



## **Installation of LAM with LM usage metrics option on a Linux server.**

LAM and LM are compatible with different versions of various distributions of Linux, including RHEL, SuSe and Fedora. But we suggest you work with RHEL 3.0 or 4.0, Fedora 6 and upwards, for optimal performance.

Also LAM and LM will run on either a 32-bit or 64-bit processor machine but only on a 32-bit operating system.

LAM-LM is best supported on IE browser 5.x or later and Firefox 1.5.x or later versions.

Please ensure that your LAM-LM installation server meets these requirements.

We provide support to install and train you how to use LAMLM. Typically, the process is as follows:

1. Identify suitable server.
2. Download and install appropriate LAMLM software.
3. LAM(License Asset Manager) Training using Go To Meeting conferencing system with anyone that may be using LAMLM from your company attending(usually about 1 hour). Feel free to forward the invitation to anyone who currently has to do with software license administration or purchasing. Typically at this stage you want to corral any spreadsheets containing vendor info, purchase orders, physical locations of purchase orders, and licensing agreements. You also want to read the attached "User Guide For Import Template".
4. Data entry creating capture of usage statistics in License Monitor.
5. LM(License Monitor) Training using Go To Meeting conferencing system with anyone that may be using LAMLM for administering license servers or providing reporting on usage statistics in your company(usually about 1 hour).
6. Complete data entry-Note: TeamEDA provides Data Import services at \$50 per hour.

Contact TeamEDA for more information (978-251-7510)

## **Getting Started:**

**The bundled LAM-LM version comes with all necessary component software and self installing scripts.**

Create a non-root user account on your server and download the *lamlm\_bundle<version>.tgz* file on it.

Extract the file to the /home/user directory using your default extracting tool or by running the command,

```
$ tar -xzvf <lamlm_bundle<version>.tgz>
```

## **Starting up LAM and LM:**

Change directory to installation directory of choice,

```
$ cd <lamlm_bundle> (as extracted)
```

Enable the execute permissions,

```
$ chmod +x start_lamlm
```

Run,

```
$ ./start_lamlm
```

In the terminal window you will get a notification that you need a license file. Make note of the hostid and hostname.

Now, open a browser window to point to the LAM login page, <http://localhost:8181/lam>.

After logging in with the default ‘*admin/admin*’ account, you can create more user accounts. It is recommended that the default admin account be deleted after this.

At this time you will want to contact TeamEDA for a LAM training session either by emailing your existing support person or [support@teameda.com](mailto:support@teameda.com) or calling (978)251-7510. You will also want to send the hostname and hostid for later configuration and operation of the License Manager side of LAMLM after your LAM Training.

LAM will come with a blank database. Refer the user manual or click ‘Help’ on the top

right corner for further instructions on how to use or enter data in LAM.

### **Setting up your LM license key:**

You will need to provide us with the Hostname and Host ID of the installation server to generate a LM license key to start the Flowtracer license server. This information is automatically generated on running the '*start\_lamlm*' script in the *lamlm\_bundle* ([click here](#) for instructions) , or you may run the following commands in a terminal window,

For Host ID,

```
$ /sbin/ifconfig
```

The HWaddr will give you the MAC address or HostID of the machine without the colons ('-').

For Host name,

```
$ hostname
```

Following this, we will send you the Reprise license file for LM.

To install the license,

Stop LAMLM by running *./stop\_lamlm* from the *lamlm\_bundle* directory

Rename the file '**license.rlm**' and copy it to the *rtda/linux/local/* directory in the *lamlm\_bundle* installation directory.

In a terminal window, change directory to the *lamlm\_bundle* installation directory and change directory to the *rtda/linux/bin* folder. Run,

```
$ pwd
```

Modify the ISV line in the license file, replacing *@VOVDIR@* with this path (present working directory) and appending */rtdad* to it. The output of the *pwd* command is what replaces the *@VOVDIR@/bin/* path leaving *rtdad* on the end.

Example:ISV rtdad /home/<user>/lamlm\_bundle/rtda/linux/bin/rtdad

cd to *lamlm\_bundle*.

```
run for csh, tcsh
```

```
source rtda/common/etc/vovrc.csh
```

```
for sh, bash
```

```
./rtda/common/etc/vovrc.sh
```

```
run rlm -nows -c rtda/linux/local/license.rlm >& rlm.log &  
run ./start_lamlm
```

### Checking for the lmstat and rlm processes:

For LM, you need to have a good ‘lmstat’ program in the *\$VOVDIR/bin* folder to read information from FLEXlm licenses. You can download the appropriate ‘lmutil’ for your Linux OS from: [http://www.globes.com/support/fnp\\_utilities\\_download.htm](http://www.globes.com/support/fnp_utilities_download.htm). Rename it to ‘lmstat’ and copy it to the rtda/linux/bin folder of the *lamlm\_bundle* installation directory.

If the path of the lmstat program is ‘/tools/flexlm/lmstat’, then run the commands,  
\$ cd *lamlm\_bundle*

```
copy lmstat,  
$ cp /tools/flexlm/lmstat rtda/linux/bin
```

To check if the RLM license server is running,

```
$ ./rtda/common/etc/vovrc.sh (for bash)  
or $ source rtda/common/etc/vovrc.csh (for csh, tcsh)  
$ rlmstat -avail
```

This should not bring up any errors or warnings and all processes should show as available.

Open a browser window to point to the LM login page, <http://localhost:8183/>. This is the standard port for LM which requires you to log in using your Linux user account information, and grants you admin capabilities. LM also uses a read-only port, 8182, to allow access to and from LAM, which does not require authentication.

Click ‘Documentation’ on the top right corner of the home page for a guide to using LM.

*For support with setting up LAM/LM, please call us at (978).251.7510 or email us at [support@teameda.com](mailto:support@teameda.com). Common issues are discussed below in the ‘Troubleshooting’ section.*

**NOTE:** *Contact us when you have completed the install per this manual and are ready to add licenses to LAM and start utilization statistics in LM.*

## LAM Database Backup

It’s a good idea to backup the database periodically and storing the backup file in a safe

place.. This can be done manually or by running a Cron job.

### **Mysql backup- in the MySQL/bin folder**

```
bin> ./mysqldump -u lamuser -plampassword lamdb> backup.sql
```

### **To Restore**

```
bin> ./mysql -u lamuser -plampassword lamdb < backup.sql
```

### **Troubleshooting:**

**a.** If you are unable to login to LAM or get an error message stating, “*Database not found. Make sure the database is properly configured*”, check if you are logged in as a non-root user.

To troubleshoot MySQL, check the log file, *<Mysql dir>/data/ \*.err*

**b.** You can also get this error message if LAM(mysql) cannot resolve the hostname of the machine. So LAM-LM should be installed on server hosts, that have static IP addresses and well known designated names.

**c.** Another thing to check is the database.properties file in *<Tomcat-webapps-lam-WEB-INF-classes-properties>* folder. It should have the line,

*“url=jdbc:mysql://localhost:3407/lamdb”*.

If not, edit and save the file. Restart Tomcat by first running the *stop\_lam* script and then the *start\_lam* script for LAM. (The port number for LAM database is set to 3407, so that it does not conflict with any other MySQL installation.)

**d.** To check if the LAM database is set up in MySQL, open a terminal window and run the following:

```
$ cd <mysql dir/bin>
```

```
$ ./mysql -u lamuser -plampassword (user account set for the LAM database)
```

If you are able to enter mysql,

```
$ show databases; (to check for LAM database, ‘lamdb’)
```

```
$ exit
```

**e.** Once LAM is installed on your server, you can access the application from any other machine by pointing the browser to *http://IPadd (or hostname):8181/lam*

Please disable any firewalls on your server to permit connections to the TCP/IP port.

**f.** Do not move the installation directory after you have LAM-LM running. This may alter some of the environment variables and cause application failure.

*Copyright© 2006-2008 TeamEDA Inc. All rights reserved.*