The messages in machine-readable format can be converted into human-readable format by the newly created tool **ltfsee_catcsvlog**, which is run by the following command:

```
/opt/ibm/ltfsee/bin/ltfsee_catcsvlog /var/log/ltfsee_trc.log
```

The **ltfsee_catcsvlog** command accepts multiple log files as command-line arguments. If no argument is specified, **ltfsee_catcsvlog** reads from stdin.

Persistent problems

This section describes ways to solve persistent IBM Spectrum Archive EE problems.

If an unexpected and persistent condition occurs in the IBM Spectrum Archive EE environment, contact your IBM service representative. Provide the following information to help IBM re-create and solve the problem:

► Machine type and model of your IBM tape library in use for IBM Spectrum Archive EE
► Machine type and model of the tape drives that are embedded in the tape library
► Specific IBM Spectrum Archive EE version
► Description of the problem
► System configuration
► Operation that was performed at the time the problem was encountered

The operating system automatically generates system log files after initial configuration of the IBM Spectrum Archive EE. Provide the results of the **ltfsee_log_collection** command to your IBM service representative.

10.6.2 IBM Spectrum Scale

IBM Spectrum Scale writes operational messages and error data to the IBM Spectrum Scale log file. The IBM Spectrum Scale log can be found in the /var/adm/ras directory on each node. The IBM Spectrum Scale log file is named mmfs.log.*date*.*nodeName*, where date is the time stamp when the instance of IBM Spectrum Scale started on the node and nodeName is the name of the node. The latest IBM Spectrum Scale log file can be found by using the symbolic file name /var/adm/ras/mmfs.log.latest.

The IBM Spectrum Scale log from the prior start of IBM Spectrum Scale can be found by using the symbolic file name /var/adm/ras/mmfs.log.previous. All other files have a time stamp and node name that is appended to the file name.

At IBM Spectrum Scale start, files that were not accessed during the last 10 days are deleted. If you want to save old files, copy them elsewhere.

Example 10-19 shows normal operational messages that appear in the IBM Spectrum Scale log file.

Example 10-19   Normal operational messages in an IBM Spectrum Scale log file

```
[root@ltfs97 ]# cat /var/adm/ras/mmfs.log.latest
Wed Apr  3 13:25:04 JST 2013: runmmfs starting
Removing old /var/adm/ras/mmfs.log.* files:
Unloading modules from /lib/modules/2.6.32-220.el6.x86_64/extra
Loading modules from /lib/modules/2.6.32-220.el6.x86_64/extra
Module                  Size  Used by
mmfs26               1749012  0
mmfslinux             311300  1 mmfs26
tracedev               29552  2 mmfs26,mmfslinux
```