting Deliver, Lafite will give you a special Reply-To Field menu, asking you to choose between four options. The options are to send the message as is, have recipients reply to yourself, have them reply to someone else, or to abort the message. This is intended to minimize unintentional deliveries to large distribution lists.

## **ARPANET Messages**

The ARPANET (Advanced Research Projects Agency Network) is a network linking ARPA research sites, including some Xerox sites. The Grapevine system is connected to the ARPANET, so you can correspond with individuals at ARPA sites outside Xerox.

As of this writing, ARPANET individual and distribution list addresses are in the form Name@Host.ARPA. However, all ARPANET addresses are gradually being changed to domain names. The primary Xerox address, "Xerox.ARPA," will soon become "Xerox.COM"; external ARPANET addresses are also being changed. The name changes are not expected to greatly inconvenience Xerox ARPANET users. The current Xerox address will be supported for some time after the change, so you can receive mail from people who don't yet have your new address. If you send mail to an obsolete address, the ARPANET mail gateway will insert the proper address in the message header, but it is a good idea to keep an eye out for address changes in the correspondence you receive and update your private list of addresses accordingly. You don't have to update ARPANET addresses in any Grapevine distribution lists you own, because ARPANET names on Grapevine distribution lists are kept current by Xerox network administrators (who periodically run a program to update all the names). If you want to verify an ARPANET address, you can search for it in the ARPANET host table stored on {Indigo}<NetInfo>ARPANET>Hosts.Txt. The first name in a host entry list is the primary name and the one you should be using.

ARPANET messages sent via Grapevine undergo some special processing. Because many mail systems receiving the mail you send over the ARPANET cannot process the long lines contained in Lafite messages, carriage returns are automatically inserted to make each line less than 72 characters long if there are any lines of

more than 90 characters within the first 5,000 characters of the body of your message. If you have already inserted carriage returns to make your lines slightly longer than 90 characters and you don't want your message to look unaesthetic, include a "Line-Fold: No" line in your header.

ARPANET Distribution Lists. ARPANET distribution lists are not maintained at any one, central location. Instead, they are administered locally by interested sites; for example, SF-Lovers@Rutgers is maintained at Rutgers. When you send a message to an ARPANET distribution list address, it goes to the appropriate host, who sends it to all the members of the list. Some hosts anthologize messages for certain lists (such as SF-Lovers); that is, someone at the host site periodically collects messages from members and sends anthologies of them out to everyone on the list.

Almost every ARPANET distribution list has a Xerox-internal redistribution list, so that all Xerox members are actually members of the redistribution list. For example, the redistribution list for SF-Lovers@Rutgers is XeroxSFLovers^.PA. You use Maintain to add yourself to the redistribution list of an ARPANET list in the same way you would add yourself to a Xerox distribution list. If you want to add yourself to (or make another administration request regarding) an ARPANET list that does not have a Xerox redistribution list, send a message to *DistributionList*-Request@*Host*.

## Other Forms of Grapevine and ARPANET Addresses

Lafite recognizes three special forms of address that contain arbitrary text in addition to a valid Grapevine or ARPANET address. The first form is *Human Sensible Name <Actual Address>*. For example, if you wanted to include Cheryl Jones's first name in her address you could write it as Cheryl Jones <Jones.PA>. The area outside the angle brackets can contain any text except for certain prohibited characters: parentheses, angle brackets, commas, colons, semicolons, and quotation marks.

The second form of address is *Actual Address* (*Comments*). You could, for instance, send an invitation to Jones.PA (and spouse). You can include any characters within the parentheses except additional parentheses.

The third form of address is "Comments" <Actual Address>. For example, you could send a message to "Special Attn: Sybalsky, Shih" TEditFriends^.PA. Any of the prohibited characters can be included within the quote marks except additional quote marks.

## **Maintain**

Maintain is a Lisp Library package used only within Xerox for maintaining Grapevine public distribution lists and changing your Grapevine password. To load Maintain, type (LOAD '{FILESERVER}<DIRECTORY>MAINTAIN.DCOM) in your executive window. To enter Maintain, type (MAINTAIN). Maintain will try to log you in automatically with your current user name and password. If that fails, then you may log in using the Login command in Maintain (see below).

### **How to Issue Maintain Commands**

Maintain has its own prompt sign, in the form GV:. To issue a command in Maintain, you must type after the prompt sign only the initial letters that uniquely identify that command; i.e., as soon as enough of a word (usually one letter) has been typed, Maintain will complete that word for you. For instance, when typing the Add

Friend command, you need only type A F. Throughout this section, the letters that Maintain fills in are given in square brackets.

Once you have issued a command for a specific distribution list or individual, Maintain will fill in that same name for the next command you type. If the name is appropriate for that command, press the space bar or carriage return to confirm it. If the name is not appropriate for the command, begin typing the correct distribution list or individual's name to replace it, ending by hitting the space bar or carriage return.

## The Login Command

To log into Maintain, type L[ogin]after Maintain's GV prompt. Now type your name and registry and press the carriage return. Maintain will prompt you for your password, each character of which will appear as an asterisk on the screen. Grapevine maintains its own copy of your password, and the password you give here must be the one Grapevine knows. If you give your password successfully, Maintain will inform you that you are logged in. Once you are logged in, you may proceed to issue other Maintain commands. If you cannot log in, because you have forgotten your password or for some other reason, then you will have to ask an administrator for your registry to issue a Change Password command.

Maintain automatically logs in the current user when it starts up, so you only need to issue the Login command if you wish to change your identity for some reason.

#### The? Command

To obtain a list of Maintain commands, type a question mark after the GV prompt. You will see that the commands are Add Friend, Add Member, Add Owner, Change Password, Change Remark, Login, Quit, Remove Friend, Remove Member, Remove Owner, Type Entry, Type Members, and ^YžEnter Lisp. Each of these commands is described below.

### The Type Entry Command

The Grapevine system has a *name data base* of entries giving information about groups and individuals. Groups represent distribution lists and some other groups that are unimportant to casual users, such as access control lists. Individuals represent human users and server computers. There are also "abstract users" that are syntactically individuals but actually name a group, such as LafiteSupport.PA.

To read an entry in the data base, type T[ype] E[ntry] after the GV prompt. Maintain will ask you for the name of the group or individual whose entry you want to read, then print the entry. When it is finished, it will return you to the GV prompt.

An entry for a group has four components: the *remark*, the number of *members*, a list of *owners*, and a list of *friends*. The remark describes the purpose of the group; for example, the remark for the distribution list Books^.PA is "Resource for Readers (primarily reviews)."

The members are the individuals or other groups contained in the group. To obtain a list of members, use the Type Members command (described below).

The owners are the people empowered to add and remove owners, friends, and members for the group. They can also set and change the remark.

The friends are the people empowered to add and remove their own names to and from the group. If the list of friends is None, no one but the owners can add members to the list. If the list is an asterisk, anyone on the Grapevine system can add himself or herself to the list. If the list is of the form \*. Registry, anyone in that registry can add himself or herself to the list, and so on.

An entry for an individual has two components: connect site and mailbox site(s).

## The Type Members Command

To find out who the members of a distribution list are, type T[ype] M[embers] after the GV prompt. Maintain will fill in the words "of group" followed by a colon. Type the name of the distribution list after the colon and press the carriage return. Maintain will then print the list of members. If it is a very long list, your executive window may fill up, stop printing the list, and become highlighted in reverse video, a sign for you to hit the space bar to get the listing going again.

Some members of a group may be groups themselves. To see the members of those groups, you can use extra Type Members commands. If you use Type Members for the special group Groups. *Registry*, you will obtain a list of all distribution lists for that registry.

When Maintain is through printing the members of a distribution list, it will repeat the GV prompt.

### The Add Member Command

You can add yourself (or another person if you are an owner) to a distribution list by typing A[dd] M[ember] [name] YourName.Registry after the GV prompt. Maintain will print "to group" after which you should fill in the name of the distribution list to which you want to add your name. If Maintain prints "done," you have successfully added yourself to the list. If it prints "NoChange," you were already a member of the list. If it prints "NotAllowed," you should send a message to the owners of the list, asking them to add your name.

### The Remove Member Command

You can remove yourself (or another person if you are an owner) from a distribution list by using the Remove Member command. This works in the same way as the Add Member command.

#### The Add Owner Command

Use the Add Owner command to add an owner to a distribution list. This is not allowed unless you yourself are an owner. Otherwise, this works in the same way as the Add Member command.

#### The Remove Owner Command

Use the Remove Owner command to remove an owner from a distribution list. This is not allowed unless you yourself are an owner. Otherwise, this works in the same way as the Remove Member command.

## The Add Friend Command

Use the Add Friend command to add a friend to a distribution list. You cannot do this unless you are an owner. Otherwise, this works in the same way as the Add Member command.

#### The Remove Friend Command

Use the Remove Friend command to remove a friend from a distribution list. You cannot do this unless you are an owner. Otherwise, this works in the same way as the Remove Member command.

## The Change Remark Command

The remark is the description of the distribution list that Maintain prints when you use the Type Entry command. To change the remark, type C[hange] R[emark] after the GV prompt. Maintain will prompt you for the name of the group, then ask you to type the new remark followed by a carriage return. You cannot change the remark for a list unless you are an owner.

## The Change Password Command

You can change your Grapevine password using Maintain's Change Password command. Type C[hange] P[assword] after the GV prompt. Maintain will respond with "for individual." Now type in your name and registry. Maintain will prompt with "to be." Type in your new password, which will appear as a series of asterisks. Maintain will ask you to confirm your new password by typing it again. When you terminate this word with a carriage return or a space, Maintain will store it in the Grapevine data base. Be very careful when typing your new password, because if you make a mistake and can't reproduce the password later you will have to obtain the help of an administrator for your registry to correct it.

After returning to the executive, you will need to reinvoke the Login command (see above) to continue using Lafite to get and send mail.

## The ^Y Command

If you want to drop into Lisp temporarily, then return to Maintain, type control-Y at the GV prompt. Maintain will fill in "Enter Lisp" and return you to the regular executive window prompt. To go back to Maintain, type OK.

### The Quit Command

To leave Maintain, type Q[uit] after the GV prompt. Maintain will ask you to confirm this command with a carriage return.

## If You're on Both Networks

Because the Grapevine and NS systems are totally separate, you must have a registered name and password to send mail on each system you are using. You can have two different passwords, but it is advisable to use the same one because otherwise you will be prompted to log in again each time you switch systems. You can also call (LOGIN 'GV::) yourself to set your Grapevine log-in, and (LOGIN 'NS::) to set an NS log-in, apart from your default (Grapevine) log-in.

## **Lafite Modes**

When you use Lafite on the Grapevine system, Lafite is in Grapevine mode. When you use Lafite on the NS system, it is in NS mode. Mail sent to you on a particular system can be

accessed, answered, and forwarded only if Lafite is in that system's mode.

If you have loaded both NS and Grapevine protocol handlers (NS Mail and MailClient), Lafite needs to know which mode to operate in. The first time you start Lafite after loading a new Lafite or a full sysout, you must set the mode explicitly. Until you do this, the Lafite status window reads "Mode Not Set." After that, Lafite starts up in the same mode it was in when you quit Lafite. To change modes after you have intialized Lafite, use the middle mouse button to choose Quit from the status menu. Another menu containing several options will appear; one is GV Mode and another is NS Mode. Select the mode you want with the left mouse button. The center region of your status window reflects the mode you select. If you are in Grapevine mode, it says Lafite (GV). If you are in NS mode, it says Lafite (NS). You can also find out what mode you are in by typing (LAFITEMODE) in your executive window, or change modes by typing (LAFITEMODE 'GV) or (LAFITEMODE 'NS). If you always want to start Lafite in the same mode, you can set the global variable LAFITEMODEDEFAULT to the value GV or NS, in which case Lafite will initialize itself in that mode.

At sites with multiple Lafite modes, the values of the global variables LISPSUPPORT, LAFITESUPPORT, and TEDITSUPPORT are association lists in the form ((Mode1 "Address1") (Mode2 "Address2")---). Because the Lisp Report, Lafite Report, and TEdit Report forms are currently all sent to Grapevine addresses, they cannot be used at all in NS mode.

## From Grapevine to NS and Vice Versa

Without switching modes, you can send mail from a Grapevine to an NS address or vice versa through a *mail gateway*. The gateway provides pseudoregistries and pseudodomains for mail addressed to the other kind of network. (A list of the special registries and the domains they correspond to is stored on {Indigo}<Registrar>GV>GV-NS-Mapping.Txt.) A single message can contain both Grapevine and NS addresses.

When Lafite is in Grapevine mode, you can send mail to the NS address Name:Domain:Organization by addressing it to "Name:Domain:Organization".NS (the double quotes are needed to keep the colon and any spaces in the name from being misparsed). For convenience, the domains PARC, OSBU North, and OSBU South can also be addressed as the registry of the same name, with the spaces removed. Thus, to send mail to Jones:PARC:Xerox, send it to Jones.PARC; to send mail to Oscar:OSBU North:Xerox, send it it Oscar.OSBUNorth.

When Lafite is in NS mode you can send mail to the GV address *Name.Registry* by addressing it to *Name.Registry:*GV. For convenience, the registries PA and ES can be addressed directly as NS domains. Thus, to send mail to Jones.PA, send it to Jones:PA.

Conversion of Grapevine Distribution Lists for NS Users. Until recently, people who used only NS mail could not add themselves to the many Grapevine public distribution lists. To address this problem, a new naming structure is being applied to general-interest public distribution lists in the PA, ES, and X registries. (Most organization and project lists, or any lists that might be used for access control, will not be converted to the new naming structure.) The new structure allows both NS and Grapevine mail users to add themselves to, broadcast to, and receive messages from these lists. Grapevine users will have to change the way they add themselves to lists that currently reside in Grapevine and the way they add themselves to lists.

To enable the new distribution list structure, new NS domains have been established in a one-to-one correspondence with the ES, PA, and X Grapevine registries. "All Areas:Xerox" is the NS domain analogous to the X registry. "PA Area:Xerox" is the NS analog of the geographically based registry PA, and "ES Area:Xerox" is analogous to ES. After the restructuring is implemented for a distribution list in, for example, the X registry, Grapevine users will continue to broadcast to *List*^X, but will add themselves to *List*-GV^X. NS users will broadcast to *List:*All Areas, but will add themselves to *List-*NS:All Areas. Either form of broadcast will reach both the Grapevine members (*List-*GV^X) and the NS members (*List-*NS:All Areas:Xerox).

The conversion process will take several months. Distribution lists will be converted upon requests from their owners. If you own a distribution list and wish to request conversion, retrieve {USC:OSBU South:Xerox}<Public USC>DLRequest.Form, fill out the form, and send it to the appropriate address, according to the table below.

Registry	Grapevine User	NS User
ES lists	UserAdministration.ESArea	UserAdministration:ES Area:Xerox
PA lists	UserAdministration.PAArea	UserAdministration:PA Area:Xerox
X lists	UserAdministration.AllAreas	UserAdministration:AllAreas:Xerox

As soon as a distribution list of which you are a member is converted to the new naming structure, you will receive notice of the conversion. If you are a Grapevine member of *List*^.X, you will be added to *List*-GV^.X and removed from *List*^.X. If you are a Grapevine user and want to add yourself to a distribution list of which you are not currently a member, use Maintain to attempt to add yourself to *List*-GV^.X. If Maintain complains that this list does not exist, then add yourself to *List*^.X. You should continue to address messages to *List*^.X.

If you are primarily an NS user and are a member of Grapevine List^.X, then when that distribution list is converted to the new structure, you will be moved to List-GV^.X. Then you should ask your system administrator to add you to List-NS:All Areas:Xerox. To make sure you don't miss any mail, wait three days after you start receiving two copies of messages sent to List^.X, then remove yourself from List-GV^.X with Maintain. To add yourself to a new distribution list, ask your system administrator to add you to List-NS:All Areas:Xerox. If this list does not exist, then add yourself to List^.X using Maintain. You should broadcast messages to List:All Areas:Xerox.

One key point to remember is to never send messages to a list with a -GV or -NS suffix. If you do, you will not reach both NS and Grapevine members. Another key point is, never broadcast to both *List*^.X and *List*:AllAreas, or everybody will get two copies of the message.

A more detailed description of the conversion process is filed on {USC:OSBU South:Xerox}<Public USC>DLConversion.Doc and {Indigo}<Registrar>GV>DLConversion.Doc.

# Lafite-Related Lisp Users' Packages

As of this writing, Xerox employees have access to four Lafite-related Lisp Users' packages that have not yet been released to customers. The packages are Mailomat, Mail Sorter, Mail Cards, and Mail Reader. Mailomat enables you to automatically retrieve mail for one or multiple users for whom you have passwords. The

program is filed on {Eris}<Lisp>Koto>LispUsers>Mailomat.DCOM; documentation {Eris}<Lisp>Koto>LispUsers> is on Mailomat. TEdit. Mail Sorter will automatically sort mail into folders according to a set of rules you have specified. The code and {QV}<Pimp>MailSorter.DCOM documentation are on {QV}<Pimp>MailSorter.TEdit, respectively. Mail Cards integrates the Note Cards environment with the Lafite mail system; you can place Lafite messages in specialized note cards, which are then placed in a Note Cards network. The code is stored on {QV}<Pimp>MailCards.DCOM and {QV}<Pimp>MailCardsLafiteInterface.DCOM; the documentation, on {QV}<Pimp>MailCards.TEdit. Lastly, the Mail Reader uses a voice synthesizer to read your mail to you over the telephone. You do not need special code to use this package, because you enter all commands by pressing the buttons on a touch-tone telephone. Reader's documentation is stored {QV}<Speech>Speech> MailReader>.MailReader.TEdit.

All the abovementioned file names are subject to change. If you can't find a specific package, ask a release master or a network administrator for a pointer.

## From Laurel to Lafite

Previous users of the Laurel mail program will find Lafite to have a similar user interface. Some of the ways in which it differs from Laurel are the following:

Laurel can only access mail folders on the local disk; Lafite can access folders on remote file servers. Thus, it is not necessary to transfer mail folders back and forth between your local disk and your file servers.

Laurel can only "browse" one mail folder at a time; Lafite can have several mail folders "opened" at the same time. Using the Interlisp window system, you can view the tables of contents of many mail folders and refer to messages in them independently.

You may have multiple windows displaying messages and multiple windows for sending messages and you may move text freely among them.

Messages can be selected in the table of contents by clicking *anywhere* within the summary line, unlike in Laurel, where you must select at the left end.

## The Browse Laurel File Command

Lafite can read mail files written by the Laurel and Hardy mail programs; the files it writes are in Laurel format.

To browse a Laurel file that was produced by the Laurel mail reader version 6.1 or later, use the Browse Laurel File command from the middle-button Browse menu. Laurel 6.1 files are almost the same as Lafite files, but contain some line-formatting information that is stripped out by this command. After you have applied this command once to a file, you can subsequently browse the file with the normal Browse command (unless you use Laurel on it again, of course). This command is not intended for repeated use, but simply to make mail files built by Laurel more pleasing to browse. This command has the side effect of destroying any TEditformatted messages, so it should be used with care.