License usage logging

On this page:
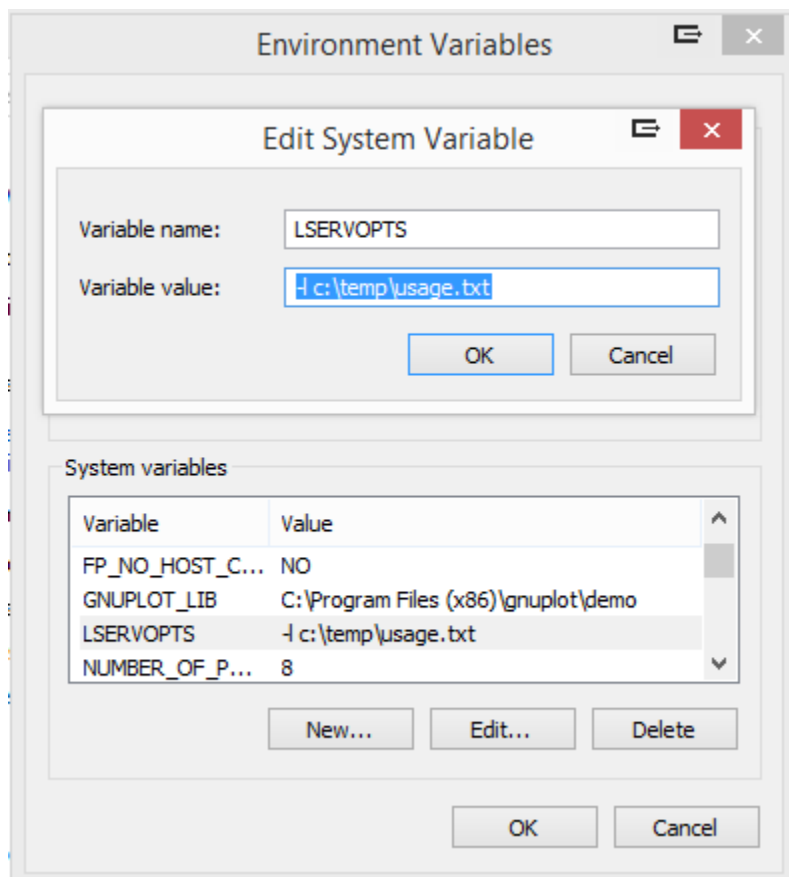
The procedure for setting up license usage logging is described in detail in the "System Administrator's Help.html" document located in the "License Manager" subdirectory of the program installation directory. The procedure is briefly summarized below by the way of example.
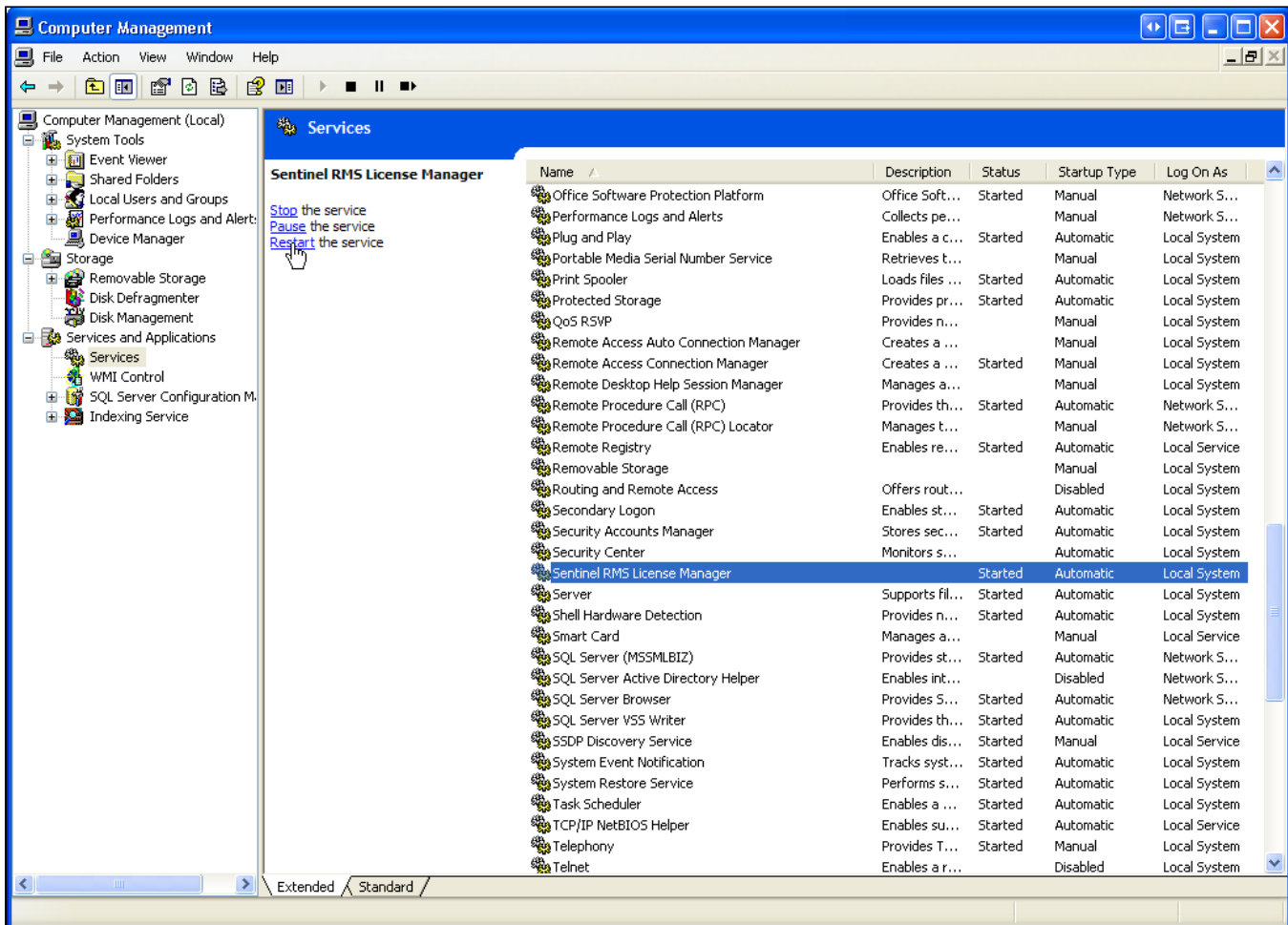
Step 1: Setup log file

Set up -l usage-log-file option for the LSERVOPTS system environment variable. As per the "System Administrator's Help.html" document, this option specifies the location (directory) and name of the license server's usage log file, which enables usage logging. By default, usage logging is disabled.

For example, we can setup the log file to be c:\temp\usage.txt by setting the system environment variable as shown in the figure below (the directory c:\temp must exist; the log file itself, ie. usage.txt may or may not exist):
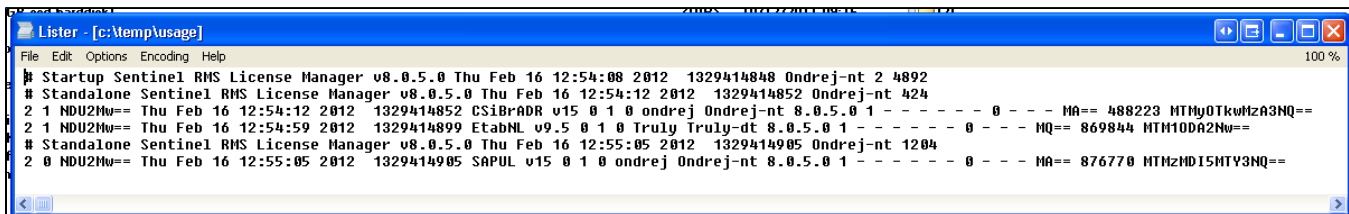

Step 2: Restart the RMS Sentinel License Manager Service

Restart the RMS Sentinel License Manager Service for the new options to take place:

From this point on, the license usage is being logged into the c:\temp\usage.txt file:
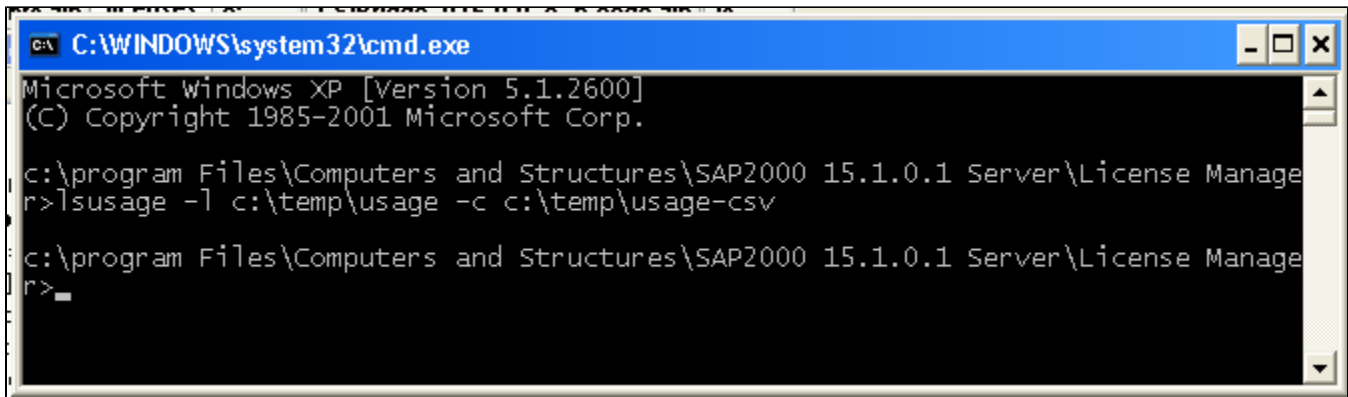

Step 3: Obtaining the results in a more readable format

To obtain the license usage in a more human-readable format, run the lsusage command located in the "License Manager" subdirectory of the program installation directory. For example, running

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lsusage -l c:\temp\usage.txt -c c:\temp\usage.csv
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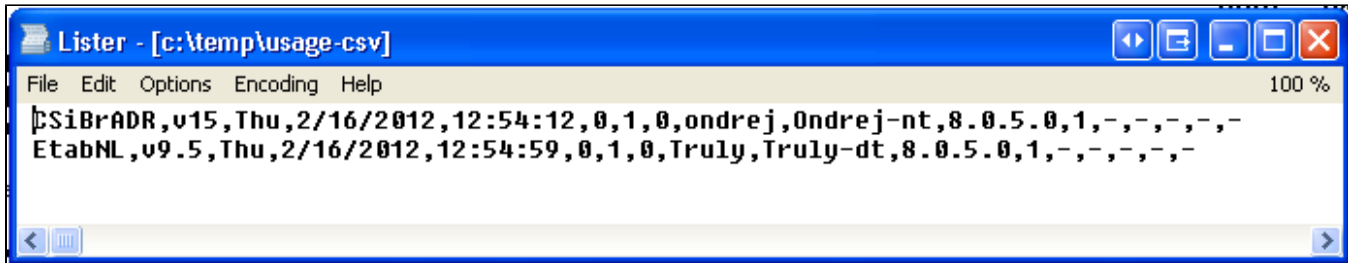
will create a c:\temp\usage.csv file that contains the usage statistics in a comma-separated-values format. See the images below:

The CSV file can be imported to Excel or Access to visualize the usage statistics.

Format of the CSV file

The format of the CSV file is not documented in Sentinel documentation, but the following was determined from the investigation of the csv file:

(1) The description of the individual fields is provided below:

A. FeatureName - name of the product and feature or level

B. Version - version of the product

C. DayOfWeek - day of week when the license was checked in or out

D. DateOfTrans - date when the license was checked in or out

E. TimeOfDay - time when the license was checked in or out

F. LoggingType - 0 for license was checked out, 2 for license was checked in

G. KeysInUse - number of licenses that were checked out for the given product level or feature

H. UsageTime - number of seconds the license was checked out

I. UserName - name of the user who checked the license in or out

J. HostName - host name of the computer from which the license was checked in or out

K. LmLibVer - version of Sentinel License Manager Server

L. NoOfLicenses - number of licenses that were checked in or out

M. ClientLockedStr

N. QueueKeyId

O. AbsPos

P. GrpPos

Q. GrpName

(2) Rows with columns (F, H) = (0, 0) are when the license was gotten, and the rows with (F, H) = (2, t) are when the license was released, with t = time difference between these, in seconds. The time t can be easily confirmed by differencing column E of the rows.

(3) There does not appear to be a way to determine which end row corresponds to which beginning row for the same user, but a very simple logic could be written to figure it out. It is also easy to see how many simultaneous license are open, by adding the check-outs and subtracting the check-ins, in sequence.

(4) The last 5 columns are details of the license and they are not needed for license usage tracking.