

Synchronizing Your Palm Treo with Google Calendar

By Whil Hentzen

A group of elitist snobs out there disparage the Palm Treo for one reason or another, but for those of us who have work to get done, it's a great device - combining a phone and a Palm Pilot in one moderately compact device. Its fully-functional Web browser, Blaser, provides access to most websites (unlike crippled browsers from competitors that don't enable cookies or javascript), including... Google Calendar. This makes the Treo a perfect device for multiple members of a group to use for a synchronized calendar. This article shows you how.

1. Preface

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1.2 Revisions

1.2.1 History

Version	Date	Synopsis	Author
1.0.0	2008/2/22	Original	WH

1.2.2 New version

The newest version of this document will be found at www.hentzenwerke.com.

1.2.3 Feedback and corrections

If you have questions, comments, or corrections about this document, please feel free to email me at 'booksales@hentzenwerke.com'. I also welcome suggestions for passages you find unclear.

1.3 Acknowledgments

Thanks to my whole family, who put up with me messin' wit' their Treos and testing out various permutations of calendars.

1.4 Disclaimer

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Before making any changes to your system, ensure that you have backups and other resources to restore the system to its state before making those changes.

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1.5 Prerequisites

This document was written using the Palm Treo 700p, GooSync syncml_client_goosync.prc as of 2007/10/6 and updated via goosync.com on 2008/1/10, and Google Calendar via Mozilla Firefox 2.0.0.6.

2. Background

2.1 Google Calendar

Google Calendar (calendar.google.com) is a great collaboration tool. It provides typical calendar functionality - views by day, week, or month, ability to flag events as repetitive, and set up multiple calendars (for different people or for different purposes for the same person) on the same view. Multiple people can subscribe to a calendar and both keep track of other people's events while at the same share their own schedule with others.

My family - two parents and five kids ranging from elementary school through college age - has a typically hectic schedule, between work commitments, school happenings, sports events (practices and games), and other extracurriculars such as Scouts, volunteer and church activities, community events, medical appointments, and miscellaneous social gatherings.

It's been a significant chore to keep everyone's schedule coordinated - we have a huge paper calendar made from a flip chart in the back hall that is more often than not stuffed to the edges with each person's schedule. The problem, of course, is that the calendar is not portable - and even if someone was able to carry the flip chart around with them, it certainly wouldn't be usable by more than one person at a time.

Google Calendar has gone a long way to solving the problem of being used simultaneously in multiple locations. The only significant drawback is that access requires a live connection to the Web. While mobile phones that have Web access and can use Javascript can connect to Google Calendar, this isn't as big a benefit as one would first think. The problem is that Google Calendar detects the browser being used - when the browser is on a mobile device, Google Calendar reformats itself to better fit on the limited screen, and this limited view is badly crippled - it essentially becomes a single column listing of upcoming events - fine if you are interested about what's happening today or tomorrow; not so handy if you need to schedule a parent-teacher conference or a doctor's appointment in four weeks and need to check on possible conflicts.

A second, though not quite as important, consideration is that Google Calendar requires a live connection to the Web. There isn't a mechanism to download the Google Calendar to your mobile device and work with it offline.

This means that the rich functionality of the native Google Calendar UI is lost when accessing it on a mobile device. Why can't the mobile keep the great functionality? Enter the Palm Treo calendar app.

2.2 Palm Treo Calendar

The Palm Treo has a native calendar application as part of its PDA functionality. While not quite as rich as the Google Calendar UI, it's still extremely useful, with day, week and month views and the ability to navigate between views with a single tap of the stylus. And it's available as long as the PDA has power - no Internet connectivity is required.

The data that populates the Palm Calendar, however, is tied to the device. Sure, it can be synced with a desktop application - but to coordinate multiple Palm Calendars, you're faced with a server based calendar database. Companies have the resources to set up and administer such a beast; families and other smaller groups probably don't. Wouldn't it be great if the Palm Treo Calendar data could also be sync'd with the Google Calendar? Multiple users could use their Palms to share calendars via Google's Calendar. In effect, you'd be using Google Calendar as your server-based calendar database.

It *is* great. The trick involves a third party application called GooSync.

2.3 GooSync

GooSync is a piece of software that you can download to your Palm Treo. It operates much like the native Palm HotSync application, except that it allows the Palm Calendar to talk back and forth with Google Calendar on the Internet instead of a desktop calendar application.

3. Goal and Requirements and Roadmap

Now that we've got the basic idea described, I'll describe a specific scenario. We'll be looking at the Example family, Al and Barb, each of whom wants to share their own calendar with their significant other.

Both Al and Barb have their own Palm Treos. They also each have their own gmail email addresses, al.example@gmail.com and barb.example@gmail.com. They also share a third Google account, theexamplefamily@gmail.com, which will be used for their shared calendar, but not for email purposes.

The Examples are going to follow this general route:

- Set up a Google Calendar that they'll share, using their 'theexamplefamily@gmail.com' account.
- Enter events into the Google Calendar.
- Set up a pair of GooSync accounts (on the GooSync site); one for each of their Treos.
- Coordinate both GooSync accounts with the single Google Calendar account.
- Download and install the GooSync application on each Treo.
- Configure the GooSync applications on each Treo.
- Enter events into each Treo.
- Run the sync on each Treo, downloading Google Calendar events to each Palm Treo calendar as well as uploading Palm calendar events to Google Calendar.

4. Set up a joint Google Calendar

The first step is to log into Google Calendar. Navigate to calendar.google.com, as shown in **Figure 1**.

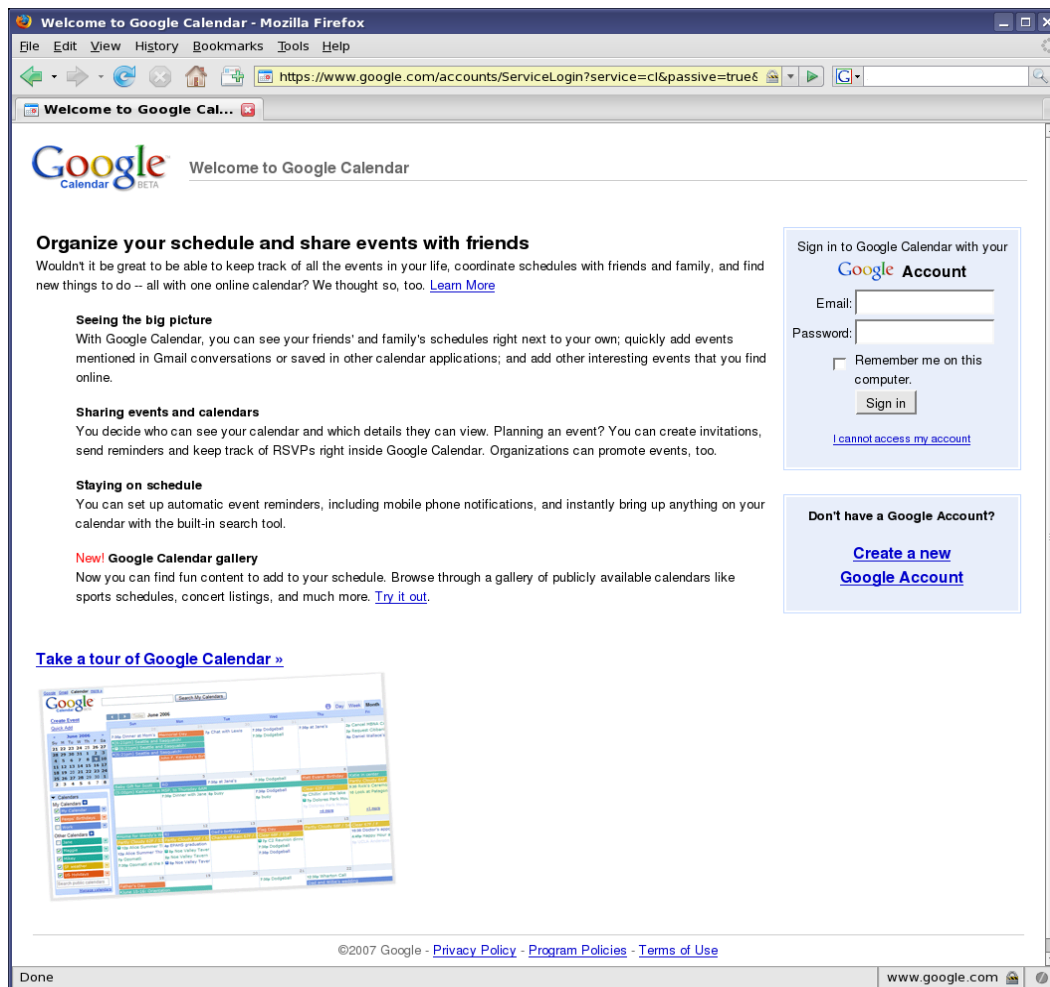


Figure 1. Log in to calendar.google.com.

Once there, use the 'theexamplefamily@gmail.com' email address, as shown in **Figure 2**.

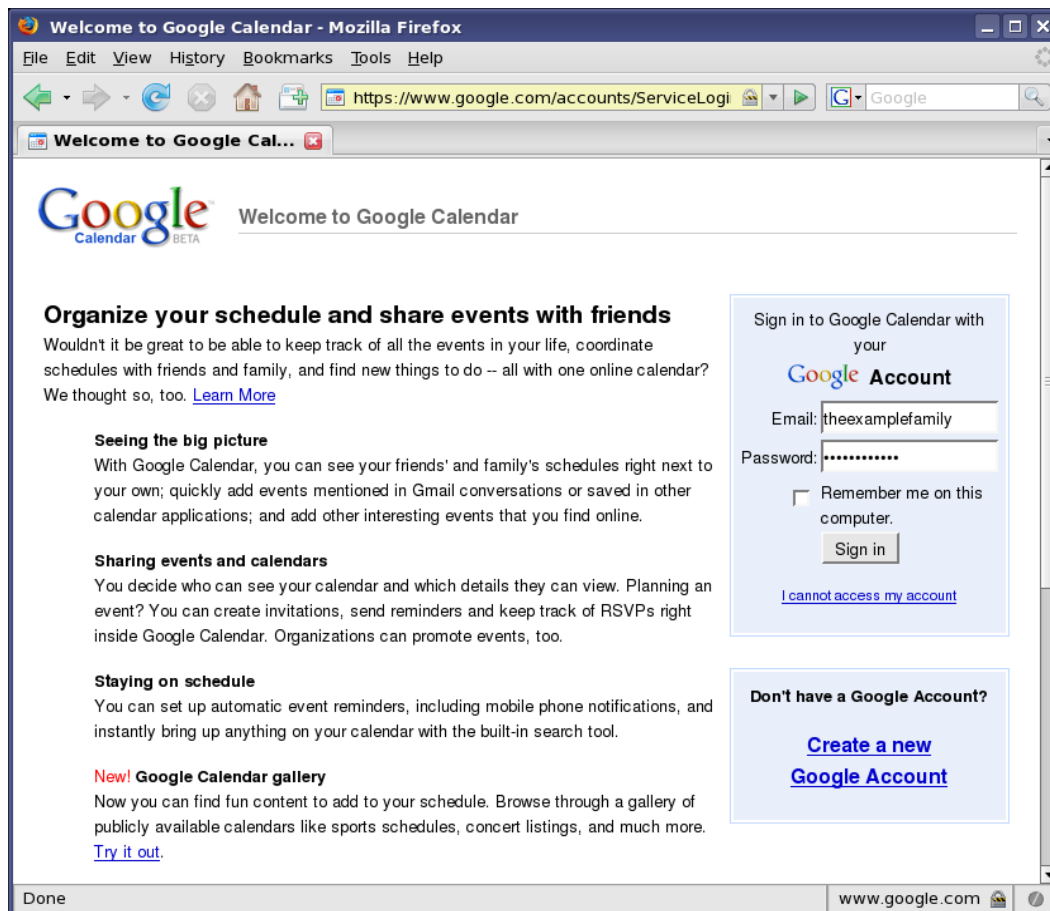


Figure 2. Signing into Google Calendar using the joint account.

Assuming that the Examples haven't forgotten their password, a blank Google Calendar page will display, as shown in **Figure 3.**

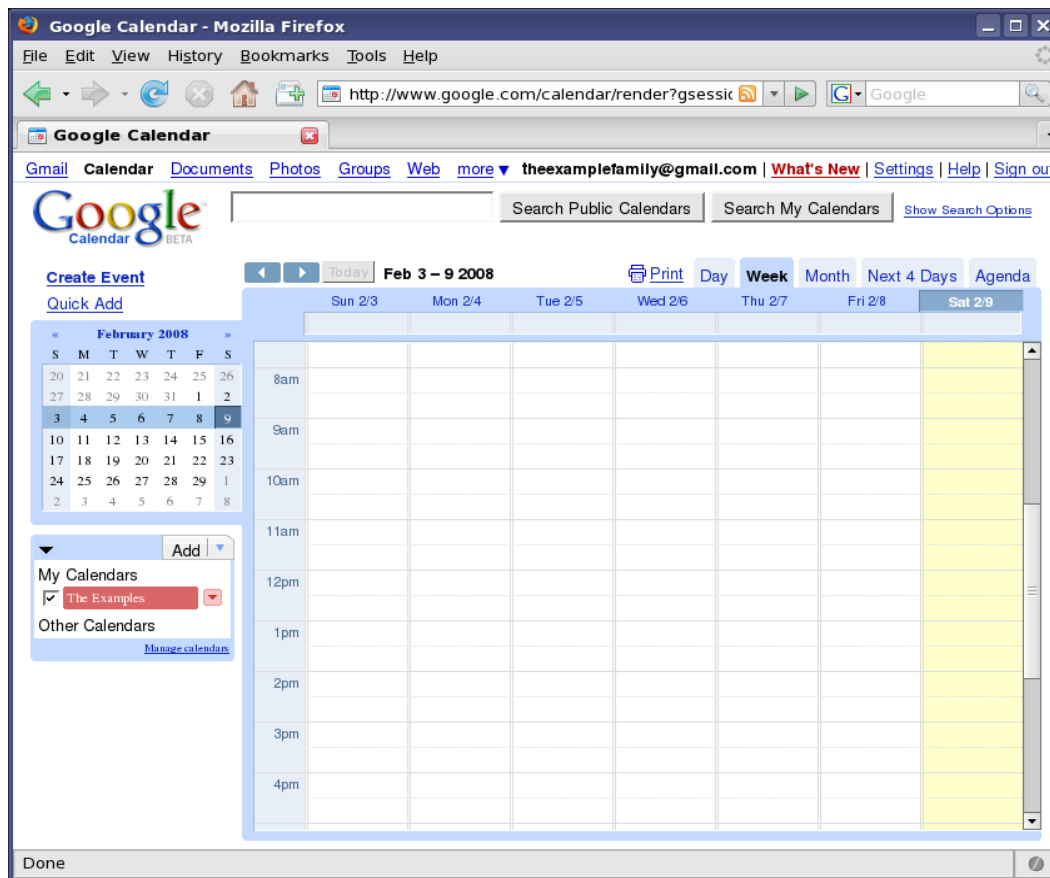


Figure 3. A blank Google Calendar page. Note the 'the examplefamily@gmail.com' email address at the top.

At this point, I'll point out that their account login, 'theexamplefamily@gmail.com', is displayed at the top. It's important to keep an eye on this to make sure you're logged into the right account during the various steps because cookies can cause Google to think that you are logged in with one account (say, the joint calendar account) when you wanted to be logged in with another (your personal gmail account.) I'll point this out again when it becomes important.

(You're not required to use gmail for your personal accounts; I do so in this article because I suspect that most folks will choose this route, and I wanted to point out a potential gotcha when doing so. If you use a different email provider for your personal accounts, such as Yahoo!, then this gotcha won't affect you.)

Before we go any further, let's create an event on Google Calendar. I'll copy my own "first thing Monday morning" appointment: meeting with the President. The Google Calendar makes it easy to create events with a minimum of fuss. Click on the "Quick Add" on the left side and enter a one line description of the event, as shown in **Figure 4**.

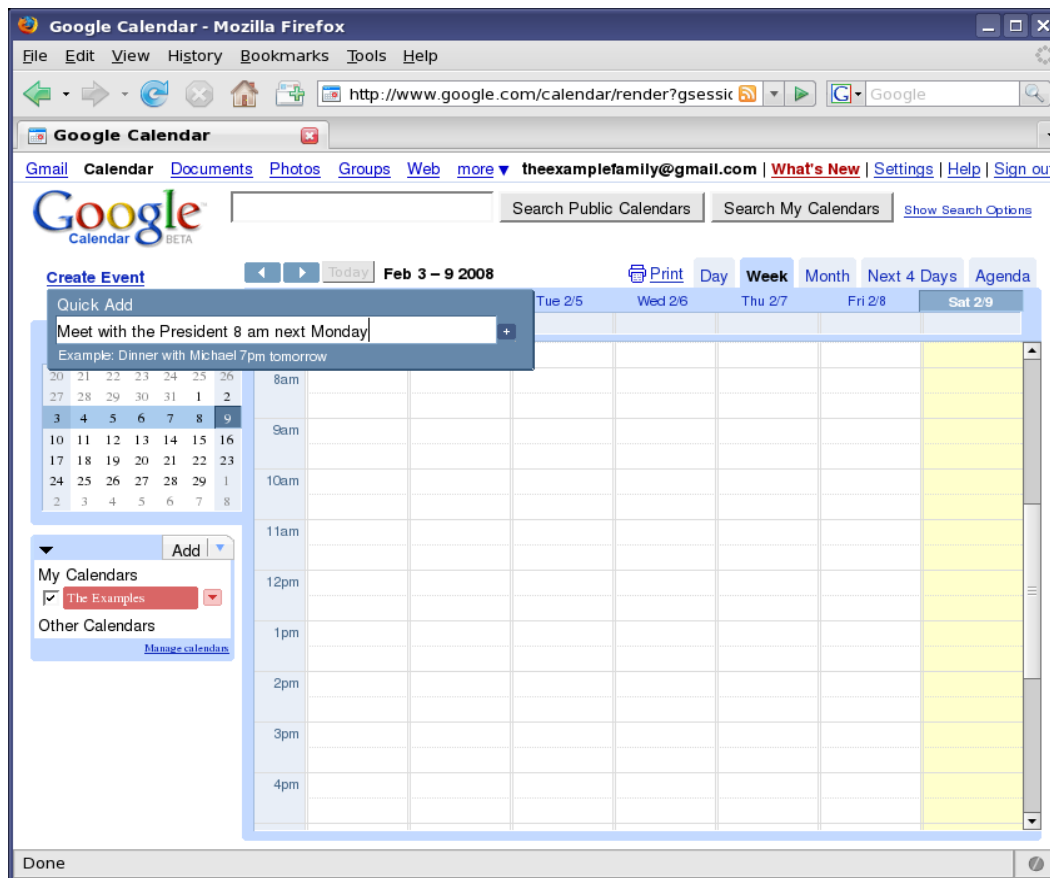


Figure 4. Quickly adding an event with Google Calendar's Quick Add.

There are lots of shortcuts and tricks using Quick Add; it's remarkably intelligent at figuring out what "next Monday" means, for example. The result after pressing Enter or clicking the (+) to the right of the text box is shown in **Figure 5**.

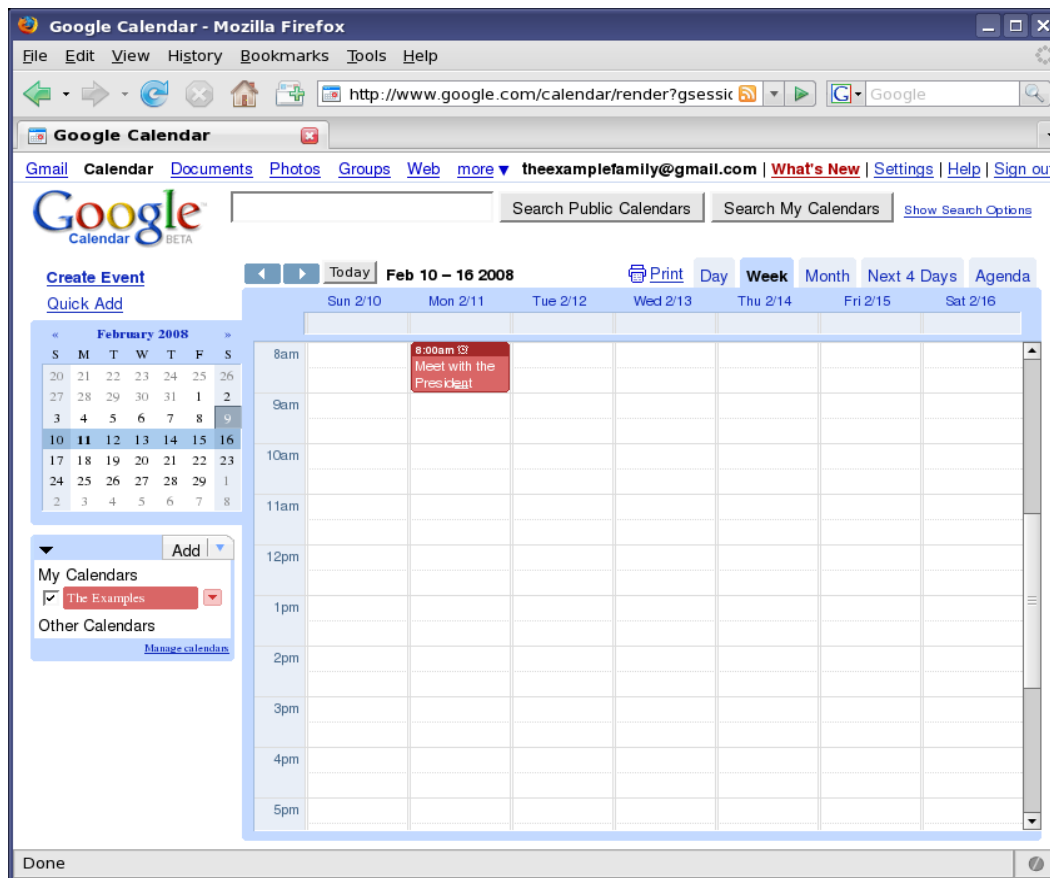


Figure 5. A meeting with the President!

OK, now The Example Family has an event in their Google Calendar. Now it's time to get involved with GooSync.

5. Set up accounts at GooSync

Each Treo must be associated with a separate GooSync account. First, Al Example will create his GooSync account; Barb will follow in his footsteps moments later. Navigate to www.goosync.com and click on the Register link on the left. The GooSync Registration page will be displayed, as shown in **Figure 6**.

GooSync - Create Account - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://www.goosync.com/Register.aspx

Google Calendar GooSync - Create Acco...

GooSync
Powered by Tofta

Home Help

GooSync Registration

This page allows you to create a new registration with GooSync. Fields marked with * must be filled in.
Important - you will need to enter a valid email address in order to activate your account.

User Name: alexample

First Name: Al

Last Name: Example

Company Name:

Password:

Confirm Password:

Email: al.example@gmail.com

Confirm Email: al.example@gmail.com

Security Code: 8030b1

Done www.goosync.com

Figure 6. Creating a GooSync account.

Note that Al Example is using his own gmail email address, al.example@gmail.com, *not* 'theexamplefamily@gmail.com'! For the purpose of this discussion, we're going to assume that Al's super-duper secret password is 'alssecretpassword'. (This is where you could also use a different email provider, such as 'al.example@yahoo.com'.)

This process creates an account on the GooSync website. After you click, "I accept... please create...", you'll get **Figure 7**.

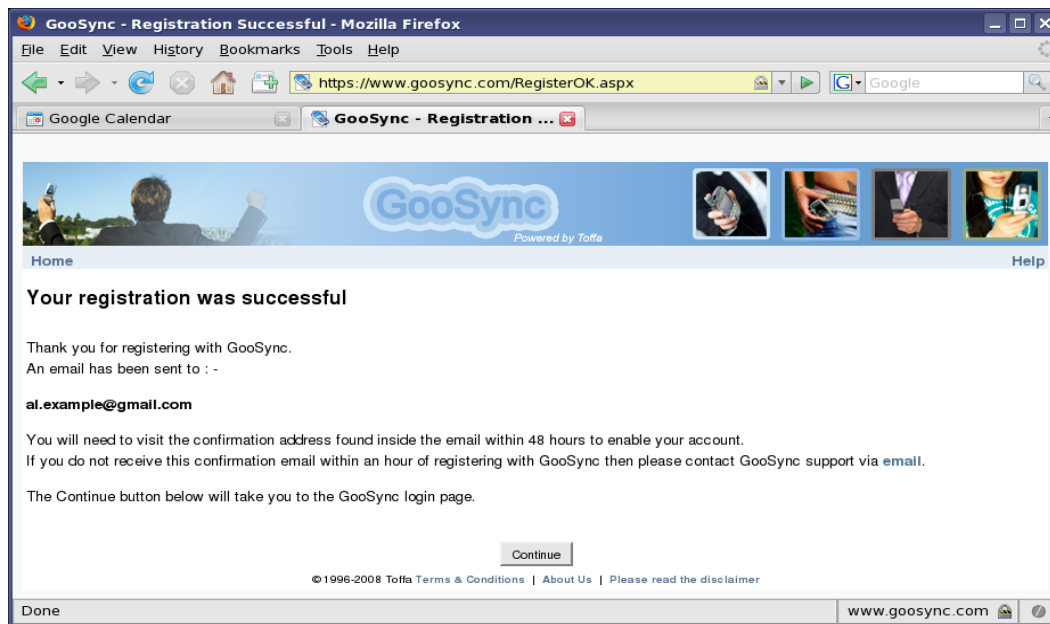


Figure 7. Successful registration.

Now go get the confirmation email from the GooSync folks at al.example@gmail.com. Remember how I said that you need to be careful about which Google account you're logged in as? Here's the first case. If you simply navigate to gmail.com (or mail.google.com) in the same session, you'll be automatically logged into gmail as theexamplefamily, as shown in **Figure 8**.

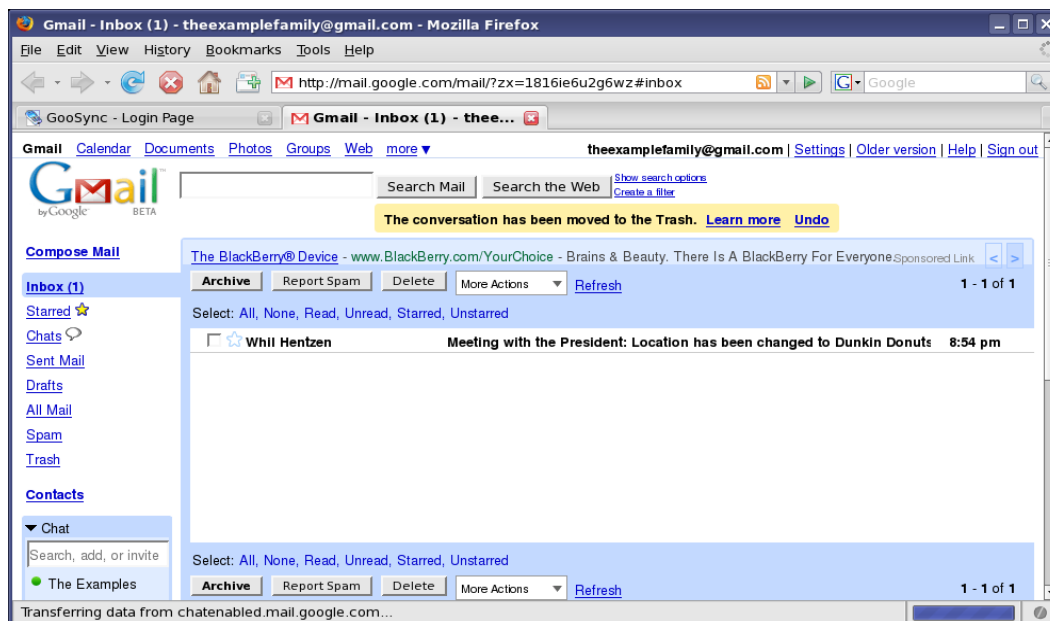


Figure 8. Navigating to gmail may accidentally log you into the wrong account.

So, once you go to gmail.com, you'll need to sign out (via the "Sign out" link in the upper right) and then log back in as 'al.example@gmail.com'. (Again, if you're using a different email provider, this wouldn't be an issue.) Once you do so, find the email from the GooSync people as shown in **Figure 9**.

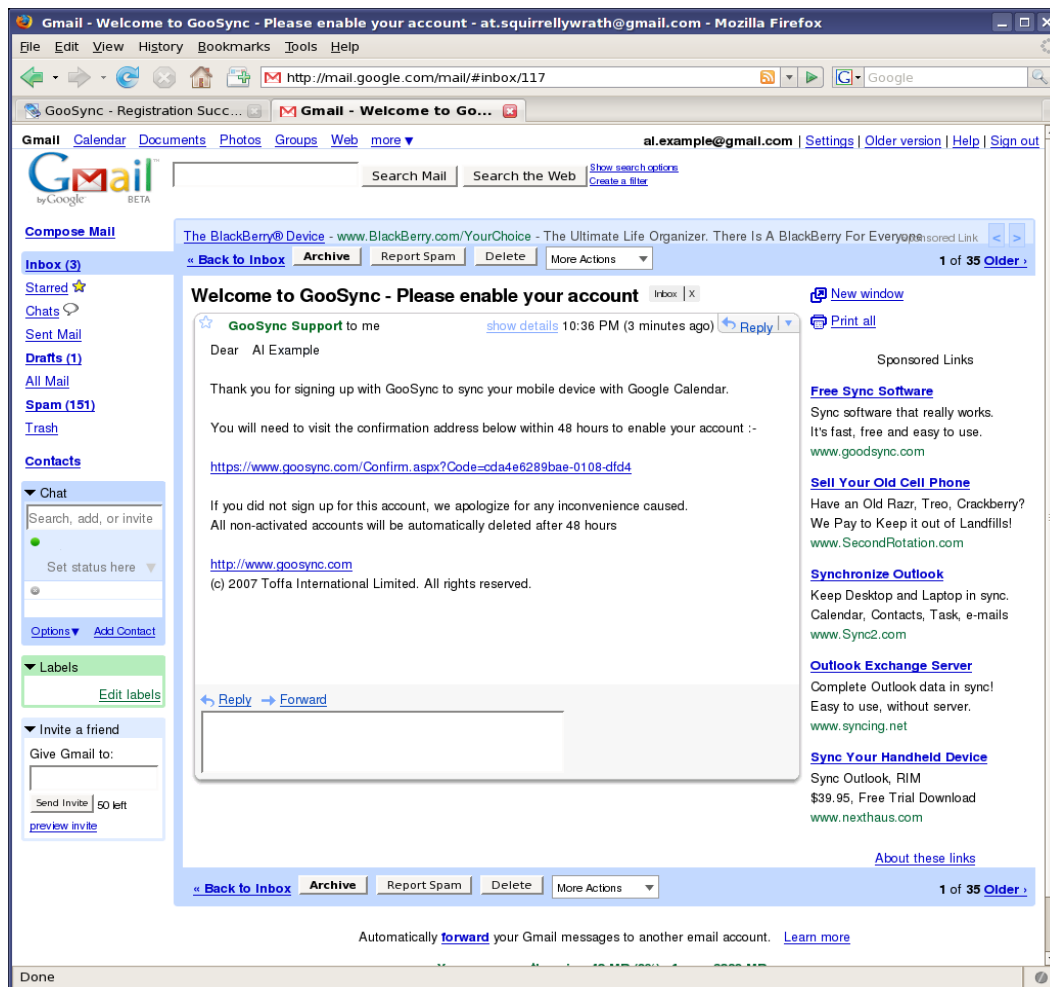


Figure 9. The email from the GooSync folks in your individual gmail account.

6. Activate your GooSync account via the link in your email

Click on the link in the email and you'll be brought back to the GooSync Web site, as shown in **Figure 10**.

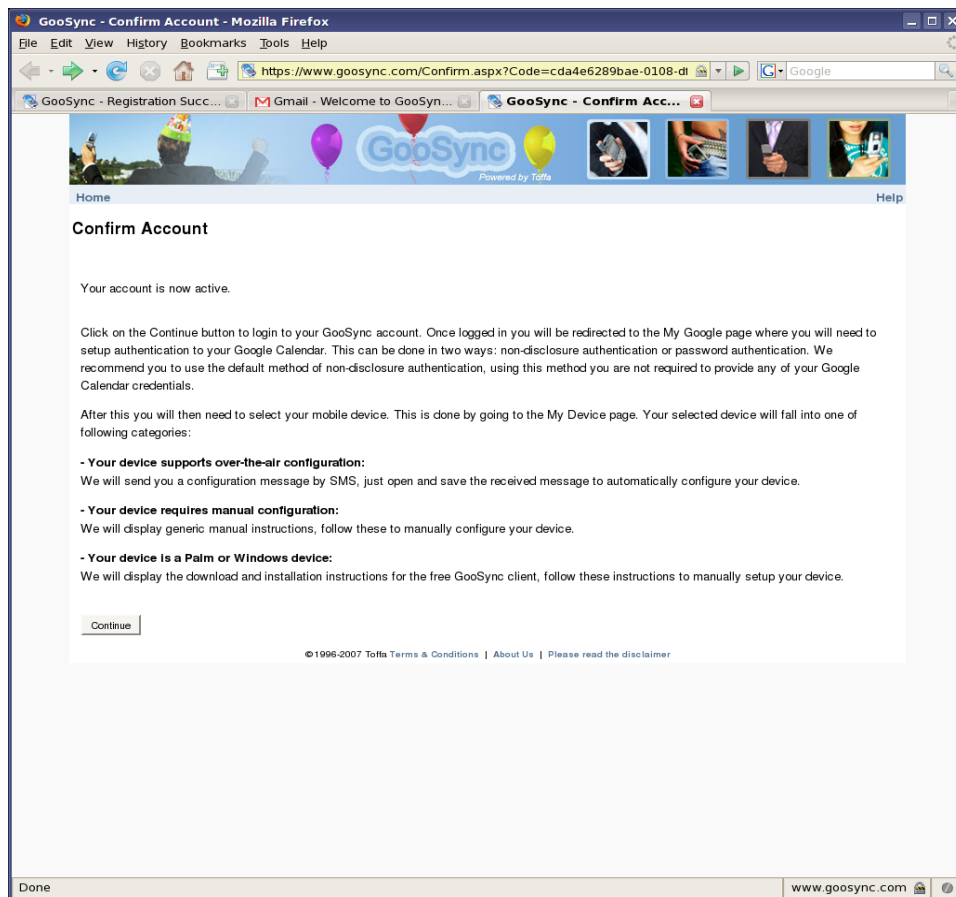


Figure 10. Your GooSync account is now active.

Once you've activated your GooSync account, click on 'Continue'. You'll need to log in again as shown in **Figure 11**.

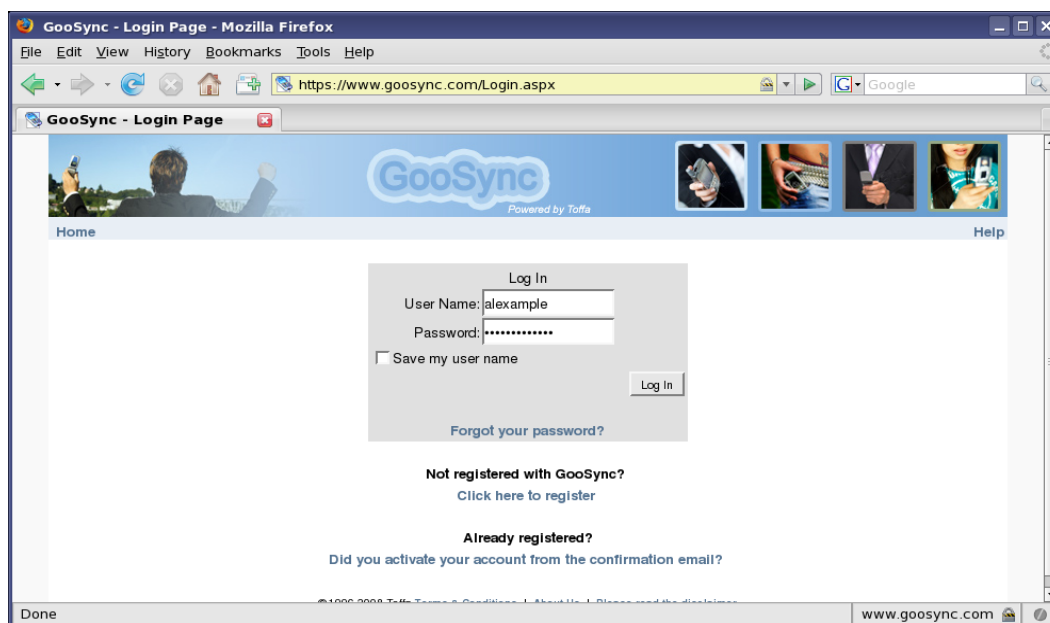


Figure 11. Log in to GooSync again.

Upon logging in to your GooSync account, you'll get a page that tells you that your account isn't affiliated with Google. (See **Figure 12**.)



Figure 12. GooSync not authenticated with Google.

Huh?

7. Tell Google that GooSync can access your Google Calendar.

This next step is conceptually a bit tricky. You've got separate accounts at GooSync and Google. You need to associate them. Specifically, you need to tell your Google Calendar account that it's OK when the GooSync application (on your Palm Treo) comes in to get your Google Calendar data - that GooSync is a trusted application as far as your Google account is concerned.

You could do this one of two ways. The first way is to give GooSync your Google credentials (email address and password.) Most people probably won't want to do this, since it opens up all of your Google data. The second, and preferred, method, is to tell Google to allow GooSync to get at your Google Calendar data. (Nothing else, however.) The second method is the default, and that's what's described here.

When you first log in to your GooSync account, it'll tell you that it doesn't have access to your Google Calendar. That's what the text in red in Figure 12 is saying. By clicking the "Authorize" button on the right, you'll be directed to the Google Web site where you'll add GooSync to your list of trusted applications. See **Figure 13**.

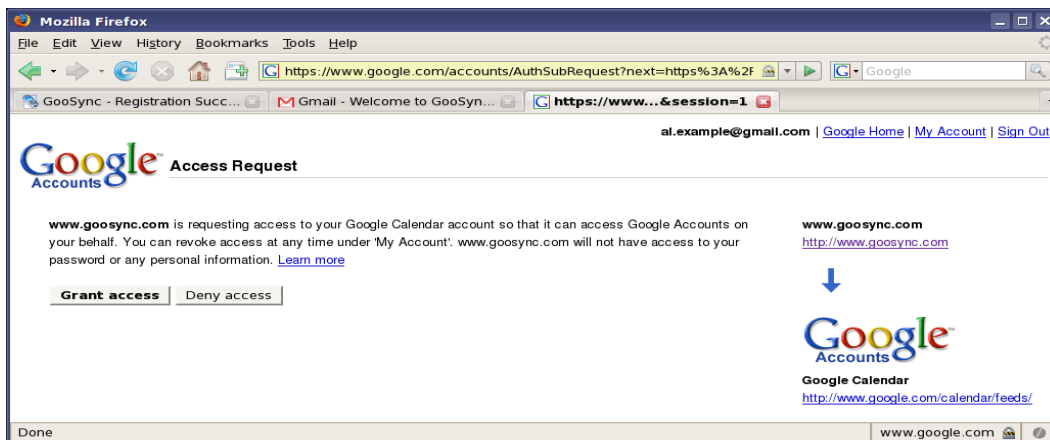


Figure 13. Telling Google to allow access to your Google Calendar by GooSync.

This is the second tricky part. You need to make sure that you've connected to the Google account that contains your calendar that you want to sync to your Palm. In other words, you want to be connected to your Google Account - theexamplefamily@gmail.com. Note that Figure 13 shows 'al.example@gmail.com' - this is because I was most recently connected to that account (when I was confirming the GooSync account in my personal email account.) The first few times I did this for real, I kept hitting "Grant Access" but the operation would fail. **Figure 14** shows what happens when this fails.



Figure 14. Failure to authenticate the correct account.

If you had your GooSync confirmation email (back in Figure 9) sent to a non-gmail account (al.example@yahoo.com), then this won't be a problem.

The account in the upper right to the left of 'Google Home' should say 'theexamplefamily@gmail.com'. Note that this will be the same when Barb Example sets up her GooSync account. Behind the scenes, what you're doing is allow both Al's GooSync account and Barb's GooSync account to both access the 'theexamplefamily@gmail.com' Google Calendar account. If Carl Example acquires a Palm, he'll create his own GooSync account, but then 'theexamplefamily@gmail.com' will need to allow his GooSync account access.

Once you click 'Grant Access', you'll get an 'All is hunky dory' page, like shown in **Figure 15**.

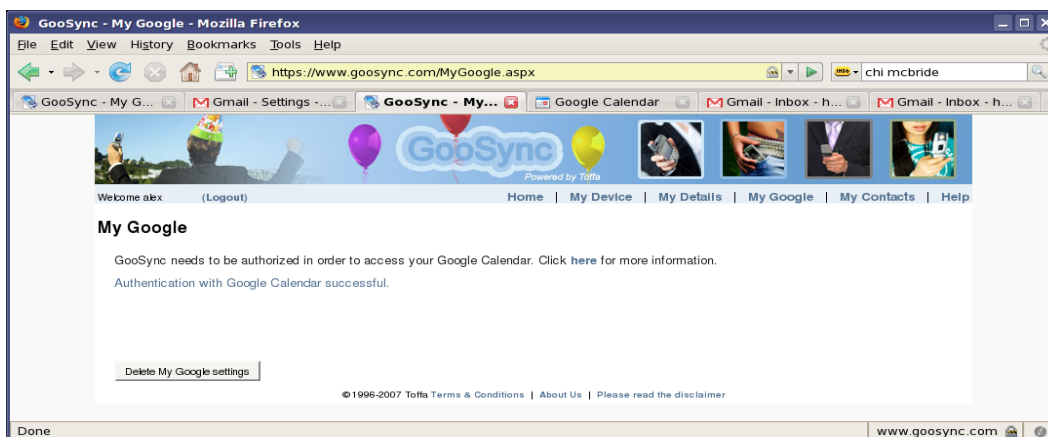


Figure 15. All is good - you've told Google that GooSync has permission to access your Calendar.

Again, if you get a page that looks like Figure 14, it means that you weren't logged into 'theexamplefamily@gmail.com' account at Google.

At this point, GooSync and Google cal are set up. Now it's time to get connected to your Palm device.

8. Connect your Palm device

So... your Google Calendar and your GooSync account are in sync. Next, we want to connect our Palm Treo to the combination. Stay on the page shown in Figure 15 and click on the "My Device" link in the upper right. You'll be asked to select your device.

Select your device family from the combo box, and then click on the picture of your specific device. Note that for Palm Treo, there is only one picture. Don't make the mistake of assuming that since there's just one device, it's already selected - you still have to click on the picture to select it. Once you do, you'll be brought to the Add Device screen as shown in **Figure 16**.

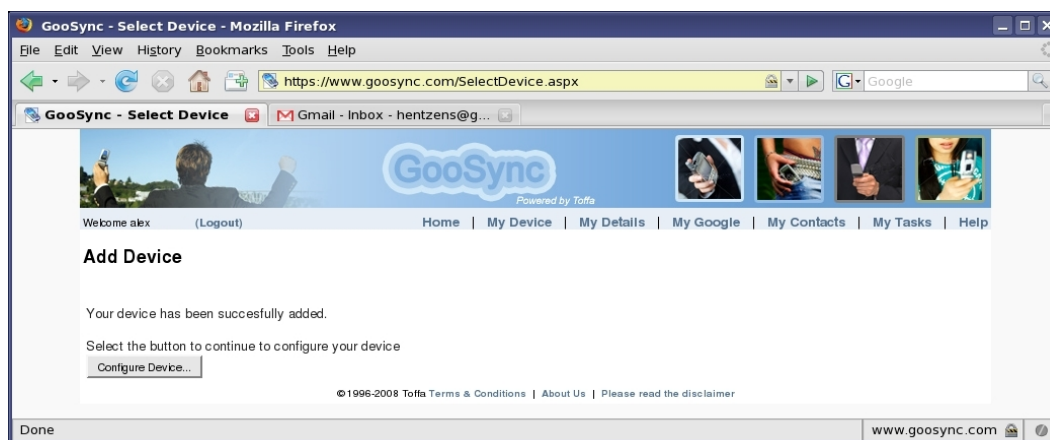


Figure 16. Successfully selecting your device.

This registers YOUR device (your Palm has a unique ID, like a MAC address on a PC network card) with GooSync. In other words, your account at the GooSync Web site (alexample) now knows about your Google Calendar (via 'theexamplefamily@gmail.com') and also knows about your specific device.

9. Install GooSync on your Palm

Now let's put the GooSync software on your Palm so that your Treo can communicate with the GooSync Web site. Click "Configure Device" to bring forward the Palm OS Client Software page, as shown in **Figure 17**.

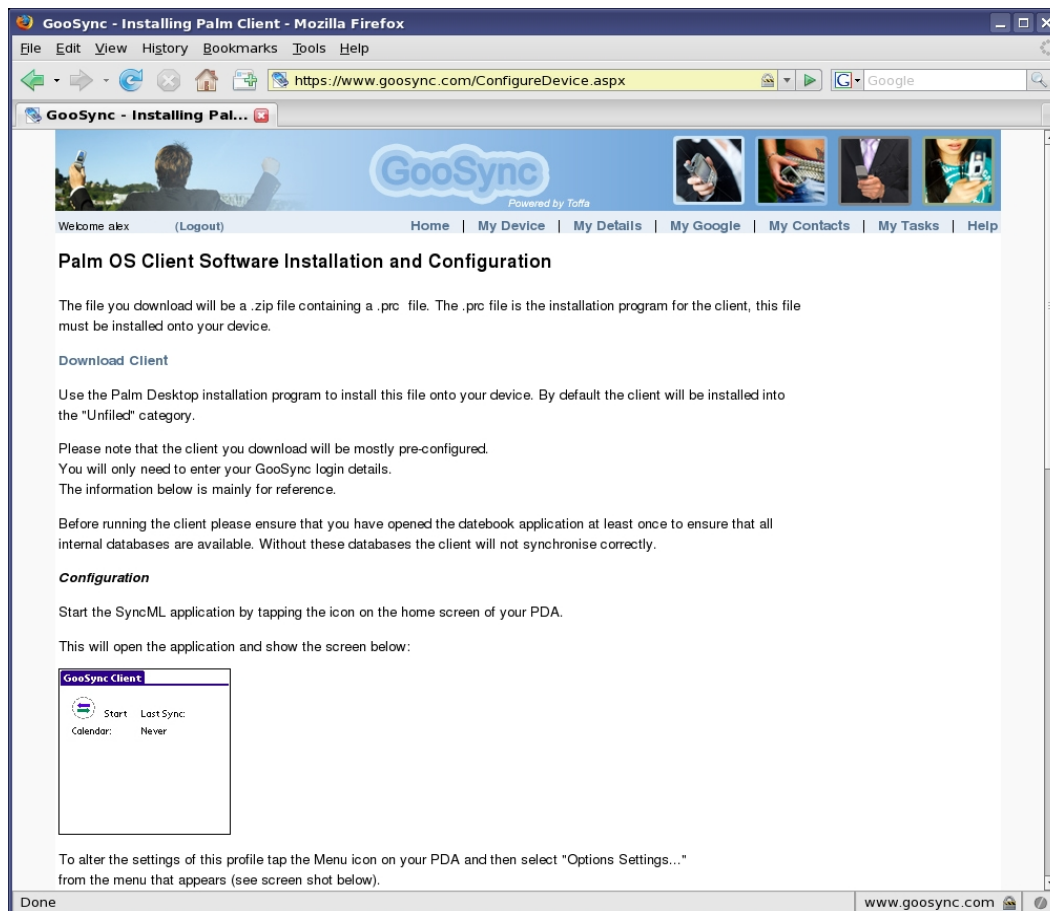


Figure 17. The Client Software Installation page.

Here's where I've found it necessary to deviate from the process given in the instructions, as I don't use a desktop installation program for my Palm. Instead, I downloaded the client, unzipped the .prc file and put it on a private Web page. Then I used the Web browser on my Palm Treo to navigate to my hidden page, downloaded the .prc file and installed it directly from my Palm. The file name on my hidden page was

`syncml-client-goosync.prc`

If you go this route, when you download it from your hidden web page, you'll be prompted (1) where to put it (put it in main memory, not a removable card), and (2) whether to install it then or not (answer yes.)

10. Configure GooSync on your Palm

On your Palm Treo, select Home | GooSync - you'll get the GooSync client app, as shown in **Figure 18**. (Sorry for the fuzzy picture... whaddaya gonna do for screen capture of a separate device?)



Figure 18. The GooSync application on a Treo.

Tap the GooSync Client label at the top to open the menu or press the Menu button on the keyboard. Once the menu opens, select Options | Settings as shown in **Figure 19**.

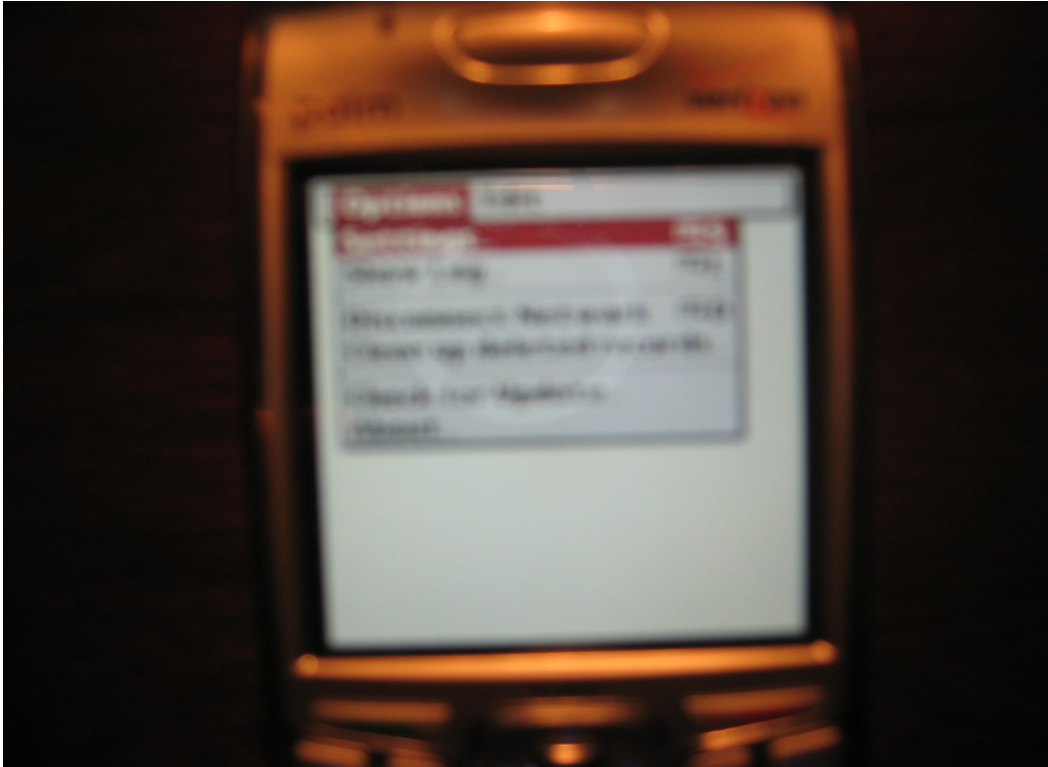


Figure 19. The Settings menu on the GooSync application.

Doing so opens the Settings dialog as shown in **Figure 20**.



Figure 20. The Settings dialog for GooSync on the Treo.

The controls in this dialog look like this:

```
SyncML ServerURL: <Options>
sync.goosync.com
[] Secure transport (HTTPS/SSL)
User: _____
Password: _____
<Sync Mode Options>
<Cancel> <OK>
```

First, navigate to sync.goosync.com in the SyncML ServerURL control. It's probably already filled in for you.

Second, enter your GooSync credentials (not your Google Calendar account).

```
User: alexample
Password: alssecretpassword.
```

Then click OK.

Then tap the "Start" button (in Figure 18) and syncing will begin.

11. Errors and problems

There are several common problems that crop up. Three typical problems include "Database not found" and "DB not found" error messages and the display of error code 511. Fortunately, the GooSync page for Help has a lot of FAQs that answer these as well as dozens of other common questions and problems. Scroll down to the "Troubleshooting" link for the good ones.

12. Where to go for more information

I've only been using my Treo for a few months, and thus don't have a lot of resources available gathered yet. GooSync has its own forum at

<http://www.goosync-forum.com/>

and there are a number of Palm/Treo-centric forums as well. The following seem to be the big ones.

```
http://discussion.treocentral.com/
http://www.everythingtreo.com/forum/
http://mytreo.net/forum/index.php
http://palmzone.net/
```

There are others but these three seem to be the big ones.

13. About the author

Whil Hentzen started out life in the early '80's as a custom software developer using dBASE II (he still has the original 8 1/2 x 11 grey binder of documentation, much to the chagrin of his wife), and switched to FoxPro in 1990. Besides billing 15,000 hours in the 90's, he presented more than 70 papers at conferences throughout North America and Europe, edited FoxTalk, Pinnacle Publishing's high end technical journal for 7 years, hosted the Great Lakes Great Database Workshop since 1994. He's written 8 books and published 30 more on a variety of software development topics. He was a Microsoft Most Valuable Professional from 1995 through 2003 for his contributions to the FoxPro development community, and received the first Microsoft Lifetime Achievement Award for Visual FoxPro in 2001.

Whil began using Linux on the desktop when OpenOffice.org became a standard in the mainstream distributions, as it spelled potential for custom application development in the future, and has been a Linux user, developer, and evangelist ever since. His first book on Linux, *Linux Transfer for Windows Power Users*, was published in early 2004.

He is available for new and legacy Visual FoxPro application development as well as Web and desktop development on Linux.

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