

The Future of Mac Synchronization!

A New Mac Synchronization Solution and Conduit
Developer Kit for Palm OS 4.x, 5.x and Cobalt

Technical Whitepaper

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by
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Overview

Palm Desktop and the Palm HotSync Manager serve as the core components in the desktop relationship of any Palm Powered device. The combination of these two programs has been very successful and has served the Palm community quite well since their inception. Mac users have had a long history with Palm OS handhelds with versions of Palm Desktop software since Mac OS 7, through Mac OS X.

The Macintosh Palm Desktop and HotSync Manager software appear to be at the end of their product lives with PalmSource not planning to offer an updated Mac solution for Palm OS Cobalt. Existing handheld users can continue to use the current Palm Desktop software, but with the release of Palm OS Cobalt and other devices such as the Tapwave Zodiac, the existing HotSync Manager software for Mac will fail to synchronize these new devices. Also, each new release of Mac OS X has proven to require updates to the current Mac desktop software.

As a proven leader in Mac synchronization solutions, Mark/Space, Inc. will fill the need to offer Mac users a solution for synchronizing Palm OS Cobalt devices. Mark/Space has the best combination of Mac and Palm OS expertise, as well as key resources to develop a modern synchronization architecture. Mark/Space is developing a replacement to HotSync Manager that works on modern Mac OS versions, newer Palm OS devices, and can be maintained into the future.

Who is Mark/Space

Founded October 1990, Mark/Space, Inc. focuses on mobile and wireless software and solutions for Palm OS, Mac OS, and Pocket PC. Mark/Space has been providing Mac synchronization solutions for Palm OS users since first shipping the Missing Sync for Sony CLIÉ in January 2001. Products include Missing Sync for Palm OS, Missing Sync for Sony CLIÉ, Missing Sync for Pocket PC, Missing Sync for hiptop, Missing Sync for Samsung, Missing Sync for Garmin iQue 3600, Mark/Space Mail, Mark/Space Mobile Office and Online VT100/Telnet. For more information on Mark/Space, Inc., please visit www.markspace.com

The Missing Sync for Palm OS

Missing Sync for Palm OS is Mark/Space's solution for Macintosh end users and device manufacturer licensees. Missing Sync for Palm OS is intended to offer Macintosh users a complete Palm OS desktop solution.

The Missing Sync for Palm OS is built upon our existing Missing Sync for Palm OS, combined with a new HotSync Manager replacement. It will have the following features:

Support for Existing conduits and more

Users expect to be able to continue to sync data with their favorite applications. Missing Sync for Palm OS will start with binary compatibility with existing conduits and add support for extended and schema databases allowing conduit developers to take advantage of new features of Palm OS Cobalt devices, as well as Tapwave devices.

Tight Integration with Apple iApps

Missing Sync for Palm OS will be built upon tight integration with the Apple iApps, including iSync, iCal, Address Book, iPhoto and iTunes. These applications take advantage of the latest Mac OS technology and offer a modern look and feel. They are the logical choice to sync the same content types from a Palm OS device.

The new Mark/Space Mac synchronization solution will enable the user to choose which Mac PIM application they choose to sync with (e.g. iCal, Mac OS X Address Book, Entourage, Now-Up-to-Date, Personal Organizer, etc.).

Syncing Options

Missing Sync for Palm OS will offer support for syncing over USB, Bluetooth, and for the first time on a Macintosh, Network Syncing.

Network syncing will allow Macintosh users to take advantage of WiFi, cellular, and other network options; breaking the USB tether.

We do not plan to support IR, Serial, or Modem Server syncing. PalmConnect USB dongles likely will not be supported.

Simplified Aqua User Interface

The user interface of HotSync Manager was designed for Mac OS 9, and updated for Mac OS X. It is outdated and can be confusing. By using elements only present on Mac OS X, we will create a user interface that fits in seamlessly with the rest of the operating system.

Mounting of VFS Media

Missing Sync for Palm OS supports the mounting of VFS media in most Palm OS devices on to the Macintosh desktop, allowing users to save and copy files directly to Palm volumes. In addition, mounted media is available for use in any Mac OS application via standard file system calls.

International Support

Missing Sync for Palm OS will be fully internationalized for English, French, German, and Japanese. Development of internationalized conduits will be supported as well.

System Requirements

While we will develop the software to be as compatible as possible with existing Palm based handhelds, the minimum system requirements will be:

- Mac OS X 10.2 or later
- Palm OS 4.0 or higher
- Native USB on the device
- Built-in USB on the Mac

Certain devices may not be supported due to non-standard USB interfaces.

Distribution and Support

How do Mac users find out about it? How do they know what they need? Where do they get it? How much does it cost? The key is a win-win-win solution that works for customers, Palm OS licensees, and Mark/Space.

Mark/Space has been developing Palm OS and Mac software for thirteen years. With the Missing Sync product line we have become the Mac synchronization super hero users look to for innovative handheld to Mac solutions. Mark/Space has its own customer support department offering a searchable knowledgebase and e-mail support. Mark/Space has established online and retail distribution channels in the United States, Europe and Japan. Resellers can purchase the Missing Sync products from the Navarre distributor.

The solution is a Mark/Space product, fully developed and supported by Mark/Space, Inc. Mark/Space looks to continue to work closely with Palm licensees to be able to support the newest devices from both a technical standpoint and a marketing level. For companies wanting to include a Mac solution with their products Mark/Space is willing to discuss flexible licensing terms.

The Missing Sync for Palm OS CDK

Mark/Space will be providing a Macintosh Conduit Developer Kit (MS CDK). The MS CDK will be freely available from the Mark/Space website.

CDK 4.0.3 Compatibility

Developers have been building Macintosh conduits for years, and Mac OS X conduits built with the 4.0.3 CDK will work with no changes in the Missing Sync for Palm OS. CDK 4.0.3 support will include Sync Manager, User Manager, Expansion Manager, VFS Manager, and the Generic Conduit Framework.

Conduit API for Extended Databases

Extended Databases offer developers the ability to break the 64K record barrier. Missing Sync for Palm OS will include an API that closely mirrors the Window's C/C++ Sync Manager API for Extended Databases as defined in SyncDm.h. This will allow developer to share as much code as possible between Windows and Macintosh Conduits.

Conduit API for Schema Databases

Schema Databases give developers the flexibility they've been requesting for years. Missing Sync for Palm OS will include an API that closely mirrors the Window's C/C++ Sync Manager API for Schema Databases as defined in SyncDb.h. This will allow developers to share as much code as possible between Windows and Macintosh Conduits.

Generic Conduit Framework

The Generic Conduit Framework has been the recommend method of building conduits in a cross-platform way since it became available. As a result, Mark/Space is committed to working to ensure the CDK 6.0 version of the Generic Conduit Framework works on the Macintosh.

Trusted Desktop API

The Missing Sync for Palm OS CDK will include compatibility with the Trusted Desktop API, allowing conduits to ensure that they are running on a Trusted Desktop.

Development Tools

Initially, conduits will continue to be built as CFM modules; as a result, development will be done using Metrowerks Codewarrior.

Mark/Space plans to support Mach-O conduits built using either Xcode, or Metrowerks CodeWarrior in a future version of our CDK.

Distribution

The Missing Sync for Palm OS CDK will be freely distributed from the Mark/Space website.

Marketing Programs

Mark/Space wants to make sure that the Macintosh Palm OS conduit market is a vibrant and successful place for all developers. In order to support everyone's success, Mark/Space wants to work with Conduit developers and device vendors to make end users aware of the full range of devices and conduits available to Macintosh users.

Database of supported Devices

Mark/Space will be maintaining a list of devices supported by the Missing Sync for Palm OS. Device manufacturers can email Mark/Space at sales@markspace.com to ensure their devices are compatible with Missing Sync for Palm OS and that their devices are included in our database.

Database of supported Conduits

Mark/Space will be maintaining a list of conduits compatible with the Missing Sync for Palm OS. Conduit developers will be able to test with Missing Sync for Palm OS and let Mark/Space know that their conduits are compatible. Compatible conduits will be listed in a database published on the Mark/Space website.

Coupons, Promos, and mentions in the Mark/Space newsletter

Mark/Space has historically worked with conduit developers to offer coupons and promos either in our box, or in our newsletter. Developers interested in participating can email sales@markspace.com.

Communication and Staying Informed

Mark/Space wants to make sure device manufacturers, and conduit developers can stay informed, so we've setup a missing-sync-palmos-dev-talk mailing list. See lists.markspace.com for details on all of our mailing lists.

Mark/Space welcomes your feedback at feedback@markspace.com. We can't promise to respond, but our development team will review all messages.

A marketing whitepaper and additional details are available on the Mark/Space website: www.markspace.com.

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