TeksLogs

TeksLogs is a companion program for users of AppLog. AppLog is an application logging tool for use on PalmOS PDA's. AppLog is a tool 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.

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.

TeksLogs also helps with beaming items to other PDAs. Often in an educational environment a tutor may wish to beam a number of files to a student,such as new programs, quizzes etc. TeksLogs can also help this process by sending a batch of files.

Installation

Install TeksLogs.prc using the PalmOS install tool.

(Locate the folder containing the above file and double click one of itthem and the install tool will be launched.) Now hotsync your PDA

TeksLogs can also help to copy files between memory cards. Files on a memory card may be copied to a temporary storage area on the Palm then copied back to a different card. This can help when needing to organise files on a card (such as swapping MP3 files etc.

TeksLogs manages files stored in 3 areas. The different file locations are select by tapping the Icons at the top of the form.

 Files on a removable memory card, eg SD/MMCard or memory stick. If you use a communication module such as a Bluetooth card, files can be moved to a temporary area on the PDA, see below.
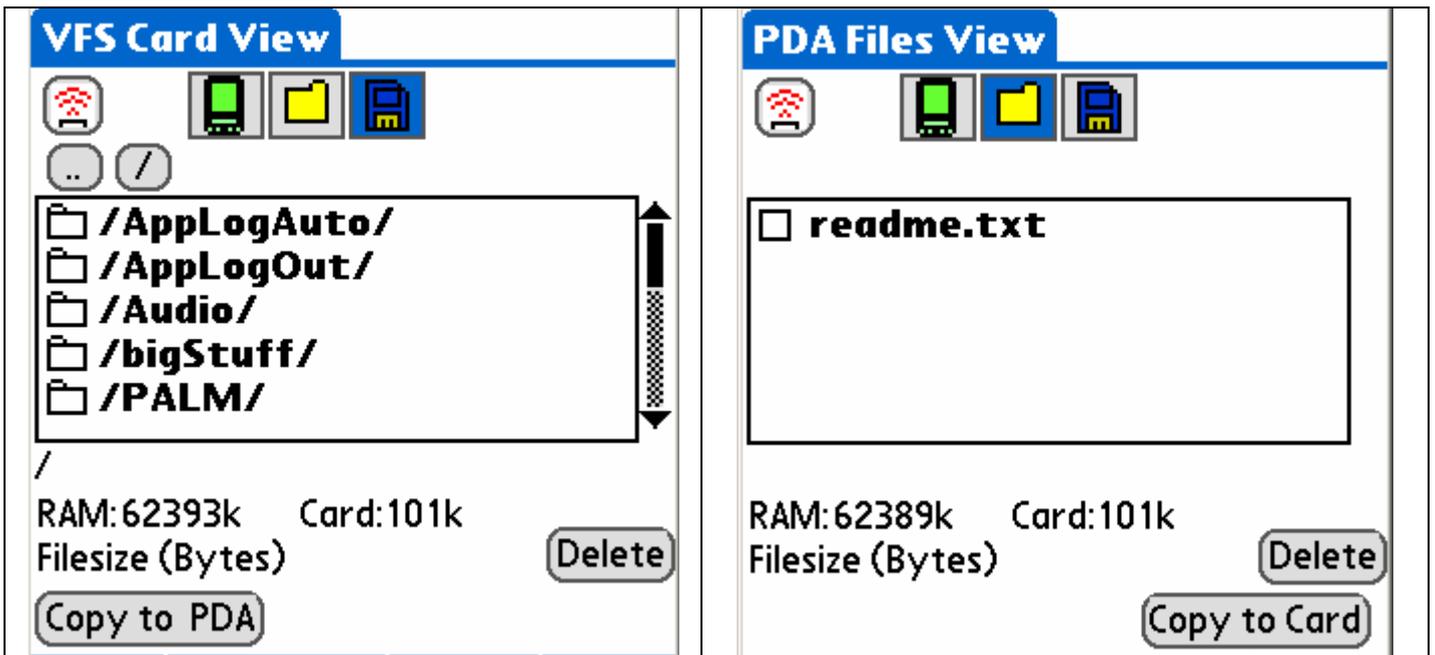
 Files stored on the PDA. This area is a temporary area for saving files that you wish to transfer to or from a memory card. This area is useful if you wish to transfer files to or from a removable card when you also use the memory card slot for a communication module, such as a bluetooth.

 Palm Application files and databases that are stored in main memory (not the card)

 To copy a file, first select the files you wish to copy, by ticking them (tap the checkbox next to its name), then tap the button at the bottom of the form that corresponds to your chosen destination.

The screen captures on the next page show examples of each of the views.

VFS Card View

../ /

📁 /AppLogAuto/
📁 /AppLogOut/
📁 /Audio/
📁 /bigStuff/
📁 /PALM/

/
RAM: 62393k   Card: 101k
Filesize (Bytes)

[Delete]
[Copy to PDA]

PDA Files View

☐ **readme.txt**

RAM: 62389k   Card: 101k
Filesize (Bytes)

[Delete]
[Copy to Card]

In card view navigate between folder by tapping on the folders name. To move back a folder tap the "..." button, to return to the root of the card tap the "/" button.

To get information about the size of a file, select the file by tapping on its name. The file size will be shown at the bottom of the screen.

PDA Files view shows the files stored in TeksLogs special "holding" area. These files are stored in the main memory of the Palm.

This area is a temporary area for saving files that you wish to transfer to or from a memory card. This area is useful if you wish to transfer files to or from a removable card when you also use the memory card slot for a communication module, such as a bluetooth.

Another use of the temporary area is to move files between different folder of your memory card. Just transfer the files to this area from the card, then change to the destination folder on your card, flip to PDA files view and choose copy to card.

Applications View

All Applications

- ☐ **1.jpg.pdb**
- ☐ **2.jpg.pdb**
- ☐ **3.jpg.pdb**
- ☐ **AddressCitiesDB.pdb**
- ☐ **AddressCompaniesDB.pdb**

RAM:62375k   Card:101k
Filesize (Bytes)

Copy to Card

Options Folder

Create AppLogAuto Folder

Delete Folder

- ☐ **/jont/**
- ☐ **/PALM/**
- ☐ **/theBigFolderOfStuff/**

/

RAM:62396k   Card:101k
Filesize (Bytes)   Delete

Copy to PDA

The Applications view shows the Program and data files that are stored in the main memory of the Palm.

To list only items that belong to a particular application use the drop down list box. The association between the data files and applications is reliant on both sharing the same application identifier (Creator code). Some applications have additional data files with a different creatord code to the main application, so if you cannot find the file you are looking for, try setting the selection to "All Applications".

The AppLogAuto Folder is a special folder that can be used to assist with the beaming on multiple items to other PDAs.

When the select button (the centre of the 5 way button) is pressed,

TeksLogs checks for files in the AppLog auto folder. If there are any files there then it TeksLogs will attempt to beam them.

To create the folder use the "Create AppLogAuto Folder" option from the menu bar.

To display the menu tap the top of the form

Test its all working

To test out the operation of TeksLogs you need two PDAs. For the purposes of this description we will refer to them as the students PDA and the tutors PDA.

The students PDA should have a copy of AppLog installed. (see the AppLog manual) The tutor PDA should have TeksLogs installed.

Student PDA
On your palm open a close some applications.
Open AppLog and check that the numbers of events have changed.

Tutor PDA
Open TeksLogs

Now, prepare to beam the logs from the **Student PDA**. From the AppLog page tap the beam button.

The **Tutor PDA** should now indicate that it is receiving files.

The **Student PDA** will send two files. One contains the events recorded by AppLog. The other will contain a list of the Applications and their associated Creator IDs of all applications on the **Student PDA.**

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Creator IDS
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.
Eg the creator code for the calculator built into Palms is 'calc'.

The files sent from the Student PDA are called
Username-DateOfBeaming--timeOfBeaming.alo
example:
delph---20050204-2120--.alo

Username--ccd-- DateOfBeaming--timeOfBeaming.ccd
example
delph--ccd-20050204-2120--.ccd

So the above example files were sent from Palm with user name of "delph" at 21:20 on Feb 4th 2005.

TeksLogs saves the incoming files in separate folders of the memory card on the Tutor PDA.

AppLogIn
For files beamed from AppLog (ie file extension .alo)
AppLogOut
For processed AppLog files
AppLogCCD
For files from AppLog that contain application information
(files with extension .ccd)

When TeksLogs processes an AppLog log file (to convert the .alo file to an .alp file) the processed file is stored in the AppLogOut folder on the card and the file extension is changed to .alp (indicating a 'processed' AppLog file)

File Formats

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.

Palm provide a publicly accessible database of registered creator codes where it is possible to find the name of an application, if you have its creator ID.
http://www.palmos.com/dev/support/creatorid/

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.

Registration
Registration of TeksLogs is free, just send us your hotsync name and we'll send you a registration code.

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.

applog@ninelocks.com

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

Thanks
Special thanks to:
The late and greatly missed Bozidor Benc (http://www.benc.hr/appusage.htm) for contributing information to aid development. Checkout Benc Softwares Application Usage application .

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

MindVision Software
5901 North 58th Street
Lincoln, NE 68507

Voice: (402) 323-6600
Fax: (402) 323-6611

E-mail: mindvision@mindvision.com
http://www.mindvision.com

Appendix 1 The AppLog .ccd file, containing the list of applications and associated creator codes on the device.

AppLog .cc file
```
[NineLocksAppCCD]
[USER]ninelocks
4JMS,Timesheet
6JMS,Symbols
ADBE,Adobe Reader
Algf,Algebraf
AwBM,BigMoney
AwBW,Book Worm
AwJC,Bejeweled!
AwSC,Seven Seas!
BTMr,BtManager
BoMr,MarkMyScriptures
CHMT,ChemTable
CNvt,Converter
DDIR,DynDevInfo-DDIR
DGcl,Calcul-8!
DTGB,SheetToGo
DTGP,DocsToGo
DTGR,WordView+
EERF,EE REF
EPms,MMSLib Library-EPms
EPpm,Messages
Filz,Filez
```

Appendix 2

TeksLogs AppLog Processed File .alp
Main body is the same as that produced by the AppLog desktop conduit, but with the addition of a header section

```
[UserName]ninelocks
[BeamDate]Tue Feb 15 10:10:49 2005
[LastSync]Mon Feb 14 10:28:19 2005
[GoodSync]Mon Feb 14 10:28:19 2005
[DEVID_SOURCE]Zi72
[MAKE_SOURCE]Palm
[SERIAL_SOURCE]00VJA5G42FYY-P
[APPLOG_VER]5.0.3
[DEVID_TEKSLOGS]Zi72
[MAKE_TEKSLOGS]Palm
[SERIAL_TEKSLOGS ]00VJA5G42F9P-E
[TEKSLOGS_VER]1.0.0
1101815377  lnch  Tue Nov 30 11:49:31 2004        11      49      6
1101815386  nlAL  Tue Nov 30 11:49:37 2004        11      49      9
1101815387  lnch  Tue Nov 30 11:49:46 2004        11      49      1
1101815399  nlAL  Tue Nov 30 11:49:47 2004        11      49      12
```

Explanation of Header fields

[UserName]Username of the machine that the AppLog data is from

[BeamDate]When the file was beamed from AppLog to TeksLogs

[LastSync]Time when the sending PDA was last hotsynced

[GoodSync] Time when the sending PDA was last hotsynced

[DEVID_SOURCE] The hardware device ID of the sending PDA

[MAKE_SOURCE] The manufacturer id of the sending device

[SERIAL_SOURCE]The serial number of the sending device
(not all Palm devices have a serial number in ROM so in those cases
the serial number field is set to "No-Serial Number"

[APPLOG_VER]The Version number of Applog

[DEVID_TEKSLOGS] Hardware ID of the PDA that produced this file

[MAKE_TEKSLOGS]Palm

[SERIAL_TEKSLOGS]The serial number of the device on which TeksLogs
that produced this file was running

[TEKSLOGS_VER] TeksLog version

The body of 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
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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

Logfile format

Col	Data
A	Seconds in Palm time format (seconds since Jan 1904)
B	Creator ID (see explanation below)
C	Start date and time in human readable form
D	Application Start time (Hours)
E	Application Start time (Minutes)
F	Amount of time application was used (Seconds)

Appendix 3

AppLog Output file .alo

Jon Trinder   00VJA5G42F9P-E   Palm Zi72
3191352627 3191294984 3191294984 5.0.3   NineLocksAppLog
½ÊG nlAL ½ÊGlnch ½ÊG!PAdd ½ÊG#PDat n½ÊG$lnch ½ÊG&nlAL
½ÊG+lnch ½ÊG®*ZZZZ ½ÊJ`*WAKE ½ÊKF*ZZZZ ½ÊLN*WAKE ½ÊLÌ*ZZZZ
½ÊLó*WAKE ½ÊMr*ZZZZ ½ÊM-*WAKE ½ÊN-*ZZZZ ½ÊNF*WAKE
½ÊO-*ZZZZ ½Ê]2*WAKE ½Ê]4lnch ÿ½Ê]9Snpm ½Ê]æ*ZZZZ ½Êbw*WAKE
½Êb{lnch n½ÊbŠFoto ½Êb¶*ZZZZ ½Êf¯*WAKE ½Êf±lnch ½Êf¶Snpm ½ÊfÉlnch
n½ÊfÌ*ZZZZ ½Ê‰§*WAKE ½Ê‹y*ZZZZ ½Ê h*WAKE ½Ê "*ZZZZ
½Ê ˆ*WAKE ½Ê‘ *ZZZZ ½Ê‘Y*WAKE ½Ê‘õ*ZZZZ ½Ê’.*WAKE ½Ê"Þ*ZZZZ
lnch n½Êr Snpm ½Êr lnch n½Êr *ZZZZ ½Êžû*WAKE ½ÊŸr*ZZZZ
½ÊŸš*WAKE ½Ë *ZZZZ ½Ë-x*WAKE ½Ë-{PAdd ½Ë-€PDat Ä½Ë® *ZZZZ
½Ë±Ä*WAKE ½Ë²>*ZZZZ ½Ë²ð*WAKE ½Ë³j*ZZZZ