

Sync Buddy

User's Guide



Copyright © 2005, 2006 Florent Pillet

All Rights Reserved

www.florentpillet.com

Table of contents

Introduction	4
Sync Buddy and HotSync™	6
Requirements and installation	7
Handheld compatibility	7
Registering Sync Buddy	7
Establishing USB connections	8
Establishing Bluetooth connections	9
<i>Setup your Mac for Bluetooth</i>	9
<i>Pair your handheld with the Mac</i>	9
<i>Setup HotSync to connect over Bluetooth</i>	10
Establishing WiFi connections	11
Navigating your handheld	13
The main window	13
Drag-and-drop	14
The Handheld view	15
<i>Selecting files to view</i>	16
<i>Getting file information</i>	17
The Removable Media view	19
<i>Getting card information</i>	21
<i>Getting file information</i>	22
<i>Creating new folders</i>	23
The Pictures view	23
<i>Copying pictures to your computer</i>	24
<i>Exporting pictures to other formats</i>	24
<i>Installing new pictures on your handheld</i>	25
<i>Deleting pictures from your handheld</i>	25
Managing your backups	26
Hierarchical or flat backups?	26
Configuring the backup options	27
Tracking backup progress	28
The backup report	29

Frequently asked questions (FAQ)_____ 31

Troubleshooting_____ 32

Acknowledgments_____ 34

 Copyrights..... 34

 Trademarks..... 34

Version history_____ 36

Introduction

Sync Buddy is a backup and install management tool for Mac OS X users with Palm OS handhelds. Providing worry-free backups, installs and pictures management, Sync Buddy lets you reclaim control of your handheld. It complements the standard synchronization by giving you direct access to your handheld's contents.

Using Sync Buddy is as simple as launching the application on your Mac, plugging the handheld in its USB cradle or cable and pressing the synchronization button on the cradle/cable.

Sync Buddy provides the following benefits:

- *Flat and Hierarchical file listings*

Sync Buddy displays your handheld's files in either a flat form (all files together, which matches the real layout) or a more intuitive hierarchical directory that shows each application and its data file(s) along in separate folders.

- *Worry-free backups*

To back up files on your handheld, simply drag them from the directory to any folder on your computer. Use the Backup functionality to back up all of your Palm handheld's contents, including third-party files and databases for the built-in applications. Files from your handheld's main memory can be saved in a flat or hierarchical manner. Sync Buddy can also backup the contents of any removable media inserted in the handheld.

- *Instant transfers*

Just drop Palm databases and applications in the handheld window to install them without running HotSync™. To install files at specific locations on removable media, just drop them at the right location like you would in the Finder. With Sync Buddy, your handheld is as easy to handle as a disk!

- *Easy picture management*

Display the pictures your handheld contains with a simple click. Use drag-and-drop to copy pictures to iPhoto, to your computer or to any other application. Install pictures in a snap, and delete the pictures you don't need anymore.

- *Expansion card support*

Drag-and-drop files to and from expansion cards (SD/MMC cards, Memory Sticks, etc). The install and backup experience on expansion cards is better than ever with Sync Buddy!

- *USB, Bluetooth and WiFi/network support*

Sync Buddy can connect with handhelds over USB and bluetooth, but also accepts connection coming from the network. This allows you to use WiFi to connect your handheld to Sync Buddy, but also to connect handhelds remotely through the network by using Network HotSync.

Sync Buddy and HotSync™

Why bother with Sync Buddy, when you already have HotSync™? To understand why, here is a brief explanation of what each one does:

HotSync™, which ships with the Palm OS-based handhelds, takes care of synchronizing your handheld's address book and date book with your desktop computer. This is an essential functionality if you are using both your handheld and your Mac to handle your contacts. The downside is that you have little or no control over the full backup of your handheld, and can't do live manipulation of your handheld.

Sync Buddy lets you decide precisely which files to backup, restore, or install. Sync Buddy provides a host of features, such as easy browsing of the handheld's file directory, incremental backups, removable media backups, pictures management, and more!

Should I use HotSync™ or Sync Buddy? The decision is simple: use both. Sync Buddy excels at performing backups and installing software rapidly. It manages backups in a much better way than HotSync™ does, and it lets you install software immediately. You can still use HotSync™ to synchronize the handheld's built-in applications (Memo-Pad, Address Book, Date Book, and so on) if you use the desktop software from Palm.

OK, but will they conflict? Not at all. When Sync Buddy performs a backup, it does not change backup dates on the handheld. This means that it does not alter the way HotSync™ works, so you can safely and reliably use HotSync™ when you need to synchronize your built-in databases, and use Sync Buddy the rest of the time to install programs or data files and backup your handheld.

When you start Sync Buddy, it automatically deactivates HotSync™ and The Missing Sync™ (if any is installed and active), and reactivates it once you quit. This way, you don't need to change your synchronization settings to use Sync Buddy.

Requirements and installation

Sync Buddy runs on **Mac OS X 10.2 and later**. There is nothing to install on your handheld, you just need to make sure that you have a working connection between your handheld and your Mac, either using USB, Bluetooth or WiFi.

To install Sync Buddy, simply copy the Sync Buddy application to the desired location on your computer.

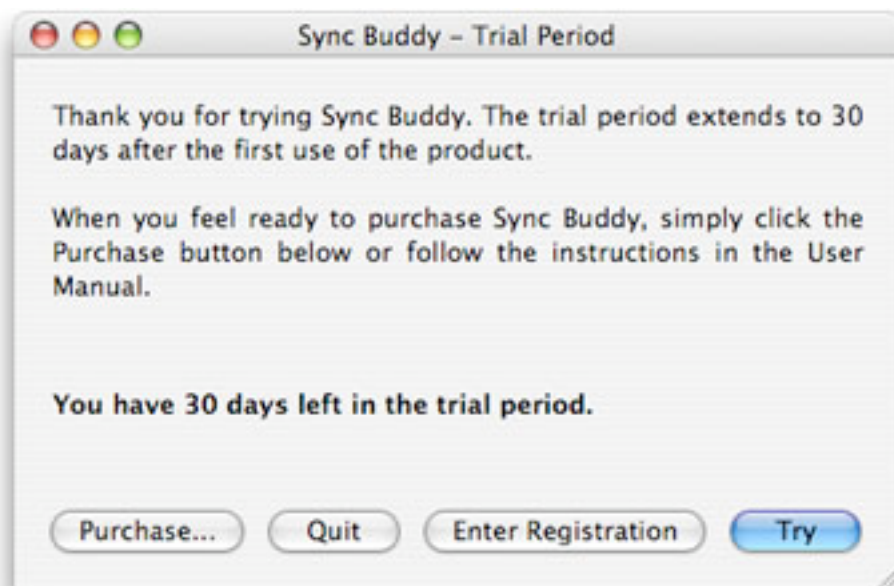
Handheld compatibility

Handhelds with a serial port connecting through the PalmConnect USB adapter are supported. Other USB adapters (like Keyspan) are currently unsupported. Direct serial port connections are not supported either.

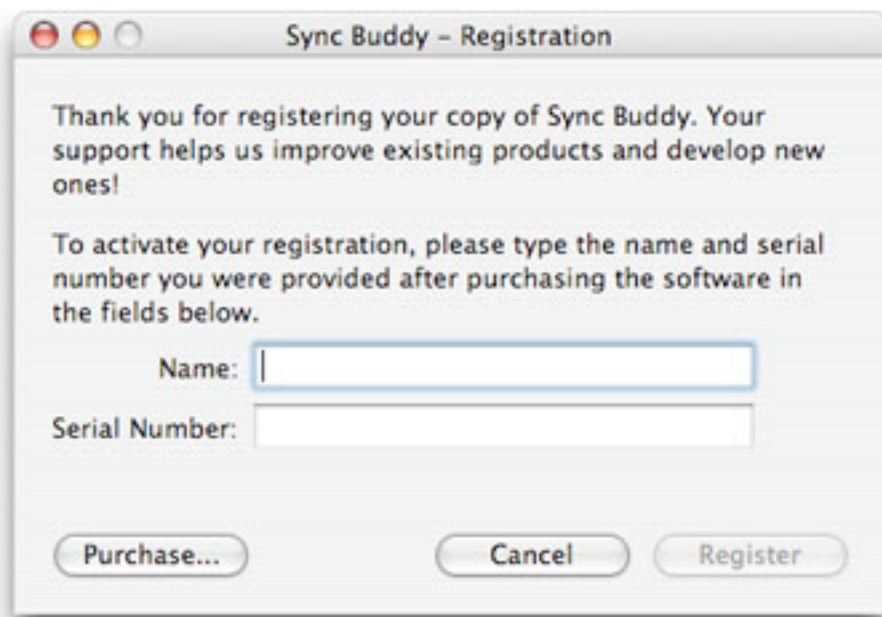
Compatible handhelds: most handhelds running Palm OS are supported. Some handhelds may not work with Sync Buddy, though. If the handheld doesn't work with Palm Desktop, there are few chances it will work with Sync Buddy. Some handhelds may work with Palm Desktop but not with Sync Buddy. This is the case for some old Handspring Visor handhelds.

Registering Sync Buddy

After purchasing a serial number for Sync Buddy (for example from our online store at <http://www.florentpillet.com/store.html>) you will receive an email with a registration code to enter in the software. After starting up Sync Buddy, you see a welcome dialog:



Click the *Enter Registration* button to open the serial number dialog:



Registration dialog

Enter the name you received in the *Name* field and the serial number in the *Serial Number* field. If you mistyped the information, the *Register* button will not highlight: in this case, copy-paste the information from the email you received to the fields.

Establishing USB connections

There is no specific setup to do on your handheld to connect through USB. Simply plug the handheld in its cradle (or connect it to the USB cable) and press the HotSync button on the cradle / cable. Note that some models like the Tungsten E come with a simple cable that doesn't have a synchronization button. In this case, you need to follow the handheld's instructions for synchronization (usually, launching the HotSync application on the handheld and pressing the HotSync icon in the middle of the screen immediately starts a synchronization).

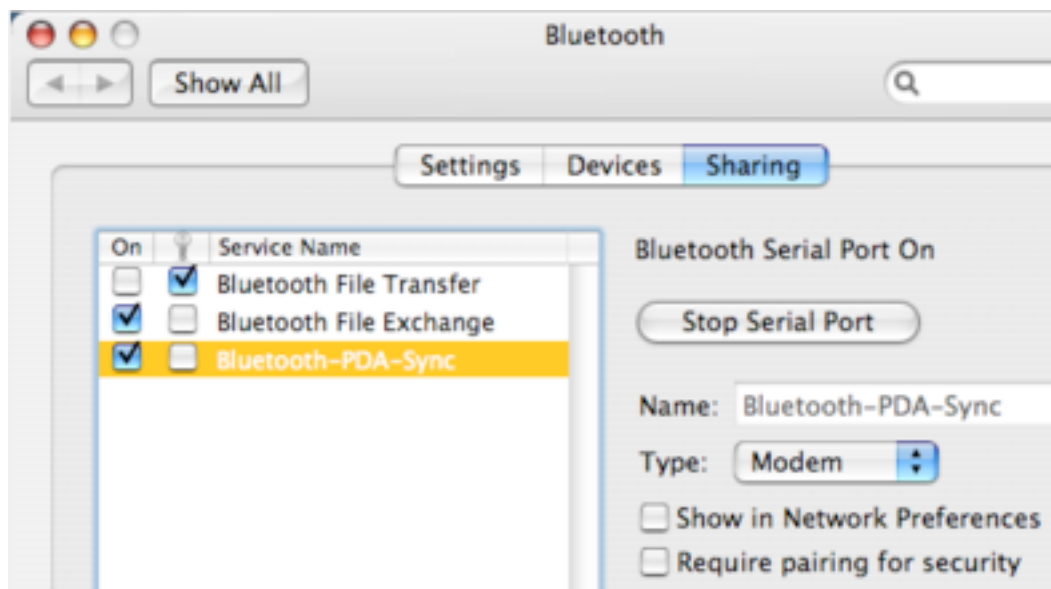
Note that at this time, you may only connect one device at once to Sync Buddy. If you have multiple handhelds, we recommend that you disconnect unused handhelds from their cable before trying to connect the handheld you want to sync. This is particularly true if you have certain recent models like the Palm LifeDrive or Tungsten T5 -- leaving on of these plugged (and not synchronizing) will prevent you from connecting to another handheld.

Establishing Bluetooth connections

Connecting to a handheld through Bluetooth (for example, to a Treo 650) requires pairing the Mac and the handheld so they recognize each other, then setting up HotSync to connect over Bluetooth.

Setup your Mac for Bluetooth

- Open the *Bluetooth Preferences* panel in the *System Preferences*.
- In the *Settings* tab, make sure *Bluetooth* is turned *On* and that the *Discoverable* checkbox is checked
- In the *Sharing* tab, make sure Bluetooth-PDA-Sync is enabled. If you don't see a Bluetooth-PDA-Sync entry, you may have inadvertently removed it. In this case, you can recreate it manually. Instructions to recreate the connection are given in the Troubleshooting section of this manual.



Setting up Bluetooth on the Mac

Pair your handheld with the Mac

- Launch the *Prefs* app on the Palm
- Select "*Bluetooth*". Make sure Bluetooth is "*ON*" and assign a *Device Name* to your handheld.

- Tap the *Setup Devices* button
- Tap the *Trusted Devices* button
- Tap the *Add Device* button
- Above the devices list, select *Nearby devices*, then wait until you see your Mac's Bluetooth name appear
- Select the Mac's name, tap *OK*
- To complete pairing the devices, enter a short text (i.e. "abc") on the handheld. A window will pop-up on the Mac asking you to confirm the pairing by typing the same text.

Your handheld and your Mac are now paired.

Setup HotSync to connect over Bluetooth

Next, you need to create a new Connection entry on your handheld that points to your Mac through Bluetooth. Here are the steps to follow:

- Open the *Prefs* application on your handheld
- Select the "*Connection*" item. The available connections appear.
- Tap the *New...* button
- Enter a *Name* for this new connection (i.e; "*Bluetooth to Mac*")
- In the *Connect to:* pop-up menu, select "*PC*"
- In the *Via* pop-up menu, select "*Bluetooth*"
- Tap the *Device* selector and chose your Mac in the list (if you properly paired it and added it to your trusted devices, it appears in the list)

Once you have created your new connection and saved it, start the HotSync application on the handheld. There is a pop-up menu below the big HotSync icon in the middle of the screen: tap it and choose the connection you just created. Launch Sync Buddy on your Mac, then tap the HotSync icon on your handheld screen. If you did set everything up properly, the connection will establish immediately.

Note that Bluetooth is slower than USB and Wi-Fi. Connecting the device and retrieving the list of files can take several seconds.

Establishing WiFi connections

WiFi is a fast, convenient and reliable way to connect to your handheld if it supports it. You first need to set up your handheld so that it can access your WiFi network and connect to your computer. Depending on the kind of network configuration you are using, you'll either have an IP address or a full name for the computer to connect to.

To properly setup your handheld to connect to your WiFi network, please refer to your handheld's documentation. Once you have done the setup and confirmed that WiFi works (i.e. you can browse the web using your WiFi connection) you can configure HotSync.

- Open the *HotSync* application on your handheld
- In the *Options* menu, select *Modem Sync Prefs...* and make sure “*Network*” is selected in the dialog box, then tap *OK*.
- In the *Options* menu, select *LANsync Prefs...* and make sure “*LANSync*” is selected in the dialog box, then tap *OK*.
- In the *Options* menu, select *Primary PC Setup....* This dialog box lets you enter the name or address of the Mac to connect to. If you have a DNS name for your Mac, enter it in the first line. Otherwise, enter the Mac's IP address in the second line. Leave the *Subnet Mask* line empty.
- On the main HotSync screen, tap the *Network* push-button (above the HotSync icon). Make sure the WiFi service is selected (in the selector right below the HotSync icon).

You are now all set on the handheld side. There is one more configuration to do on your Mac if you are using Mac OS X's firewall: you need to open port 14238 (TCP) so that WiFi HotSync can connect to your Mac:

- On your Mac, open the *System Preferences*
- Open the *Sharing* panel, select the *Firewall* tab
- Click the *New...* button to create a new entry
- In the *Port Name* pop-up menu, select *Other*
- Type **14238** in the *TCP Port Number(s)* field
- Leave the *UDP Port Number(s)* field empty
- In the *Description* field, type a description for this entry (i.e. “WiFi HotSync”)

You are now done and ready to connect over WiFi. Launch Sync Buddy on the Mac and press the HotSync icon on your handheld's screen. If your setup is correct, Sync Buddy should immediately connect.

Navigating your handheld

Sync Buddy lets you freely browse what's on your handheld, and see all the hidden files that you usually don't see.

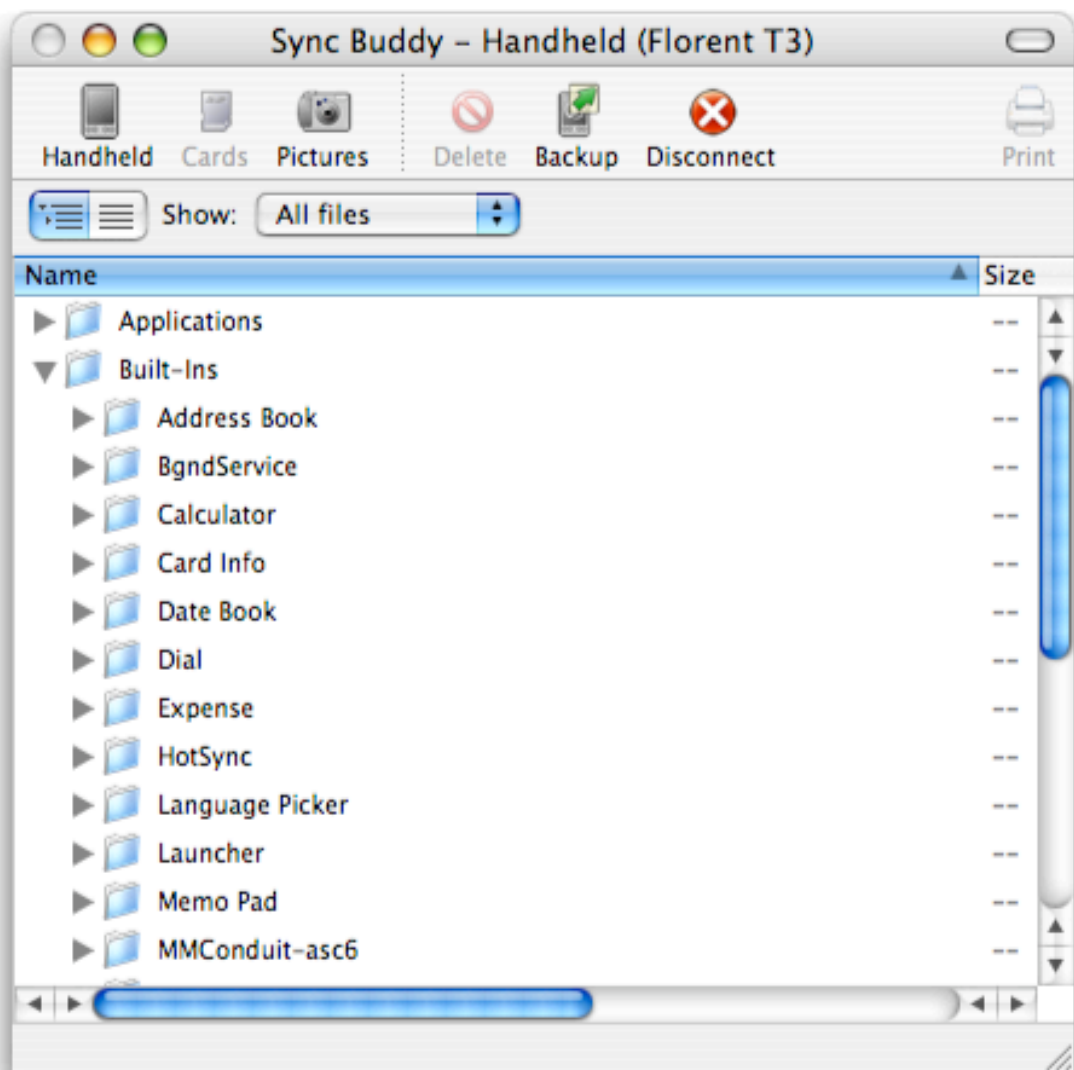
To connect your handheld, launch the Sync Buddy application on your Mac then place the handheld in its cradle and press the cradle's or USB cable's synchronization button. If you are using Bluetooth or WiFi, simply start the HotSync application on the handheld as you would for a regular synchronization.

Although your handheld's internal memory storage is like a single folder containing lots of files, Sync Buddy can display the contents in a structured manner (hierarchical view) instead of the real flat view: each application appears in its own folder, along with its data files. Also, all files are grouped in four main groups, described later in this section.

The main window

The main window shows the contents of your handheld. Sync Buddy offers three main views of your handheld's data:

- The Handheld view shows the contents of the internal memory (both RAM and ROM) as a list of files, or as a hierarchy.
- The Cards view shows the contents of any mounted removable media. A pop-up menu lets you switch between the cards or virtual volumes in your handheld.
- The Pictures view shows a synthetic view of the pictures stored on your handheld, both on internal memory and on removable media.



The main window showing the Handheld view

The toolbar lets you navigate between the *Handheld*, Removable Media (*Cards*) and *Pictures* views. If there is no removable media inserted in your handheld, the *Cards* icon is disabled. Note that on some handhelds like Tapwave's Zodiac and palmOne's Tungsten™ T5, Palm OS maintains hidden internal volumes that are seen as removable media in Sync Buddy.

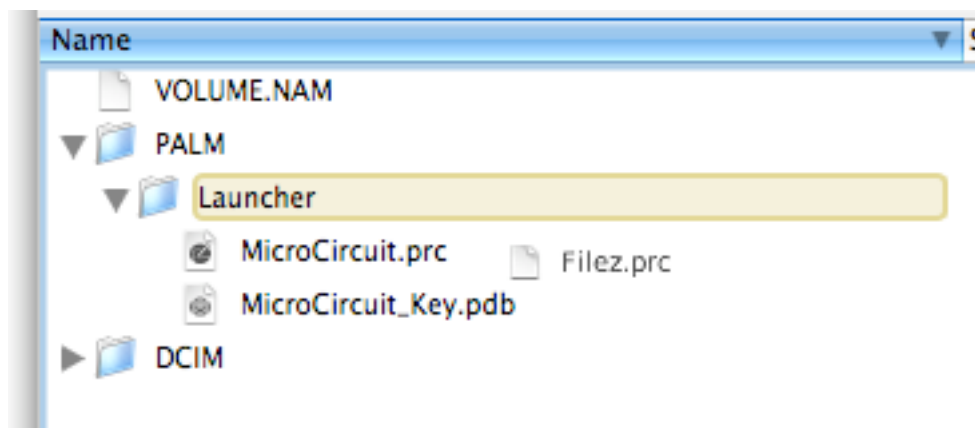
You can customize the toolbar by control-clicking it and selecting the *Customize Toolbar* item in the pop-up menu.

Drag-and-drop

To transfer files to and from your handheld, you can drag them from the handheld window to any place on your computer, and drag files from your computer to your handheld.

When viewing your handheld's main memory (in the Handheld view), you can drag only PDB, PRC and PQA files. This restriction is enforced by Palm OS which doesn't allow any other kind of files in the main memory. Since there is no real folder hierarchy in the main memory, you can drop your files anywhere in the handheld window.

When viewing removable media, drag and drop acts like in the Finder: the place where you drop a file is important. To make a .prc application visible in the handheld's Launcher, you should drop it in the /Palm/Launcher folder. When dropping files in the Removable Media view, the destination folder will highlight to show where the files are going to be installed (see example below):



Dragging a prc file to the /Palm/Launcher folder

If you want to install images to your handheld, it is recommended that you use the Pictures view in Sync Buddy instead of directly dropping the images on a removable card. This is to ensure consistency with the handheld's internal storage.

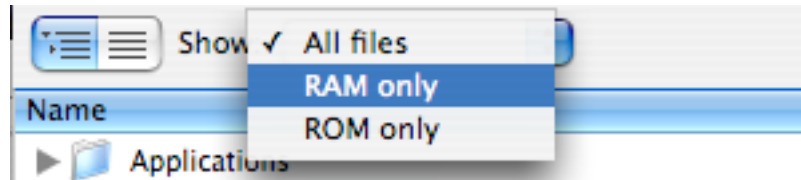
To copy a whole set of files from your handheld to your computer, simply select them all and drag them to any place you want. Note that when viewing the handheld's internal memory using the hierarchical layout, the same layout will be respected when copying files to your computer. Using drag-and-drop, you can backup portions of your handheld without copying the whole contents of the memory or the whole removable card.

The Handheld view

This view shows the contents of your handheld's internal memory. All the files in your handheld's memory are stored in a *flat* directory. That is, there is no directory. This shows up when you perform a synchronization using HotSync™ and Palm Desktop, and look at your backup folder: all the files are stored in the same place.

Selecting files to view

Sync Buddy can show you the files this way, but also offers another, more evolved and intuitive way of displaying your files: a *hierarchical* view. Using the view selector under the toolbar, you can switch between the flat view and the hierarchical view, and show only ROM, only RAM or all files.



Even though all the files are stored at the same place, Sync Buddy organizes them in *groups* and *application folders*. There are five main groups:

- **Applications:** contains all the third-party applications. It may happen that some applications that shipped with your handheld are shown in this group, for technical reasons.
- **Built-ins:** shows the built-in applications (those that ship with your handheld). For example, the Address Book and Calculator appear in this section.
- **Libraries:** this special group lists all the files known as “libraries” (used by applications to provide additional functionality). This group will matter only to the advanced users.
- **Other:** all files that don’t seem to belong to an application and are not classified as System files are listed in this group. You will usually see a mix of data files, preferences files and various other elements here.
- **System:** all files known to belong to the operating system. In the original Palm OS classification, system files are files whose creator code is all lowercase or all uppercase. This distinction tends to fade on recent devices, where many system files don’t follow this rule (and are therefore classified by Sync Buddy in the *Other* files group).

Whenever possible, Sync Buddy groups an application and its data files togetherⁱ. In the files list, you'll see folders carrying the application name. Expanding them, you'll see the application and its associated files.

Getting file information

You can get information about any file by double-clicking it or choosing *File > Get Information...* in the menus. The information window shows the attributes of the file.

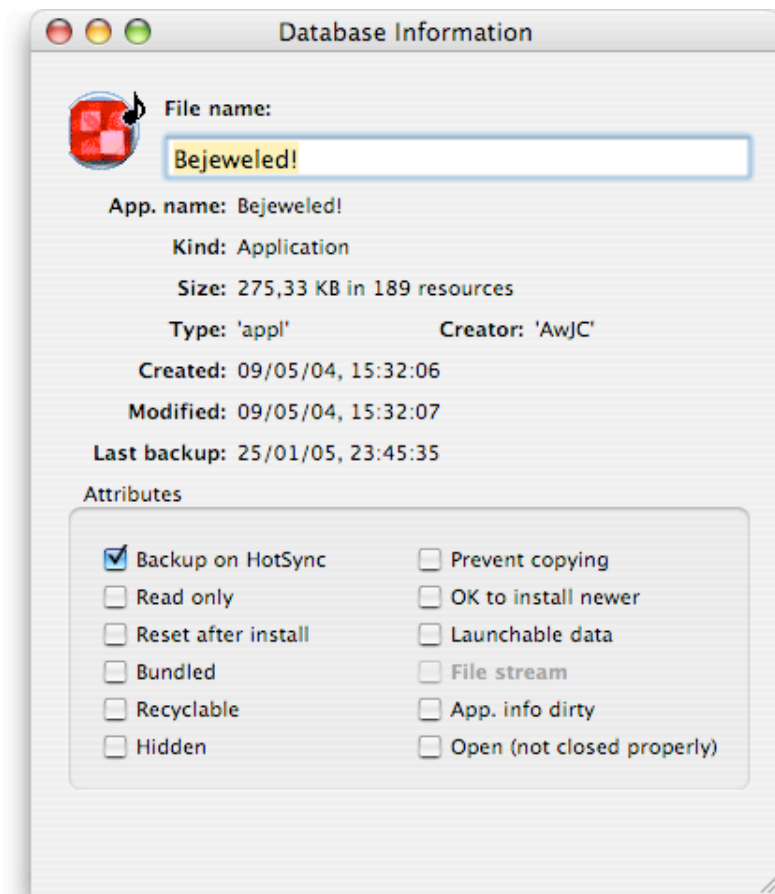
Each file in your handheld's internal memory is called a **database**, and carries many properties. Some of them can be changed directly from Sync Buddy, like the **Backup** flag that tells HotSync™ which files should be backed up during a regular synchronization.

There are two kinds of databases: **data** and **resource**. A data database contains only data (for example, your Address Book's data) and shows up of the desktop as a file with ".pdb" extension. Resource databases are applications and libraries, as well as overlay files (containing the localized texts for an application) and show up on the desktop as a file with ".prc" extension.

The **type** and **creator** of a file are similar to the original Macintosh type and creator that every file carries: they help Palm OS determine the kind of each file. For example, all applications carry the '**app1**' type. This information is useful to advanced users.

The **Last Backup** date of a file is updated when the file is backed up during a regular HotSync™ operation. To not disturb your regular HotSyncs, Sync Buddy does not touch this date when it backs up the file during a Backup (but you can see the file has been backed up by looking at the Backup Report).

ⁱ To group the application and its data files, Sync Buddy uses the creator code of each file. Each application has its own unique creator code, and its associated databases also carry this creator code. Using this information, Sync Buddy can retrieve all the files that come with each application. Of course, if the application uses data or files that don't carry its creator code, Sync Buddy won't be able to group these files with the application itself.



A Database Information window

File properties (also called “flags”) are shown in the lower half of the information window. Most of them can be changed, except the ones that are disabled (you can view whether they are set or not, but not change them). Any change you make here is immediately transferred to the handheld.

Here is a quick description of each property:

- ***Backup on HotSync***: set this property for the file to be backed up during regular HotSync. This doesn't influence Sync Buddy's Backup feature, only the standard backup that occurs during regular synchronizations.
- ***Read only***: this file cannot be written to.
- ***Reset after install***: after installing a new copy of this file, device should be reset. Usually, this property is set on system patches.
- ***Bundled***: this file should be beamed along with the application carrying the same creator code.

- **Recyclable**: rarely set, this property is set on temporary files that will be deleted soon by the operating system.
- **Hidden**: this file should be hidden and does not appear in the Launcher. Usually, these files are not visible from Sync Buddy either.
- **Prevent copying**: this property is set to prevent beaming of some files. You can unset it to allow beaming to another handheld.
- **OK to install newer**: set on some special files that should usually not be overwritten, to allow installing a new version.
- **Launchable data**: set on special files that should appear in the Launcher and be opened using the application carrying the same creator code. PQA files ("Palm Query Applications", web URLs, etc) are some examples of such files.
- **File stream**: some files are neither data or resource databases. They are data files stored in a special format known as **File Streams**. You cannot change this property, it is defined once and for all when the file is created. Pictures are examples of streamed files on some devices.
- **App. info dirty**: tells HotSync that the file's categories list has been changed on the handheld and should be synchronized. For example, it is being set when you make changes to your Address Book categories, so that the next synchronization transfers these changes to the desktop. After the synchronization, HotSync unchecks the property.
- **Open (not closed properly)**: as the name tells it, the property indicates that this file has been left open or is currently in use by Palm OS. In some cases, this can happen because an application forgot to close a file. Usually, you'll see this property set on some files that Palm OS use all the time and leave open.

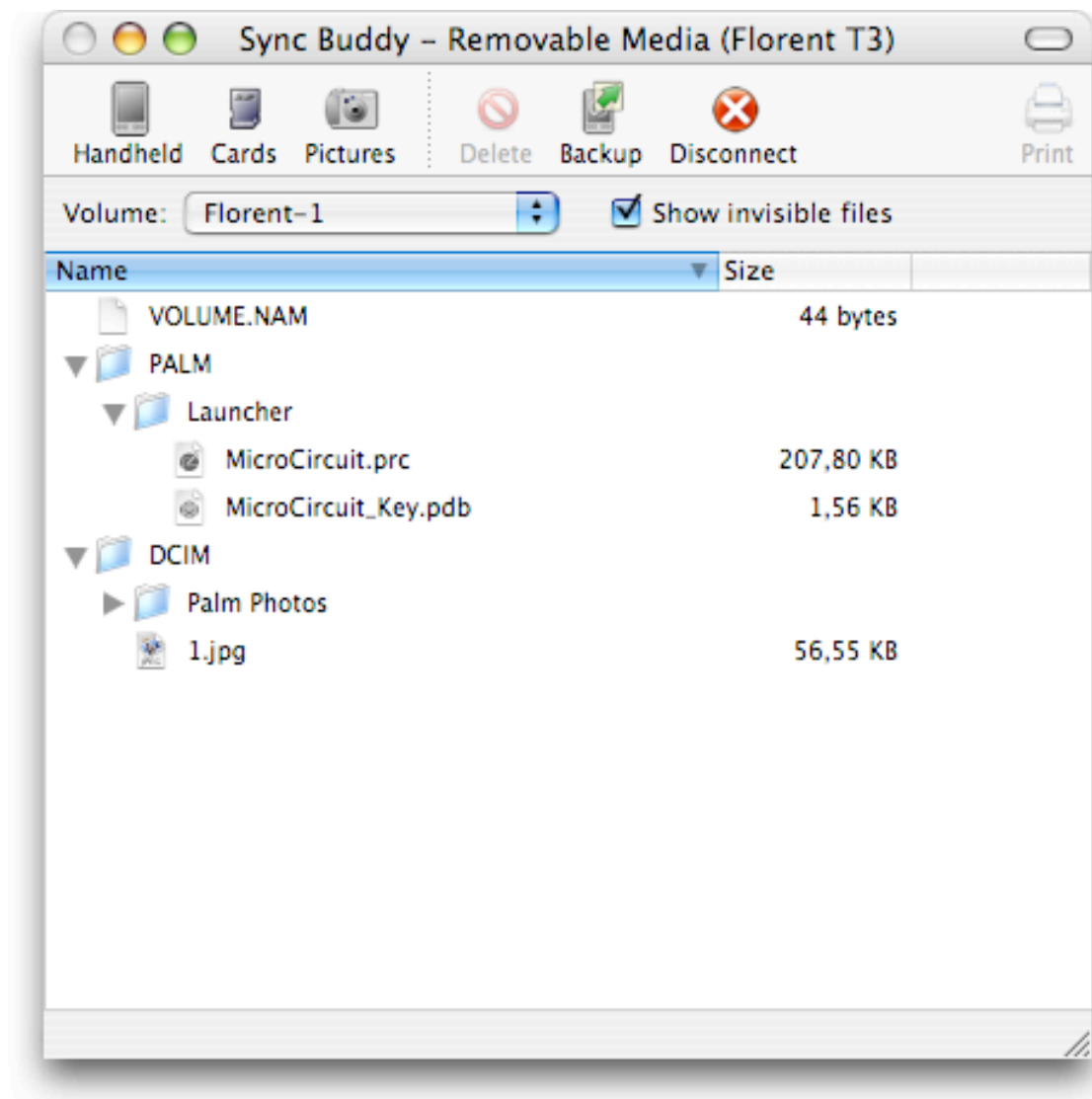
To modify a property, simply click its checkbox. It is usually safe to change the Backup on HotSync, Read only and Prevent copying properties. Changing other properties may leave the file in a unusable state. Don't touch them unless you are an advanced user and know exactly what you are doing!

The Removable Media view

Most Palm OS handhelds have at least one slot accepting removable storage cards, in either SD (SanDisk), MMC (MultiMedia Card) or MS (MemoryStick) format. In addition, some handhelds like the Tungsten™ T5 and the Tapwave Zodiac have a portion of their internal memory that acts as a removable volume, except that it can't be removed.

These media act like a disk and offer a structured storage, like a hard disk. You can create files and folders on them. In fact, removable media have a standardized folder structure so that some types of files have predefined locations. For example, all applications that can appear in the Launcher should be stored in a /Palm/Launcher folder. Similarly, images are usually stored in a /DCIM/ folder (and sometimes in subfolders, when the device supports the notion of “album” storage).

Sync Buddy displays the contents of all these removable and non-removable storage volumes in the Removable Media view (using the short name “*Cards*” in the toolbar).



The Removable Media view showing a SD card

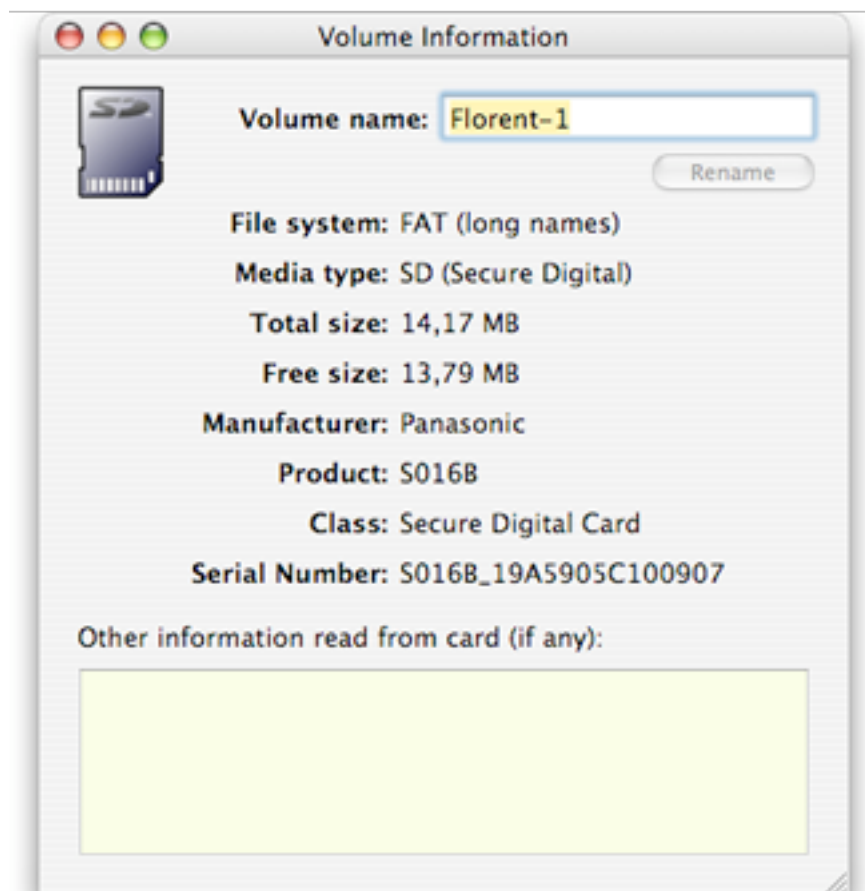
Below the toolbar, a pop-up menu lets you select which volume (card) to view. Whenever possible, the actual card name is displayed. A default name and card number is shown if the card is unnamed. A special case is the `BUILTIN` volume found on some palmOne™ devices which is a hidden pseudo-volume storing internal device information. This volume always carries the name `BUILTIN` and is write-protected to prevent corrupting your handheld.

The *Show Invisible Files* checkbox lets you show or hide invisible files. An example of invisible file is the volume name, which is stored on a card as a file named `VOLUME.NAM`. This option can be interesting for advanced users.

Getting card information

You can obtain various information about a card by selecting the *File > Informations sur la carte* menu entry. The information dialog displays all the information it can gather from the card, like its file system and media types, manufacturer, total and free size, etc. You can also change the card name in the *Volume Name* field and click the *Rename* button to apply the modification.

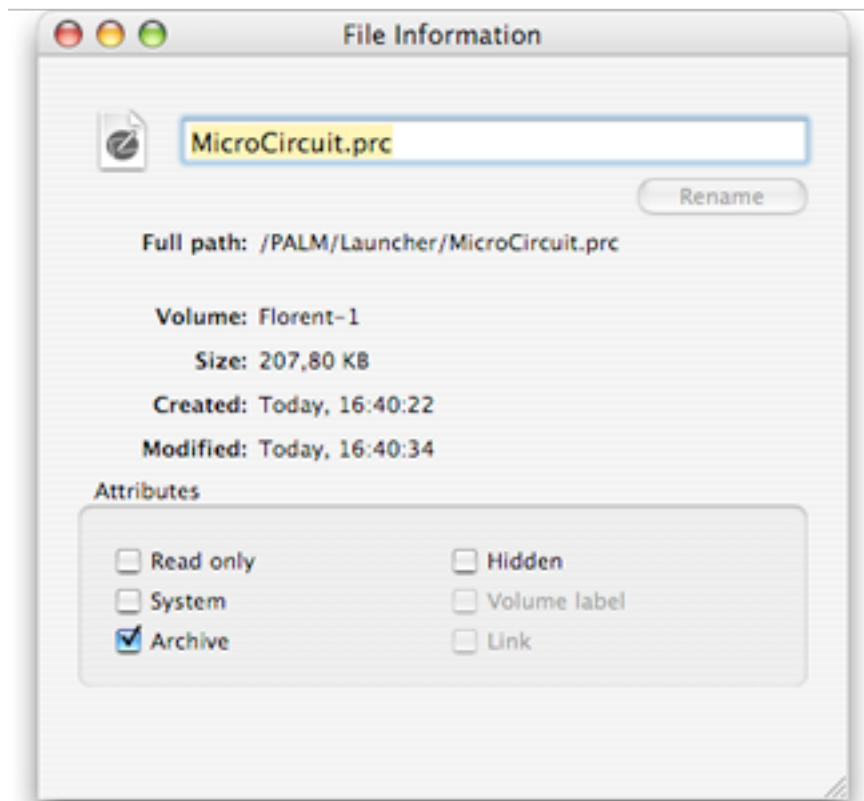
The *Other information* field shows any additional information stored by the card manufacturer. Removable cards seldom carry that kind of information, but if you have one which does you'll see the information there.



Card information dialog

Getting file information

Select a file then go to the **File > File Information** menu item to view information about the selected file. You can rename the file, and also change some of its attributes. Files stored on removable cards have less attributes than the ones stored in the handheld's internal memory.



A file information dialog

- The **System** attribute is rarely used. It is set only on certain special files like the **VOLUME .NAM** file at the root directory, which contains the card name. You shouldn't modify this attribute.
- The **Archive** attribute is usually turned on for regular files, though it has no real use.
- The **Hidden** attribute determines whether a file should be hidden. Obviously, Sync Buddy has an option to let you see hidden files!
- The **Volume** label attribute is set only on the root file carrying the card name.
- The **Link** attribute is set on files that are symbolic links to other files (much like links on Unix systems).

Any attribute change is immediately sent to the handheld.

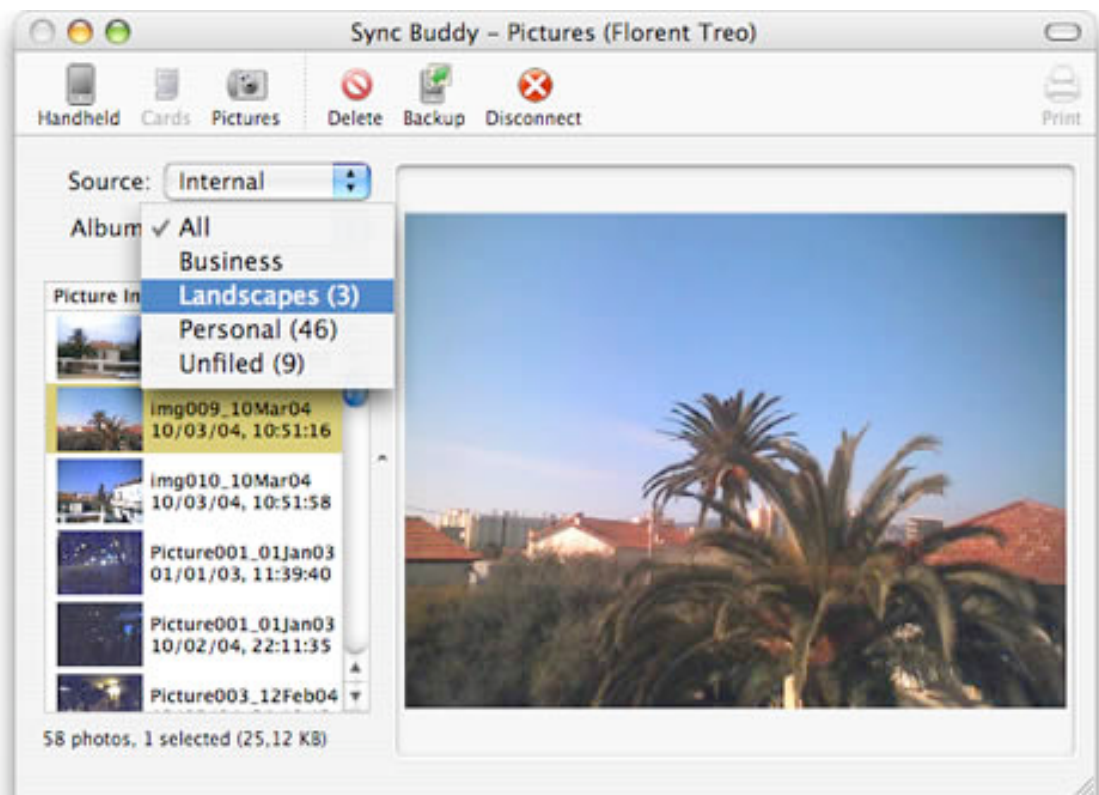
Creating new folders

Select *File > New Folder...* to create a new folder, then enter the folder name in the New folder sheet that appears. If no item is selected, the new folder will be created at volume root. Otherwise, the new folder will be created at the same level than the currently selected item.

The Pictures view

Sync Buddy offers a synthetic view of the pictures stored on your handheld under the *Pictures View*. Different handhelds have different ways of storing pictures: sometimes they are all grouped in a single file, sometimes they are spread over multiple files. To provide an easy way of managing your pictures, the popular interface of our iTreo product has been leveraged into Sync Buddy. In addition to viewing and downloading pictures from your handheld, the Pictures View lets you install and delete pictures right on your handheld, as you'd do it in the iPhoto application.

On some handhelds, pictures are classified in *Categories*. On more recent handhelds, the new *Album* terminology is being used. Sync Buddy uses the later, even on older handhelds, to provide a unified view of your pictures (it doesn't really matter what picture groups are being called, because Sync Buddy always does the right thing to find and classify the pictures).



The pictures view showing live browsing of a Treo™ 600

The **Source** pop-up menu lets you select which images to view: the **Internal** item shows the pictures stored in your handheld. When removable media are present in your device, you'll see additional volume names appear.

The **Album** pop-up menu shows the various albums (or categories) available in the selected source, along with the number of pictures in each album. By default, Sync Buddy displays the pictures from all the albums. You can select to restrict the displayed pictures to those in a selected album, like you would on your handheld.

Each picture in the list shows a thumbnail of the full-size image, as well as the picture name and creation date. Click a picture to see it in full size in the right part of the window.

If you have many pictures on your handheld, Sync Buddy may need some time to retrieve all of them. For each picture that has not yet been retrieved, a gray square appears in place of the thumbnail. Clicking the picture shows a spinning indicator until the picture has been retrieved.

Copying pictures to your computer

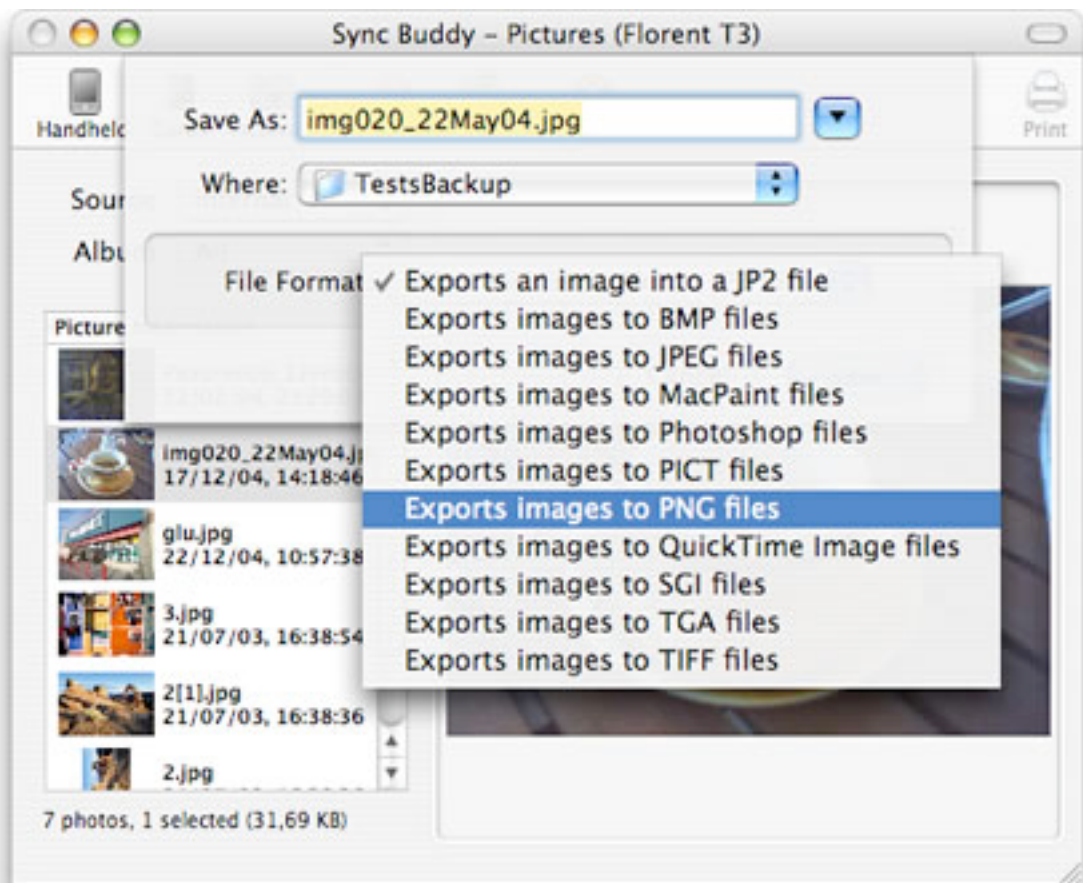
To copy a picture from Sync Buddy to your computer, simply drag it with the mouse from the list or from the full size image to the desired location. You can drag the picture to the Finder or to any application accepting pictures, like iPhoto.

You can also drag multiple pictures at once by selecting them in the list, and dragging from any of the selected pictures to the desired location.

Before dragging pictures to another application or to the Finder, you should wait for all the thumbnails to display the picture (instead of the gray square indicating that the picture has not been retrieved yet). Otherwise, the operation may take a while.

Exporting pictures to other formats

Sync Buddy supports picture exports to other formats than JPEG. Select one of more pictures in the list, then select the **File > Export Selection...** menu item. You can export to many formats, including GIF, PNG, BMP, Photoshop, etc.



Exporting pictures to other formats

Installing new pictures on your handheld

To install new pictures to your handheld, simply drag them from another application or from the Finder to the pictures list. If the currently selected album is “All”, the picture will be installed into the *Unfiled* album. This behavior is similar to the one you’d expect to get on your handheld.

Deleting pictures from your handheld

To delete a picture or a set of pictures you can either drag them to the trash, or select the pictures to delete and click the *Delete* icon in the toolbar.

Note that there is no local cache keeping your pictures around! Once you have confirmed that you want to delete them, they’ll be gone for good.

Managing your backups

Sync Buddy's greatest strength is its extensive Backup management. Not only does it make sure your handheld is properly backed up, but it also offers a variety of options that let you fine-tune the backup to your needs. After each backup operation, you'll be provided with a complete list of the files that were retrieved.

Additionally, your data is kept organized within three main folders: RAM, ROM and Removable Media.

The *RAM folder* will contain all the files that are stored in your handheld's RAM (volatile memory), such as Address Book or Calendar data, etc. This is the main part of your handheld that should be backed up regularly.

The *ROM folder* contains all backed up files coming from your handheld's non-volatile/flash memory. You can select to not back up ROM files, as they are being preserved when a hard-reset occurs. If you have moved some files to flash memory, you can also ask Sync Buddy to backup non-system ROM files so as to keep a copy of these files on your computer, in the event your handheld is destroyed or stolen, for example.

The *Removable Media folder* contains a copy of the files stored on removable cards (SD, MMC, Memory Stick, etc). If a card is inserted in your handheld when you backup your data, a folder will be created inside the Removable Media folder, carrying the name you gave to that card. On some handhelds with multiple card slots like the Tapwave Zodiac, each card is therefore backed up in a separate folder.

Note that some handhelds like palmOne's Tungsten™ T5, Tapwave's Zodiac and others have additional, hidden volumes which appear as removable media. Sync Buddy can backup these too.

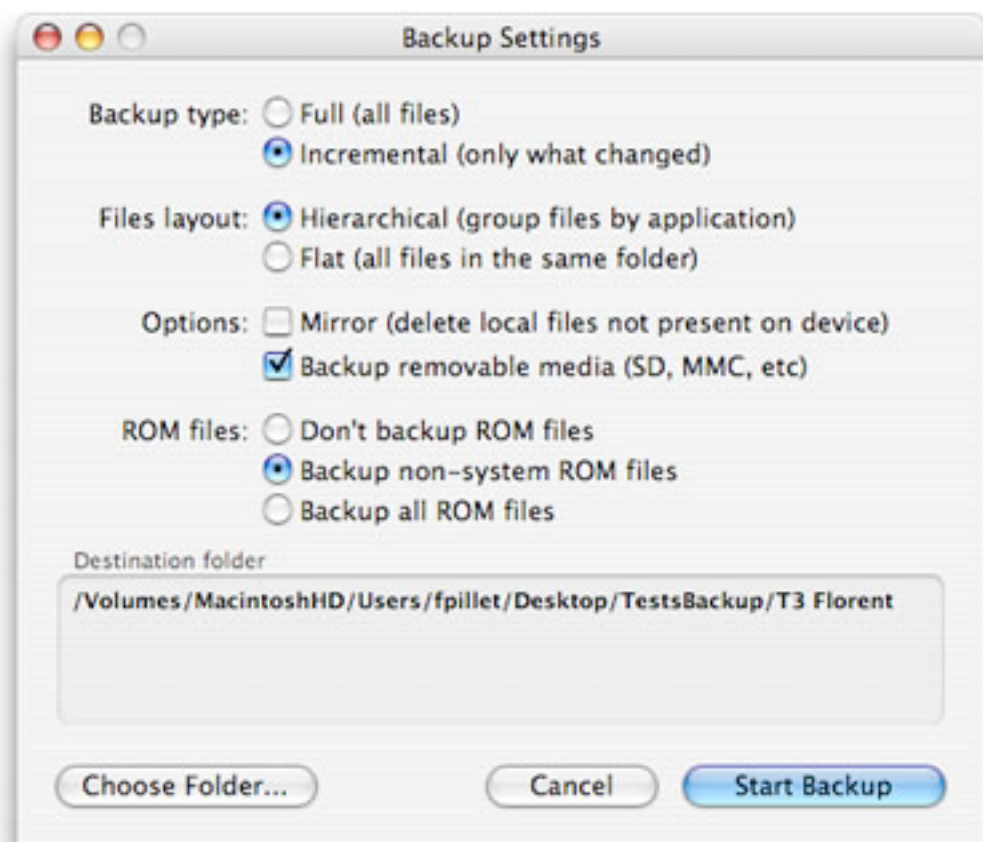
Hierarchical or flat backups?

Sync Buddy's backup functionality can store the handheld's internal memory as a hierarchy of files, instead of the flat form usually stored by Palm Desktop's backup. Whether to use a hierarchical backup is a matter of personal taste, though we think that it allows you to more easily find your way through the various files stored on your handheld (on modern handhelds, there can be several hundreds of files stored in the internal memory).

It is to be noted that Sync Buddy may not always find all the files that belong to an application. When a file has nothing suggesting it belongs to a particular application, Sync Buddy puts it in the “Other” folder. We suggest that you always have a look at this folder when you need to get the files for a specific application. We are doing our best to make sure that Sync Buddy groups all related files together but in some cases, it is just not possible for the software to make a successful guess.

Configuring the backup options

To start a backup, click the backup icon in the toolbar or *File > Backup....* You can configure backup options in the Backup dialog.



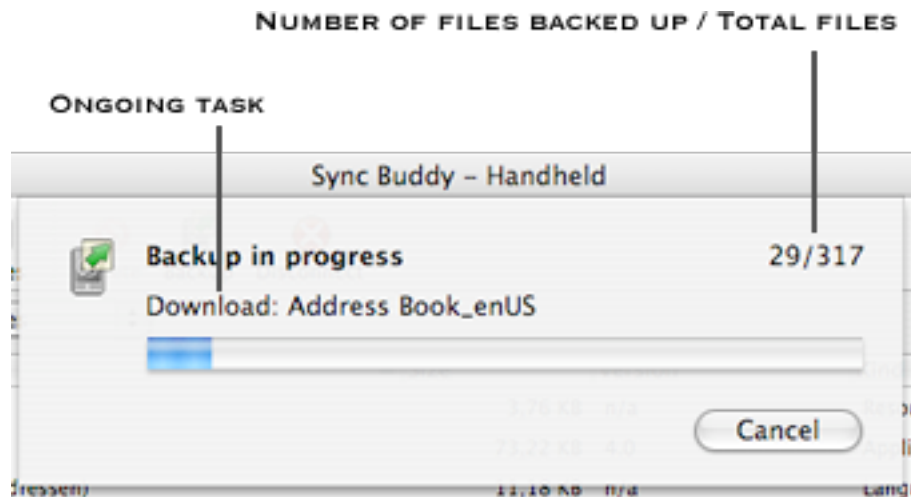
The Backup Settings window

The backup dialog lets you configure the backup functionality to meet your needs and preferences.

- **Backup type:** a full backup will retrieve all the files from your handheld, even if they have not been modified since the last backup you made with Sync Buddy. On handhelds with lots of file, a full backup can take several minutes to complete. An incremental backup will check your backup folder and only retrieve those files which have been added or modified since the last backup. This is the option you'll want to use most of the time.
- **Files layout:** determines whether backed up files are all stored in the same folder, or if Sync Buddy should create one directory for each application and store both the application and its data in the same folder for easy retrieval. The files layout on disk will be similar to the layout of the Handheld view.
- **Mirror:** this option makes sure that not only is your backup up to date, but also that the backup folder doesn't contain files that have been removed from your device. Use this option with care, as it will get rid of older files you have removed from your handheld.
- **Backup removable media:** this option backs up the removable card(s) inserted in your handheld in a separate folder carrying the card's name, under the Removable Media folder in the backup folder.
- **ROM files:** choose one of three options for ROM files backup. If you did not copy anything to Flash ROM using a third-party utility, you can leave this option at "*Don't backup ROM files*". Otherwise, setting it "*Backup non-system ROM files*" will ensure all applications and data you copied to Flash are being properly backed up, under the ROM folder in the backup folder. Finally, to backup everything that sits in your handheld's ROM, check the "*Backup all ROM files*" option.
- **Destination folder:** prior to starting a backup, you must choose the destination folder where the files will be stored on your disk. Sync Buddy remembers the last destination folder used for each handheld you connect with, so you will only need to select this folder once (unless the selected folder doesn't exist anymore).

Tracking backup progress

Once you start the Backup operation, a progress sheet appears so you can track the backup progress.



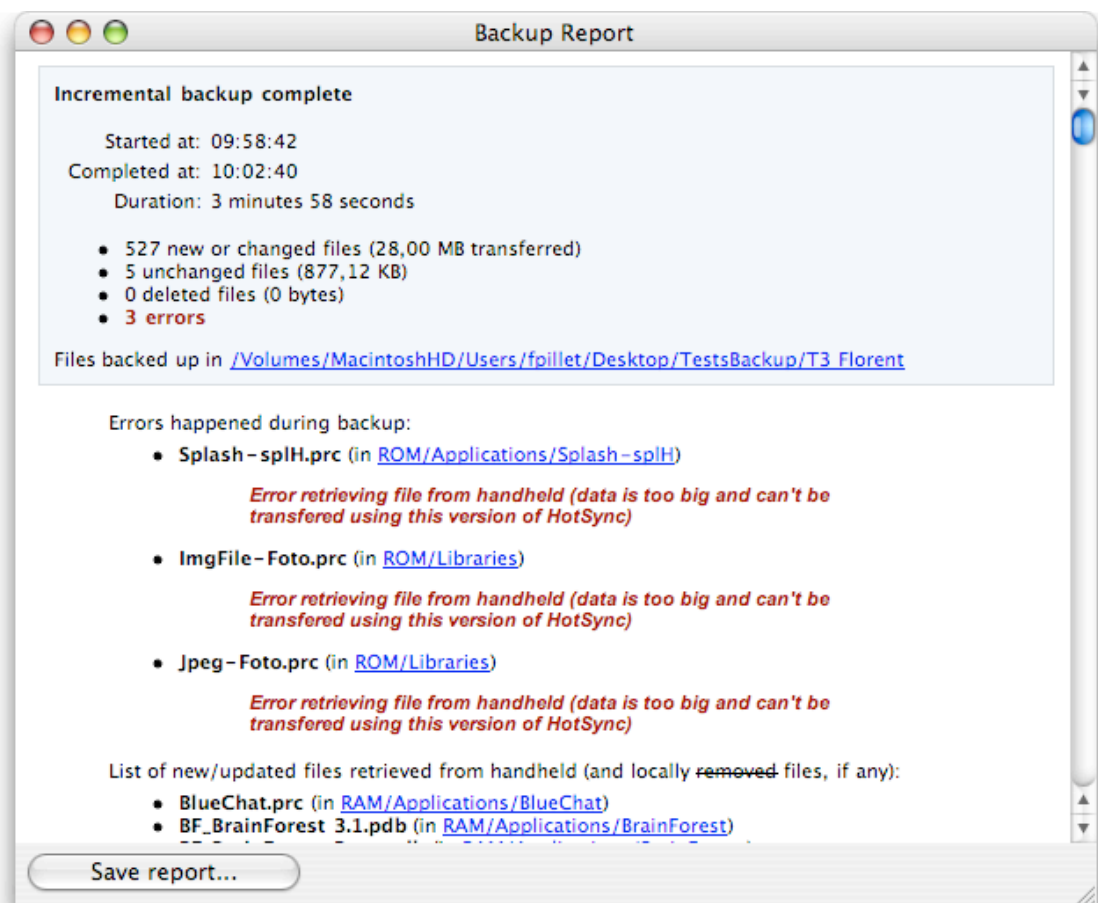
When backing up removable media, the total number of files indicator (see above) will read "--" because Sync Buddy doesn't know in advance how many files there are on the card.

Sometimes, an error may occur during backup. Errors may occur when a file can't be opened because it's being used by the system, for example. When backup errors occur, a list of the errors encountered will appear in the backup progress sheet, below the progress bar.

You can cancel the backup at any time. Note that when backing up a full device or performing a backup for the first time, the operation may take several minutes depending on how much data there is on your handheld.

The backup report

After a backup operation is either completed or interrupted, Sync Buddy displays an extensive backup report beginning with a summary to let you quickly check what was done:



The summary gives you a global overview of the time backup took, number of changes, size transferred and error count. Below is a detailed list of all the errors, files backed up and local files deleted from your computer (if your backup ran in Mirror mode). A separate list is emitted for the handheld and each on the removable media connected to it.

Note that all links in the backup report are clickable and point to the actual files or folders on your hard disk. You can also save the report to disk in HTML format or print it if needed.

Frequently asked questions (FAQ)

► **Is Sync Buddy compatible with The Missing Sync?**

Yes, Sync Buddy is compatible with both HotSync / Palm Desktop and The Missing Sync. It takes care of deactivating and reactivating them so that you don't have to change any setting to use Sync Buddy.

► **I see errors in the Backup Report. Are they serious?**

It depends which files couldn't be backed up. When saving the contents of your handheld's ROM, some of the files may not be readable. This is usually harmless as the ROM contents isn't erased by a reset, hard reset or loss of batteries.

► **Can Sync Buddy work with serial connections?**

Starting with Sync Buddy 2.1, serial connections over a PalmConnect USB adapter are supported. To get this to work requires unplugging your PalmConnect USB adapter, launching Sync Buddy, plug the PalmConnect USB adapter in your Mac and start the synchronization on your handheld. Note that if you want to establish another connection, you'll need to unplug and replug the adapter. Future releases of Sync Buddy may remove this limitation.

► **Why can't I move files around on the same removable card?**

This is a limitation in Palm OS which does not provide a way to directly move a file in a different folder on a removable media. For the time being, you need to download the file to your Mac, remove it from its original location on the card and install it to its new location. We will provide a built-in workaround for this limitation in a future release of Sync Buddy.

Troubleshooting

You may encounter problems when using Sync Buddy. If you don't find the answers to your questions in this section, please write to syncbuddy@florentpillet.com with a precise description of your problem, and make sure you include information about your Mac, the version of Mac OS X you are running, the handheld model, maker and Palm OS version.

My handheld doesn't connect

First, make sure that you **press the synchronization** button on your handheld's cradle or cable!

If you keep having connexion problems, please contact us at the e-mail address above so we can help you.

Known issues with some handhelds

We are aware that some handhelds may have trouble connecting with Sync Buddy. For the time being, they are: Handspring Treo 90. If you have such a handheld and it does work with Sync Buddy, or have another handheld that does not work, please let us know.

Backups don't complete

If you are experiencing disconnections during backup operations and you are running Virex, please consider uninstalling Virex and try again. We received reports of potential incompatibility between Sync Buddy and Virex, and are investigating the issue.

My Mac doesn't have a Bluetooth-PDA-Sync connection

In some cases, it is possible that you lost the Bluetooth-PDA-Sync link that is required for bluetooth connection. To restore it, here is what you need to do (these instruction apply to Mac OS X Tiger, the procedure may differ slightly on earlier versions of Mac OS X):

- Open the *System Preferences*
- Open the *Bluetooth* preference pane
- Select the *Sharing* tab

- Click the *Add Serial Port Service* button
- Enter this name for the new port: **Bluetooth-PDA-Sync**
- Leave the *Show in Network Preferences* and *Require pairing for security* checkboxes unchecked.

Acknowledgments

The Sync Buddy software, artwork and manual are copyright © 2005, 2006 Florent Pillet, All Rights Reserved, All Wrongs Revenged.

Software developed in Objective-C using the Cocoa frameworks with Apple's XCode development environment. Cocoa rocks!

This manual was written using Pages, the word processor from Apple's iWork suite. Pages rocks too!

I wish to express my thanks to the people who tested, tortured and commented on early versions of this product, as well as to the beta testers and users who provided invaluable feedback. In alphabetical order: Jean-Marie Calvat, T. Joseph Carter, Marianne Cornilla, David Desrosiers, Jean-Hugues Guyonnet, Somphop Krittayaworagul, Xavier Martin, Mick Mueck, Michael Murray, John Pane, JB Parrett, Michel Piquemal, Stephen Rider, Joseph Tanzola. Grateful thanks to the Palm OS users community at <http://www.palmattitude.org>.

Copyrights

The libpisock framework is copyright © The Pilot-Link Team and used under the [LGPL](http://www.gnu.org/licenses/lgpl.html) (<http://www.gnu.org/licenses/lgpl.html>) license. The pilot-link source code can be downloaded from <http://www.pilot-link.org>.

The PalmServices framework copyright © 2003-2006 Florent Pillet is available under the BSD license, and can be downloaded from the [osx-palm-tools](http://sourceforge.net/projects/osx-palm-tools/) project page (<http://sourceforge.net/projects/osx-palm-tools/>).

The [Omni Frameworks](http://www.omnigroup.com/developer/sourcecode/) (www.omnigroup.com/developer/sourcecode/) are being used under the [Omni Source License](http://www.omnigroup.com/developer/sourcecode/sourcelicense/) (www.omnigroup.com/developer/sourcecode/sourcelicense/) and are copyright by the Omni Group.

SS_PrefsController copyright © 2003 [Matt Gummell](http://www.mattgummell.com) (www.mattgummell.com) distributed under the [Creative Commons](http://creativecommons.org/licenses/by/2.0/) license.

Bits of the CocoaTechBase frameworks are copyright 2003-2004, [CocoaTech](http://www.cocoatech.com) (www.cocoatech.com) and used under the BSD license.

Trademarks

The 'Palm' trademark is the property of The Palm Trademark Holding Company LLC.

PalmSource, Palm OS, Palm Powered, Graffiti, HotSync and certain other trademarks appearing in this documentation, are trademarks or registered trademarks of PalmSource, Inc. in the United States, France, Germany, Japan, the United Kingdom, and other countries.

Treo, Zire, Tungsten and certain other trademarks appearing in this documentation are trademarks of palmOne, Inc.

Zodiac is a trademark of Tapwave, Inc. in the United States and other countries.

Bluetooth is a trademark of the Bluetooth SIG, Inc. USA.

Intel is a registered trademark of Intel Corporation, USA.

Version history

Below is an history of versions of Sync Buddy for Mac OS X. The most recent versions are being listed first.

• 2.1 - April, 2006

- Universal Binary, runs native on both Intel and PowerPC Macs.
- New preference to automatically update the handheld's date & time upon connection
- Faster backups, can now backup previously unretrievable files (eliminates the "data too big" issue)
- Fixed connection issues with some recent Palm handhelds (LifeDrive, Tungsten T|X, etc.)
- Fixed removable media issues with some recent Palm handhelds. The Internal volume was not always visible or properly discovered.
- Fixed pictures installation issues on some recent Palm handhelds.
- Added support for serial connections using the PalmConnect USB adapter (see the Troubleshooting information for instructions)
- Fixed several minor issues
- Added connection instructions and tips in the manual for WiFi and Bluetooth

• 2.0.2 - April 19th, 2005

- When going to upload duplicate files on a SD card, the Replace Files alert didn't replace the files even if you asked it to.
- Fixed some stability issues
- Fixed file transfer issues with some handhelds
- Fixed disconnection during backup of SD cards over bluetooth
- Fixed issues connecting with T5 handhelds
- Fixed error when trying to delete photos stored on SD card on Treo 600
- Pictures count was incorrect in some cases after deleting a picture
- When dropping pictures to a volume where viewing 'All' albums, now properly use the "Unfiled" album as default
- Canceling a Backup didn't cancel the current transfer
- Fixed a deadlock issue when trying to access some directory contents on removable media

• 2.0.1 - March 16th, 2005

- Fixed connection issues with Tungsten C and some other handhelds
- Fixed a sporadic crash happening when installing or backing up pictures
- Fixed an application lockup in Preferences dialog
- Fixed issue with finding and displaying pictures on removable media
- Fixed a crash that occurred during drag-and-drop of multiple photos on the photos list

- Pictures count was sometimes incorrect
- Files count on removable media now honors the "Show invisible files" setting
- Continue backing up folder contents on removable media when one file failed
- Fixed a lockup that could happen when quitting the application while still connected
- Fixed an issue with Backup operations not working properly after a first backup was done in the same session, and folder names starting with a space being improperly handled
- Fixed a crash on OS X 10.2 when dragging files to removable media

• **2.0 Final - March 10th, 2005**

- Fixed connexion issues that prevented m500, m515 and some Sony handhelds from connecting
- The Cards view wasn't showing correct file dates
- Much faster retrieval of file information
- More information in Cards view, each folder displays the total number and size of all the files/folders it contains
- Fixed Backup issue for removable media that don't have a name
- Better support for photos stored in /DCIM
- Display total count of photos for each volume

• **2.0 Public Beta 3 - March 2005**

- Added French localization of application
- New "Free space" indicator on handheld, cards and pictures views
- Fixed another intermittent crash issue during Backup
- Fixed several issues with Pictures and files management on removable media
- Preliminary support for reading pictures stored by SplashPhoto on removable media.
- Improved speed and reliability when deleting large numbers of files or deep hierarchies from removable media.

• **2.0 Public Beta 2 - February 2005**

- Fixed an intermittent crash issue during Backup
- Fixed an issue when switching between RAM, ROM and ALL in the handheld view
- Fixed a handheld crash while accessing removable media on early Palm OS 5 handhelds like the Tungsten T
- Fixed issues with browsing removable media (would show only first 32 files in a folder) and deleting folders containing more than 32 files
- Application couldn't start on Mac OS X 10.2.x

• **2.0 Public Beta - February 2005**

After a complete rewrite, this is the first publicly available version of Sync Buddy for Mac OS X. Please send your feedback to syncbuddy@florentpillet.com!