FOR 240 – Lab 7 Assignment
Using Handheld PC to Collect Timber Cruising Data
Introduction to Computing in Natural Resources

In this lab, we are going to use the handheld PC to collect timber cruising data. I do not require you to conduct a real timber cruising. However, you do need to select two 1/10-acre square plots on or close to campus and each plot should contain at least 5 trees. What you need to do are as follows:

1. Connect your HPC to a desktop PC in the lab, if it was not connected before (see attached connection procedures).
2. Build a database that should contain two tables on your HPC by using MS Pocket Access. The formats for the database and tables are exactly the same as you used in your previous labs (Labs 4 and 5).
3. Collect data on campus.
4. Transfer your data from HPC to desktop PC. I suggest you create a directory called FOR240\Lab6 on the desktop before transferring the data.
5. Browse the data and make sure you can summarize them.

Please provide me a typed summary report including Pocket Access database design, your working experience with HPC data collection in the field, and data transfer by the beginning of lab next week.

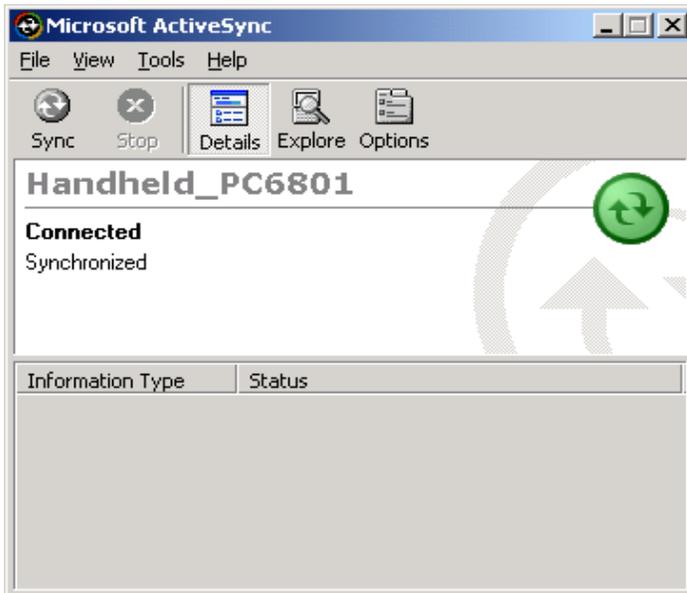## 1. HPC Jornada – Connecting to Your PC
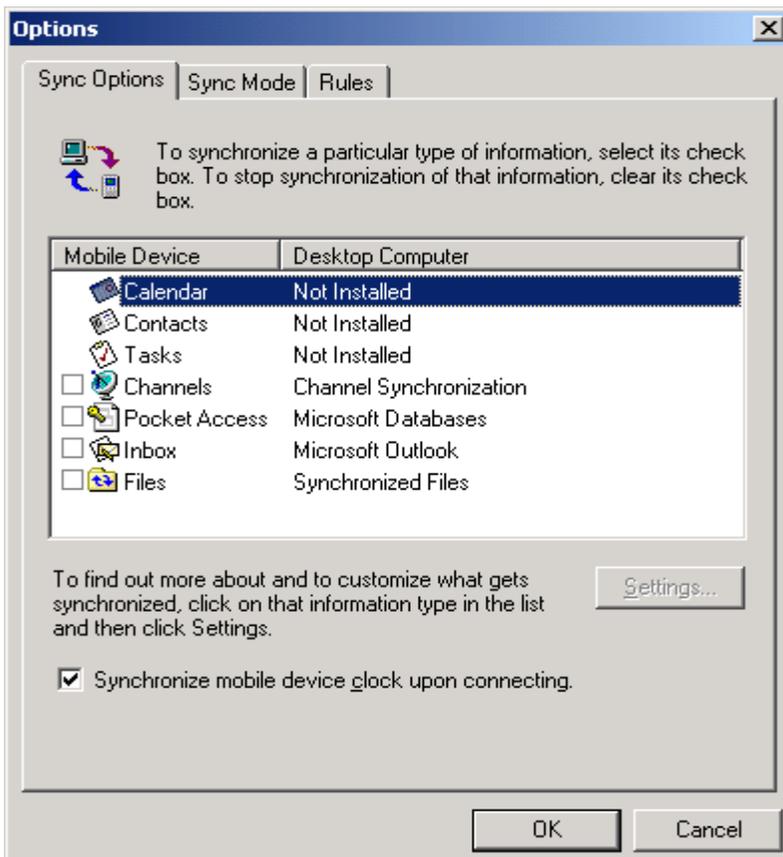
(1) Automatic Synchronization

Figure 1.

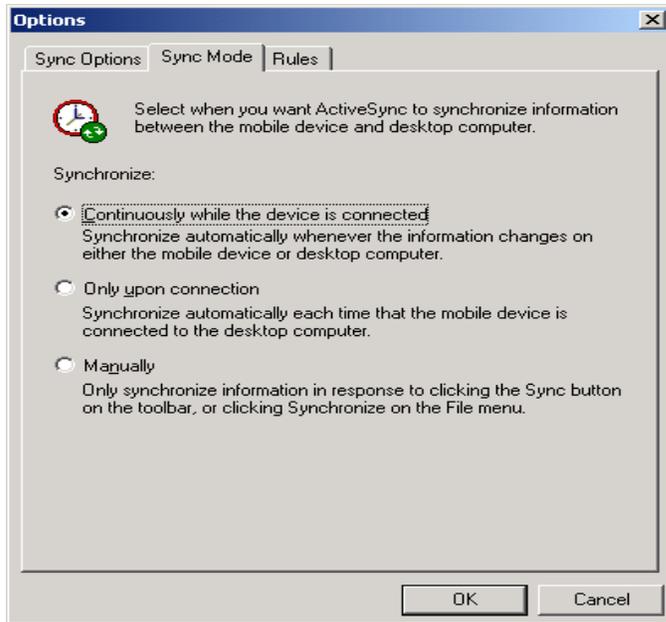Figure 2.

Figure 3.

(2) Browsing HPC

- Using ActiveSync (Explore icon)
- Windows explorer

Figure 4.
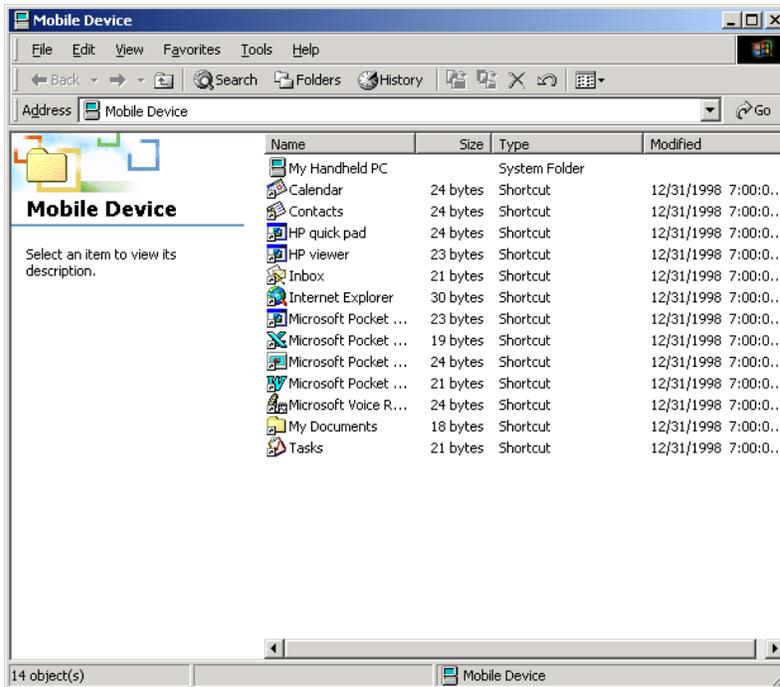
Figure 5.

(3) Transferring files
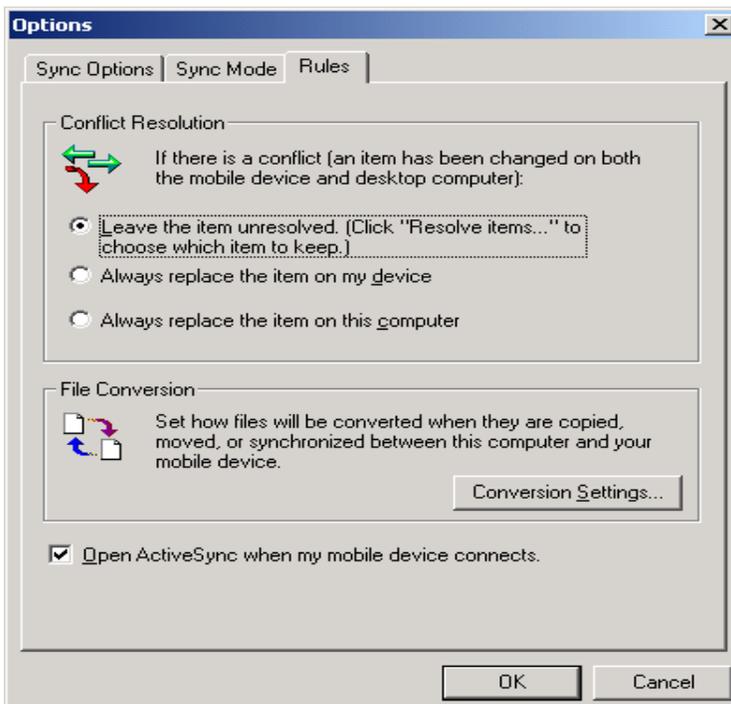
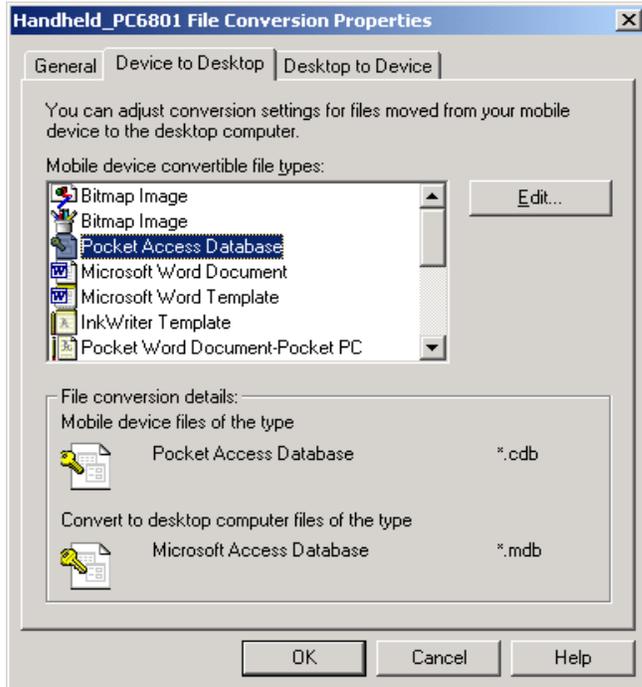- Windows Explorer (Copy, Paste)
- File conversions

Figure 6.

Figure 7.

2. HP Jornada 720 Handheld PC - Resolving the "Error 678" Message

(Source:
http://h10025.www1.hp.com/ewfrf/wc/genericDocument?docname=bpia2302&lc=en&cc=us&dlc=en&prin
table=yes&encodeUrl=true&)

Introduction

The HP Jornada 720 Handheld PC displays the following error message while attempting to synchronize:
Communications Error - Cannot start communications with the desktop computer. Remote Networking could not start due to a critical error (Error 678). Please reconnect your device. If the problem persists, restart your device using the instructions provided by the manufacturer.

Explanation

After connecting the handheld PC to the desktop PC, and starting the Get Connected Wizard by using ActiveSync, the COM ports are polled. The handheld PC polls the ports 6 times. After the sixth attempt to connect the device, the "Error 678" message displays on the handheld PC.
On the desktop, the Connection Wizard reports all the ports polled by ActiveSync and the status of each port. After the Connection Wizard completes the poll report, the device fails, and the "Error 678" message displays.

Error 678 is caused by a timing issue when both the handheld and the desktop try to send a message to connect at the same time. By following the resolutions below, you should be able to bypass this error and start exchanging information between the device and the PC. Once the device has established a partnership, you should not have to follow these steps again.

Solution #1

1. Connect the handheld PC to the desktop PC.
2. Start ActiveSync from the computer desktop.
3. Allow ActiveSync on the desktop to go through the port polling process.
4. When ActiveSync fails to connect on the desktop, click the **Next** button to start the port poll process again. The handheld PC will report that it is still attempting to connect to the desktop.
5. If the device does not connect and the error message is displayed on the device again, close the error message, restart the ActiveSync Connection Wizard, and then repeat steps three and four until the connection is successful.

Solution #2

1. Start Microsoft Active Sync on the desktop computer at the "Get Connected" window.
2. With the Jornada disconnected from the cable, soft reset the device by pushing the red reset button next to the letter "Q" with your stylus.
3. Now click **Next** on the desktop PC to get connected, and at the same time plug the sync cable into the Jornada.
4. If the device does not connect and the error message is displayed on the device again, close the error message, restart the ActiveSync Connection Wizard, and then repeat steps two and three until the connection is successful.

Solution #3

1. On the desktop computer, open Microsoft Active Sync and select **File**, then **Get Connected**. (Do not select anything else yet.)
2. On the Jornada, click **Start**, then **Programs**, then **Communications**. (Do not select anything else yet.)
3. At the same time, click **PCLINK** on the handheld, at the same time that you click **Next** on the desktop to get connected.
4. If the device does not connect and the error message is displayed on the device again, close the error message, restart the ActiveSync Connection Wizard, then repeat steps one through three until the connection is successful.