AppLog 5

AppLog is an application logging tool for use on PalmOS PDA's. It has been written to assist researchers studying the use of PDA's.

AppLog records the time any application is used on the PDA. Each log entry notes the time, date and application identifier whenever an application is started and how long the application is used for.

When the PDA is synchronised with the desktop application the file is processed to produce a text file indicating:

- Application identifier
- Date and Time the application was started
- How long the application was used

The file produced is in tab-separated format suitable for use with spreadsheet and database programs.

The data collected by AppLog may also be beamed to another PDA that is running the Ninelocks TeksLogs application. TeksLogs processes the files on the Palm and produces a data file the same as the AppLog desktop conduit.

Installation

AppLog consists of a Palm application and and a conduit for the Palm hotsync manager on the PC.

- AppLog.prc
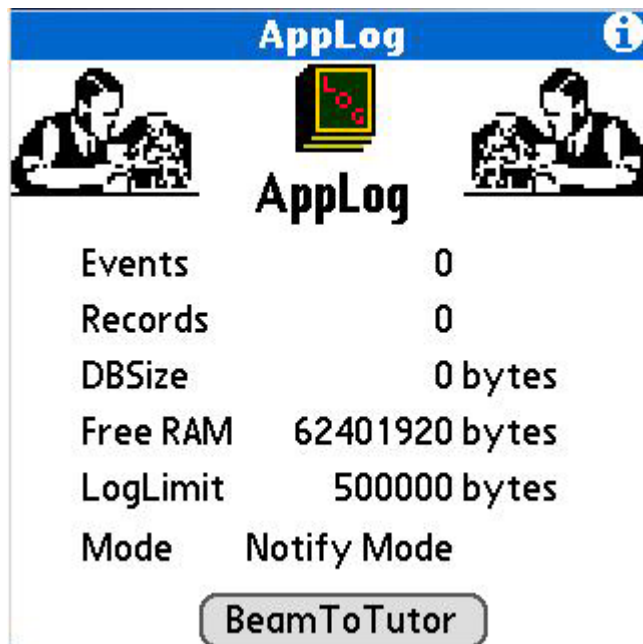- Desktop hotsync conduit.

PalmOS components

Install AppLog.prc using the PalmOS install tool.

(Locate the folder containing the above files and double click one of them and the install tool will be launched. The other files can then be dragged into the installer windows and added to the files to be installed.) Now hotsync your PDA

AppLog Icon

AppLog

The main form of AppLog shows the number of events recorded (applications started) and amount of memory the logging database is using.

What the numbers mean.

Events
An application starting is an event.

Records
There are multiple numbers of events written to each record

DBSize
Total size of the database stored on the Palm, this is the size of the records and any overhead used for database management by the Palm operating system.

Free Ram
The amount of unused memory on the Palm.

LogLimit
A maximum size can be set to limit the amount of memory that is taken up by the application logging. When this limit is reached no more events will be added to the logging database. The default size is 500K. AppLog will also stop recording events if the amount of Palm memory is less than 1Mbyte.

The entry **notify mode** is for compatability with older versions of AppLog that were used on pre PalmOS 5 machines.

Collecting the Data From AppLog

The AppLog data may be transferred   to a desktop machine via hotsyncing or transferred to a PDA that is running the running the Ninelocks TeksLogs application. TeksLogs processes the files on the Palm and produces a data file in the same format as the AppLog desktop conduit. TeksLogs is described in a separate document that is included in the download from http://www.ninelocks.com/AppLog

Desktop Conduit Installation

The data collected by AppLog can be transferred to the PC during a hotsync by a special application known as a Hotsync Conduit. (HotSync functionality is provided by a number of conduits. Conduits are small programs designed to transfer data during HotSync)

To install the conduit run the *AppLogSetup.exe* installer application.

During installation we recommend you use the default options presented.

Configure the conduit
The conduit is enabled by opening the hotsync manager (tap the Icon in the Windows task bar)

1. Choose custom
2. Select your user name
3. Scroll down the list to "AppLog conduit"
4. Tap the "Change" button.
5. Choose "Handheld overwrites desktop"
6. If you want the conduit enabled everytime you hotsync tick the "Set as default" checkbox.
7. Click the "Done" button.

Test its all working

Now is the time to test if it is all working!

On your palm open a close some applications.

Open AppLog and check that the numbers have changed.

If everything is working, try hotsyncing your Palm.

Now check in your Palm Desktop user folder.

(Normally in c:Program Files\PalmOne\yourName where your name will be a variation of your hotsync user name).

Inside that folder there should now be a sub folder called AppLog.

Inside the AppLog folder there should be a .txt file called
AppLog.txt

The file is a tab separated data file in a format as shown below.

A	B	C	D	E	F
1017064714	bckp	Mon Mar 25 13:58:34 2002	13	58	13
1017064727	lnch	Mon Mar 25 13:58:47 2002	13	58	5
1017064732	trgf	Mon Mar 25 13:58:52 2002	13	58	32
1017064764	lnch	Mon Mar 25 13:59:24 2002	13	59	5
1017064769	bckp	Mon Mar 25 13:59:29 2002	13	59	34
1017064803	lnch	Mon Mar 25 14:00:03 2002	14	00	165
1017064968	sync	Mon Mar 25 14:02:48 2002	14	02	327
1017065295	lnch	Mon Mar 25 14:08:15 2002	14	08	9
1017065304	JTeN	Mon Mar 25 14:08:24 2002	14	08	32
1017065336	lnch	Mon Mar 25 14:08:56 2002	14	08	120

All PalmOS applications have a four character identifier known as a creator code or Creator ID.

Each application should have a unique identifier as the Palm will only recognise unique creator codes. If two applications did have the same creator ID only one would be seen by the Palm.

Some of the data in the log file is produced in more than one format. The start time is shown in two formats. A human readable test string, to make looking through the log easy when you don't want to import it into a spreadsheet and with the start hour and minute in separate fields for use within spreadsheets.

This is the first version of the data file and the format is likely to be changed in response to user feedback. The format of the logfile is controlled by the desktop conduit so changes to the format can be made without requiring updating of the application file on the Palm.

In the log listing a creator code of *ZZZZ indicates that the Palm was switched off or shut itself down.
In the log listing a creator code of *WAKE indicates that the Palm was switched on and is resuming the application that was in use when the device was last used.

Feedback

If you have any comments, have suggestions for new features or alternative log file formats then please contact us. AppLog was written to help anyone who is conducting research into the use of PalmOS PDA's we are always interested to hear how AppLog is being used, so please tell us about your project.

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Information and updates will be made available at:-
www.ninelocks.com

Thanks
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The installer for this product was created using Installer VISE from MindVision Software. For more information on Installer VISE, contact:

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