APPENDIX A.   INSTALLATION HINTS

Medley Shell Variables

The following is a fragment of a `.cshrc` file which you may want to adapt to your own needs. In this example Smythe works in Building 12b (bldg12b), and always wants a fresh sysout, containing Rooms, loaded.

```
# ==========================================
# Set up various Medley variables.
setenv LDEDESTSYSOUT /user/smythe/sysouts/saved.virtualmem
setenv LDESRCESYSOUT /usr/share/lde/lispsysouts/ROOMS.SYSOUT
setenv LDEINIT       /usr/share/lde/site-files/bldg12b-init.lcom
# Assuming you are using UNIXChat and VTChat,
    configure the Chat window
  if ($?LDESHELL == 1) then
      setenv TERM vt100
      stty erase ^H
  endif
# ==========================================
```

Running on Multiple Workstations

Installation for Sites with Sun–3 and Sun–4 Workstations

In Medley 2.0, the only differences between the Sun–3 and Sun–4 distributions are in the `install.sunosX` directories. Thus, during installation the common subdirectories (`lispsysouts`, `lisplibrary`, `fonts`, etc.) might be installed instead to a shared file system, saving 15 MB of unnecessary duplicated space. In the example below, `/sharedserver` is a remote file system mounted on the local machine.

```
prompt% mkdir /sharedserver/lde
prompt% cd /sharedserver/lde
prompt% tar xvfb /dev/rxx0 126 ./lispsysouts ./lisplibrary
        ./fonts
```

If soft links are then left on `/usr/share/lde`, the installation can proceed as before.

```
prompt% ln -s /sharedserver/lde/lispsysouts
    /usr/share/lde/lispsysouts
prompt% ln -s /sharedserver/lde/lisplibrary
    /usr/share/lde/lisplibrary
prompt% ln -s /sharedserver/lde/fonts /usr/share/lde/fonts
```

Otherwise, the site initialization file needs to be changed appropriately.

The install directories are left on /usr/share/lde, since those directories are typically local to a particular processor architecture.

```
prompt% cd /usr/share/lde
prompt% tar xvfb /dev/rxx0 126 ./install.sunos4
```

Using a "runlde" on Multiple Workstations

The following is an example of a runlde script that might be used for running Medley on different machines.

```
# (invokes CSH)
# ==========================================
# Usage: runlde optional-sysout
#
# The script below is for the following machines:
#
#      Host   HostID
#      ----   ------
#      timber       1700319b
#      gopher       17003016
#      tree   13003565
# ==========================================

switch ("`hostid`")
      case '1700319b':
            ldeether $1 -k '99e8bfc6 92299f45 9199a409'
            breaksw
      case '17003016':
            ldeether $1 -k '70c5a8d8 7b0498cc 45e35500'
            breaksw
      case '13003565':
            ldeether $1 -k 'ce7627bf b5b61ac8 2f990cc0'
            breaksw
      default:
            echo "Sorry, host '`hostname`' is not in this shell
      script"
      endsw
```

Configuring the Software

The software comes in these two forms:

• An executable binary image for users who have not modified the Sun kernel too extensively

• An object file that can be relinked for your particular system.

If you want to use the executable that Venue supplies, skip to the Enabling PUP/XNS Ethernet subsection below.

Relinking

If you have tried the prelinked software and it doesn't work, link the object code with the Sun libraries. To do this, you need the `suntool`, `sunwindow`, and `pixrect` libraries, and `make`, `cc`, etc., available on your search path. To configure the system, connect (`cd`) to the directory `usr/share/lde/install.sunosx` (where `x` is the version of SunOS that you are running, e.g., SunOS 4.0 in the following), and type make.

```
prompt% cd /usr/share/lde/install.sunos4
prompt% rm lde ldeether; make
```

This procedure replaces the two executable programs, `lde` and `ldeether`. The program `ldeether` enables access to Xerox network protocols from Lisp.

Enabling PUP/XNS Ethernet

If you intend to use the PUP or XNS Ethernet directly from Medley, you need to change file ownership and permissions of `ldeether`. Note that you do this on the server where `ldeether` is actually residing (root permission must be on the server). Log in to the machine where `ldeether` resides. To find out where `ldeether` resides, type:

```
prompt% df filename
```

where *filename* is the pathname of `ldeether`. The system responds with the name of a file system (e.g., `/dev/sd0g`) for a local file, or with a machine name and directory (e.g., `python:/user1`) for an NFS file.

Now you can change the `ldeether` file ownership and permissions.

```
prompt% rlogin server
server% su
server# cd /usr/share/lde/install.sunos4
server# /etc/chown root ldeether
server# chmod 4755 ldeether
server# exit
```

If you are using the Ethernet, substitute `ldeether` whenever `lde` appears in the instructions below.

Using NIS to Manage the Keys for Multiple Workstations

Here is an example how to handle several Medley licenses on a network, by using the Sun Network Information Service (NIS).

Create a file containing an association list of hostnames vs. license keys, for each host that has a Medley license. For example:

```
# medley-keys.by-hostname
# =======================================
king            6a1c33bf 11dc1a48 a4c34080
sidewinder      7b636e98 55a26cd4 26b80560
hognose         190750c0 17c658e0 08060ac0
boa             8334d182 00793e07 4903890b
asp             c90faa4f d3477c53 d304b85b
rattler         70b8fd18 2d79f344 c30051c0
```

NOTE that the following commands should all be run as root.

On your NIS master server, create an NIS database of hostname vs. Medley keys:

```
prompt% /usr/etc/yp/makedbm ./medley-keys.by-hostname \
                /var/yp/your-domain/medley-keys
```

Replace *your-domain* with the name of your NIS domain. The output is put in the directory containing your master NIS maps.

If you have NIS slave servers serving your domain, you will need to update each one manually the first time the map is created. Thereafter, they will be updated automatically. On each NIS slave server do the following:

```
% /usr/etc/yp/ypxfr -f -h your-NIS-master medley-keys
```

Replace *your-NIS-master* with the name your NIS master server.

After updating all NIS slave servers, you now need to propagate the NIS map to your NIS clients. On your NIS master, type:

```
% /usr/etc/yp/yppush medley-keys
```

From now on, any changes made to the medley-keys.by-hostname file will only require the propagation of the map to your NIS clients. The following steps are required:

1. Create a new NIS map using the makedbm command as described above.

2. Propagate the changes to your NIS clients using the yppush command as described above.

You can now use the newly created map. Below is an example of a runlde script that uses the newly created NIS map.

```
#! /bin/csh -f
# =======================================
# Usage : runlde [sysout]
#
# Script for running Venue Medley software.
#
# =======================================
if ($#argv > 1) then
    echo "Usage : runlde [sysout]"
endif

set SYSOUT = "$1"
set HOSTNAME = `/bin/hostname`
set KEY = `/bin/ypmatch $HOSTNAME medley-keys`
```

```
if ! $status then
    ldeether $SYSOUT -k "$KEY"
endif
```

Consult the *Sun Network and Communications Administration* manual for more details about NIS and how to add the new map to the `/var/yp/Makefile`.

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