



LogBuddy 1.0 – January 2010

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LogBuddy – Background

Since the release of Bricscad V10 in October 2009, Bricscad can create network license log files. LogBuddy helps to visualize the information in these logs.

For larger organisations, **network licensing** of Bricscad makes a lot of sense. We can install the software on many computers, while only paying for relatively few licenses. Everybody can use Bricscad, just not at the same time. There are other benefits – since all the network license keys are kept in one file on a server, it's much easier to administer. By comparison, standalone single license keys must be distributed out to each desktop, requiring admin to keep track of who has which license key.

But maybe the best advantage is that network licensing allows companies to begin using Bricscad without committing to a license for every user. Some users will find Bricscad satisfies their needs; others may require applications or features that Bricscad doesn't support. It's hard for administrators to predict exactly who can and cannot benefit from Bricscad. Network licensing allows us to 'start small' and only add licenses when demand proves that they will be worthwhile.

Starting with V10, Bricscad now creates network license log files. The log file is a great tool to monitor Bricscad usage. We can find out who is using the software, how many copies are in use, and how often the pool of licenses is fully used. We can create evidence of the user demand, eg to justify additional license purchases.

The following notes paraphrased from Pieter Clarysse at Bricsys describe license logging as it is currently implemented in Bricscad V10.

If "**file.lic**" is your network license file, then Bricscad will log all network license actions into another file "**file.lic.log**" in the same folder.

Each line in the log file represents one action, in this format : (with tabs instead of comma's)
ACTION, DATE AND TIME, NETWORK (MAC) ADDRESS, USERNAME, LICENSE KEY

A normal **ACTION** is one of :

LOCKED_KEY: a user locked a license key

UNLOCKED_KEY: a user unlocked a license key

NO_FREE_KEY: a user tried to lock a license key but they were all locked.

NO_VALID_KEY: a user tried to lock a license key but there was no license key in the file that is valid for the version and language of Bricscad this user is trying to run.

These error situations are also logged:

LOCKERROR_OPEN_LICFILE: While trying to lock a license key, Bricscad could not find or open the network license file.

LOCKERROR_READ_LICFILE: While trying to lock a license key, Bricscad could open the network license file but could not read its contents.

UNLOCKERROR_READ_LICFILE: While trying to unlock a license key, Bricscad could not open or read the network license file.

UNLOCKERROR_NO_SUCH_KEY: While trying to unlock a license key, Bricscad could not find this license key in the network license file.

UNLOCKERROR_FILEFORMAT: While trying to unlock a license key, Bricscad encountered an unexpected end of the network license file.

UNLOCKERROR_LOCK_CONFLICT: Trying to unlock a license key which was locked by someone else.

UNLOCKERROR_WRITE_LICFILE: While trying to unlock a license key, Bricscad could not write the network license file.

The default maximum file size of the log file is 1MB. When this size is reached, the file is automatically copied to \\server\path\file.lic.1.log, or if that exists already, \\server\path\file.lic.2.log, \\server\path\file.lic.3.log, \\server\path\file.lic.4.log, \\server\path\file.lic.5.log and finally, if this one already exists, then \\server\path\file.lic.1.log is deleted and \\server\path\file.lic.2-5.log are renamed to \\server\path\file.lic.1-4.log.

If the file \\server\path\file.lic.sz exists, the maximum size is read from this file. The size is interpreted in KB, e.g. a file containing "1024" will result in the same maximum size as the default size: 1MB. The maximum accepted size is 1GB, i.e. a file containing "1048576". A size of 0 will prevent Bricscad from writing network license logs.

Active users information

When Bricscad starts and cannot lock a license key because they are all in use, all active users are listed in a message box. So then we know who to politely ask to log out and go for a coffee, so that we can log in! This information about the currently logged in license users can also be found in the License Properties dialog box, by clicking on the button labeled "Network license..."

Why LogBuddy?

The log file is full of good information, but it's somewhat painful to interpret – here's part of an example log file:

LOCKED_KEY	[2009-07-12 15:27:58]	00-15-C5-C0-49-E2pieterc	K8HD-W6N8-KB8E-G371-WMUL-B3NG
UNLOCKED_KEY	[2009-07-12 15:38:42]	00-15-C5-C0-49-E2pieterc	K8HD-W6N8-KB8E-G371-WMUL-B3NG
LOCKED_KEY	[2009-07-12 17:25:12]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-12 17:36:10]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 09:31:03]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-13 09:31:46]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 09:31:48]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-13 09:31:51]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 09:31:52]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-13 09:32:00]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 10:23:05]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 10:29:42]	00-30-05-5D-DF-F5tester	K8HD-W6N8-KB8E-G371-WMUL-B3NG
LOCKED_KEY	[2009-07-13 11:12:40]	00-19-21-56-BF-E4tester	13K8-71LQ-BXVH-RB1J-UWUG-6DNW
UNLOCKED_KEY	[2009-07-13 11:12:18]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 11:28:12]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-13 11:33:00]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 11:33:34]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-13 11:33:50]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 11:34:15]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-13 11:34:30]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 11:37:03]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-13 11:37:07]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 11:38:33]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-13 11:38:37]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
LOCKED_KEY	[2009-07-13 11:39:23]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
UNLOCKED_KEY	[2009-07-13 11:39:36]	00-15-C5-C0-49-E2pieterc	QK81-K3WM-VGPA-BG9T-F36D-8LGU
Etc...			

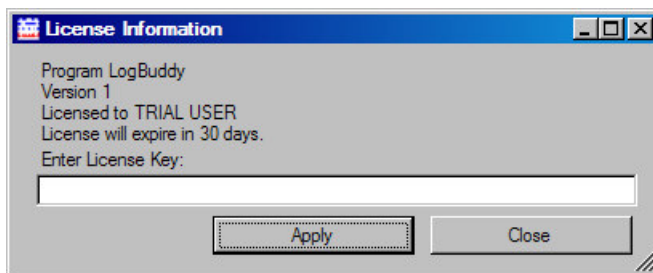
We need a tool to visualize this information and **LogBuddy is the tool!**

Installation

Download LogBuddy.zip (eg LogBuddy1.0.zip) and unzip the two files **SetupLogBuddy.msi** and **setup.exe**. Double-click on **Setup.exe** to launch the Installer. By default, the program will be installed to **C:\Program Files\Sofoco\LogBuddy\Logbuddy.exe**. A shortcut will be added to the desktop, and to the Start > All Programs menu.

Running LogBuddy

LogBuddy requires Bricscad V10. If Bricscad is not running, LogBuddy will start Bricscad. The two programs run side-by-side.

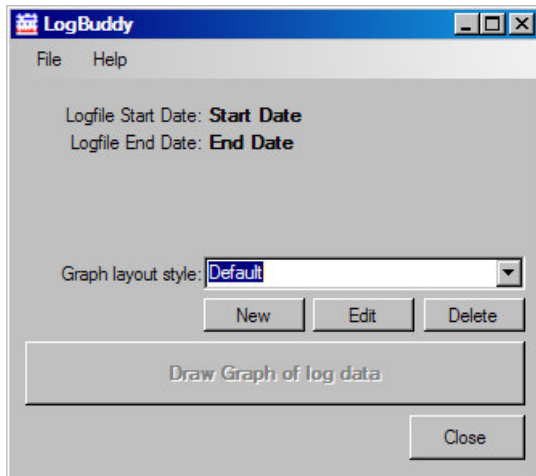


When LogBuddy first runs, it will display its License Information dialog, looking for a license key string. If we already have a license key, we can enter it here.

If we don't have a license key, just press 'Close'. LogBuddy will run as a free 30-day trial.

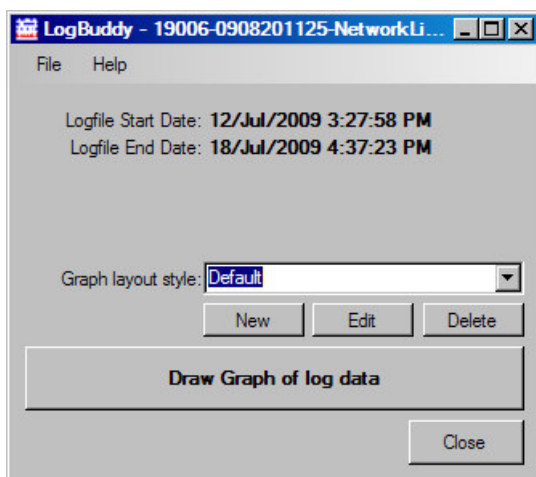
Note: we can get back to the License Information dialog by picking Help > License in the menu, eg to install our license key after purchase.

The main LogBuddy dialog is displayed.



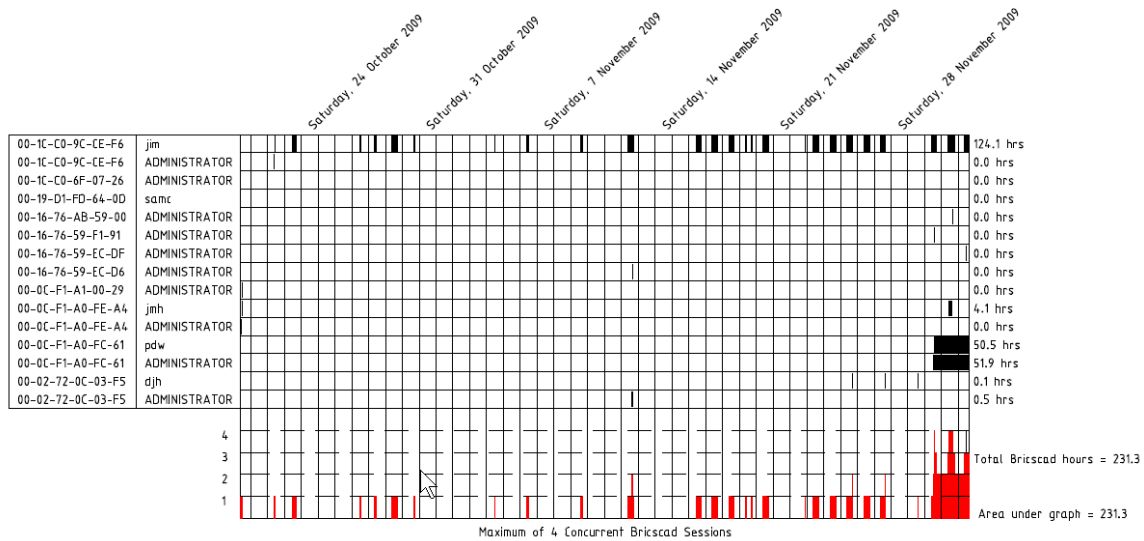
At first the logfile Start and End dates are not known, and the 'Draw Graph' button is disabled. The Graph layout style is 'Default'. We can create different layout styles later, but for now let us **open a log file**.

From the menu, we pick 'File' then 'Open a log file'. Browse to the network log file in the same folder where the network license file is. After pressing 'Open', LogBuddy will scan the file.



The log filename is displayed in the header. The date range of the file is displayed. And the 'Draw Graph' button is now enabled. In Bricscad, we should make sure to have an empty new drawing. Press 'Draw Graph of log data'. Now LogBuddy will draw a chart with several different sections.

LogBuddy Chart Sections

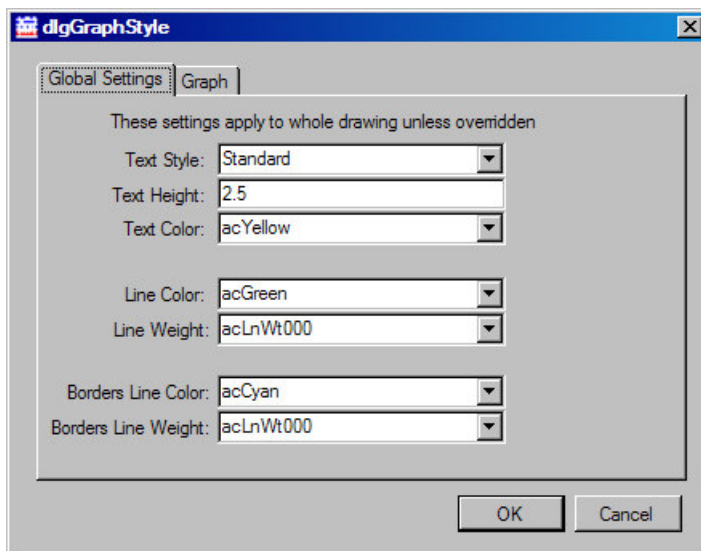


At the base of the chart is a graph of the total number of concurrent Bricscad sessions, with the peak demand listed. Above that, are bars showing all the individual Bricscad sessions in the log file. Each bar is identified by the name of one computer (or its network MAC address), and the name of the user. The 'Total Bricscad hours' are computed from these individual sessions. At the same time, we compute the area under the graph in hours as a cross-check.

In this particular chart, we can see two instances of sessions where Bricscad did not close down normally – so it looks from the logfile as if users 'pdw' and 'ADMINISTRATOR' worked continuously for days! LogBuddy can help us to spot such anomalies.

Customising the chart

Under the 'Graph Layout Style', there are three buttons 'New', 'Edit' and 'Delete'. These allow us to create new chart styles, edit them or delete them. The 'default' style cannot be deleted. These styles are stored as xml files with extension '.lhx', in the LogBuddy program folder. After creating a 'New' style or at any time later, we can select that style in the pull-down list and press 'Edit'.



On two tabs, there are settings for the colors and line weights, text style and text height, also the height and width of the main graph. Depending on the date range in the log, the number of users etc, we can adjust the graph size and shape to be more readable. After pressing 'OK', these settings are saved for next time.

We hope this tool helps you and we're interested to hear your suggestions for improvements.

Damian Harkin, Sofoco, Dec 2009