License management utilities

Subtopics

1. lmutil
2. FLEXnet

License management utilities:

- Provide information that is required to install licenses
- Streamline license file/directory management
- Support specific licensing features
- Help you diagnose and fix licensing problems
- Help you analyze and improve license usage

Two utility packages

Two license management utilities are available: "lmutil" and "FLEXnet Manager".

The lmutil file management system is available for free from Advantest and enables you to monitor, troubleshoot, and improve license usage.

FLEXnet Manager is an advanced license management utility that is particularly useful for facilities where large numbers of licenses are accessed remotely using license servers.

Among its features, FLEXnet Manager provides a detailed license usage report that will help you analyze current use, and efficiently plan future license allocation. In addition, FLEXnet Manager enables you to define a system of "alarms" that notify you about license allocation problems and automatically shut down and restart licenses as needed.

---

lmutil

All FLEXlm utilities are packaged in a single executable file called `lmutil`, that can be installed either as individual commands or as a wrapper that issues individual commands using `lmutil(for example: lmutil lmstat)`.

The Unix driven commands available through the lmutil management system are briefly described in the following tables. For syntax information, see chapter 7 of the *FLEXlm Licensing End User Guide*. (You can find the guide at the Advantest Web Site: **Advantest Home > Global Services > Product Support > V93000 > V93000 Licensing > FLEXlm License Server Software Downloads and Documents > FLEXlm End Users Guide.**)

License server and client commands

Unix command	What the command does
`lmstat`	Displays license server and client status information. `lmstat` can help you diagnose license problems and optimize license usage. Specifically, `lmstat` enables you to: • Determine the status of daemons currently running • Determine status of license files • Identify the expiration date of a license • Identify users of individual features and report checkout times This helps you identify which licenses are currently available and which are in use. `lmstat` also reports the expiration date of a license, which is an important factor for planning future license use. `lmstat` does not report on unserved license usage. You cannot use it to determine the status of unserved licenses, such as uncounted licenses. `lmstat` only gives information about the status of licenses that reside in license files on the server.
`lmdiag`	Diagnoses checkout problems. `lmdiag` is used to diagnose license checkout problems. Unless you specify a single feature, all licensed features are diagnosed. If a file contains multiple lines for a given feature, you can specify a particular line to diagnose. `lmdiag` first prints information about the license, then attempts to checkout each license. `lmdiag` indicates if the checkout succeeds. If the checkout fails, a reason for the failure is returned. If a server connection problem is identified, you have the option to run extended connection diagnostics. Extended diagnostics attempt to connect to each TCP/IP port on the server to detect if the port number indicated in the license file is mistaken. If `lmdiag` finds the daemon for the feature being diagnosed, it indicates the correct port number for the license file to correct the problem.

License server commands

Unix command	What the command does
`lmdown`	Shuts down selected license daemons. `lmdown` enables you to shut down selected license daemons, including `lmgrd` and vendor daemons. `lmdown` can be used with single and multiple servers. Note: On Unix platforms never use `kill -9`to shutdown servers.
`lmhostid`	Reports the host ID. `lmhostid` reports the host ID of the current platform. Universal arguments enable you to report the type of host ID and to return the host ID in the UTF-8 format, as well as in standard ASCII format. You will use `lmhostid` to determine the host ID of computers you are using, in order to configure licenses for servers and system controllers.
`lminstall`	Converts files from decimal to readable format. `lminstall` enables you to enter decimal format licenses so they are converted into a readable license format. `lminstall` can also be used to convert from a readable format to decimal format.
`lmpath`	Enables user definition of file path settings. `lmpath` enables you to define the path that is used for FLEXlm license settings. `lmpath` enables you to add to, override, or retrieve the current license path setting. `lmpath` will help you define the optimal license path setting for your testing environment, and also to view the current path setting.
`lmremove`	Releases hung license. `lmremove` enables you to remove a single user's license for a specified feature. The licensed feature is effectively checked back into the server, and thus available for other users to check out - or for *you* to check out again.
`lmreread`	Initiates reread of license file. `lmreread` causes the file manager to reread the license file and so start any new features that have been added since the current test operation was started. `lmreread` can be used both to reread a specified daemon or to reread all active daemons. If you want to add licenses to the current test you will first install the license file, use the `lmreread` command, then restart SmarTest.

Unix command	What the command does
`lmswitch`	Defines debug log location and size. `lmswitch` pertains to debug log files. Using `lmswitch` makes it easier for you to track debug output and to generate smaller, more manageable, debug files. By default all debug log output is written to a single debug log file, including debug log output from `lmgrd` and from any active vendor daemons. Therefore, debug output files can become very large, resulting in a large consumption of memory, and making tracking of specific debug results more difficult. The `lmswitch` command also enables you to track debug output for a specific daemon by specifying its location in an independent file.
`lmswitchr`	Defines report log location and size. `lmswitchr` pertains to report log files. Report logs are only used in conjunction with products such as SAMreport, and otherwise should not be active. Use `lmswitchr` to close the existing report log file and initiate a new report log file. If no report log is active, the `lmswitchr` commands initiates one. Using `lmswitchr` makes it easier for you to track report log output and to generate files that are more manageable in size.
`lmnewlog`	Moves existing report log to new file, then starts new report log with name of original file. `lmnewlog` is identical in purpose to the `lmswitchr` command except it assigns the new report log file the name that had been given to the original report log file. Report logs are only used in conjunction with products such as SAMreport, and otherwise should not be active. If you use `lmnewlog` instead of `lmswitchr` to rotate report log files, you do not have to change the file name in the REPORTLOG line of the option file.
`lmver`	Reports FLEXlm license version. `lmver` reports the FLEXlm versions of `lmgrd`, a vendor daemon, a license administration tool, or an executable file that has been built using FLEXlm. Use `lmver` to ensure that the FLEXlm version you are using is the most recent version. Using the most recent `lmgrd` version is always recommended. The latest versions of these utilities can be found at the Advantest Web Site: Advantest Home > (Support & Services) V93000 SOC > Software Downloads and Utilities for the V93000 SOC Series > FLEXlm License Server Software Downloads.

Universal lmutil arguments

Universal arguments that can be used with most `lmutil` commands	
`-c license_file_path`	Displays the path to the specified license file.
`-help`	Displays utility usage information, then exist.
`-v`	Displays the FLEXlm version of the utility, then exits.
`-verbose`	Displays detailed description for all errors found.

FLEXnet

The FLEXnet file management system from Flexera Software can be a powerful tool for improving license administration. Among its features, FLEXnet's report analysis and alarms tools are described below. For greater detail, see the company's website at *www.flexerasoftware.com*.

Report analysis

FLEXnet provides detailed license usage report tables and graphs that enable you to analyze usage parameters such as the following:

- Maximum licenses and hours available for a feature
- License use by project, by user group, by feature
- The *number* of licenses that are in use, have been denied, are queued, and are unsupported
- The *percentage* of licenses that have been used and that have been denied
- Patterns of use over time, including peak usage periods; daily, weekly, monthly, and longer usage patterns; and irregularities in use.

These factors can help you modify your use of licenses to maximize test time and increase test efficiency.

Alarms

FLEXnet provides alarms that will alert you about the status of your servers. You can define alarms to tell you if a server is down, if a redundant server is down, if a daemon is down, if license utilization is approaching or has exceeded capacity, and if a license is close to its expiration period, or has already expired. Alarm messages can be emailed automatically to more than one email address, to improve the chance of timely response to problems that arise.

Error messages

Appendix E of the *FLEXnet Licensing End User Guide* provides an explanations FLEXnet error codes and a complete listing of FLEXnet error messages. (FLEXnet errors are identical FLEXlm errors that have the same numerical designation.) You can find the guide at the Advantest Web Site: **Advantest Home > Service & Support > V93000 SOC/HSM > Licensing > FLEXlm License Server Software Downloads and Documents > FLEXlm End Users Guide.**

To learn about the features offered through the FLEXnet license management utility see *www.flexerasoftware.com* and the *FLEXnet End User Guide*

Revision #2
Created 2025-10-15 09:59:46 CEST by Ekaterina Nikitina
Updated 2025-10-15 15:47:36 CEST by Ekaterina Nikitina