

# Synchronizing

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## 2 Synchronizing

PowerTrax Pro runs as both a Client/Server multi-user database and as a stand-alone application that can run on, for instance, a remote laptop. You can also have multiple servers communicating (synchronizing) changes between each other to ensure that up-to-date data is available throughout the company. Both in-house and remote users can review information on contacts, schedules and sales at any time. This promotes communication and prevents misunderstandings.

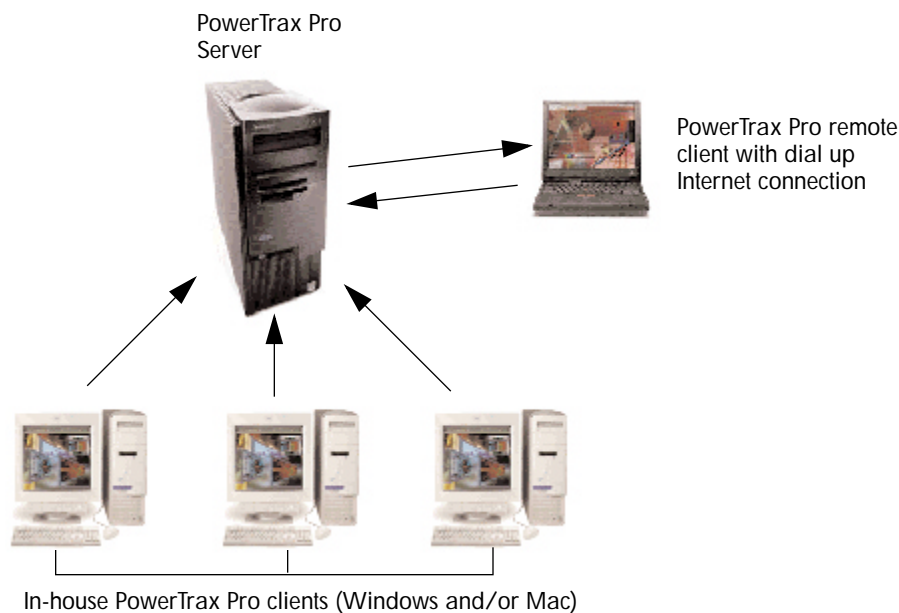
This document explains how to synchronize with the server.

### Overview

Since remote users of PowerTrax Pro work off-line modifying, adding and deleting records, and internal users work on the server database modifying, adding and deleting records, the databases have to be brought up to date with each other, so everyone has the latest information. This process is called synchronization.

For example, suppose a remote user is working in the Contacts table and notices that a person's last name is misspelled. He makes the correction and saves the record. We now have the situation where the remote user's database is correct, but the server is still wrong. The next time the outside user synchronizes with the server, the corrected field, not the whole record, will be sent, and the server will be updated.

In turn, the server database is constantly being updated with new contacts, quotes, orders and so on, and the remote user's database must be brought up to date.

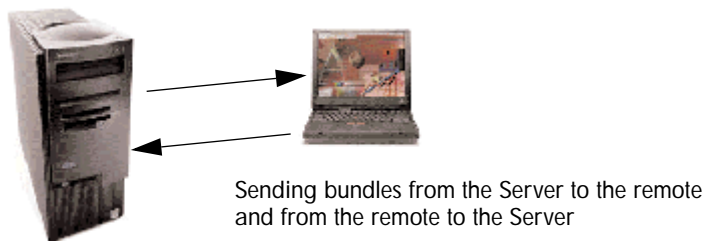


### Bundles

As you can see, there could be a tremendous amount of data that needs to be sent to the remote users. The synchronization system in PowerTrax Pro is designed to minimize the time you have to stay connected, while still moving a large amount of data from the server to the remote.

All changes are logged and periodically packaged into a bundle for a specific remote user. After the bundle reaches a predetermined size, it is compressed and marked as being ready to transfer to the remote machine.

When the remote user connects to the server the bundles that are ready are quickly moved from the server to the remote machine. Likewise, the bundles on the remote are transferred to the server.

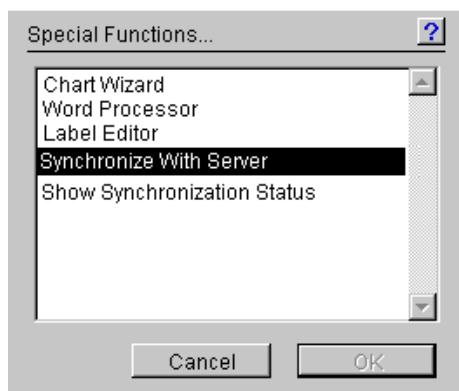


Once the bundles have been transferred to the remote machine they are ready to be unpacked and update the remote database. You do not need to be connected for this to happen. Every 2 minutes a program on the remote machine will check to see if there are any bundles waiting to be processed. If there are they will be processed and then deleted.

## Performing a Synchronization

When you are ready to transfer your data to the server and receive updates from the server, follow this procedure:

1. Choose **Tools > Special Functions > Synchronize with Server**.

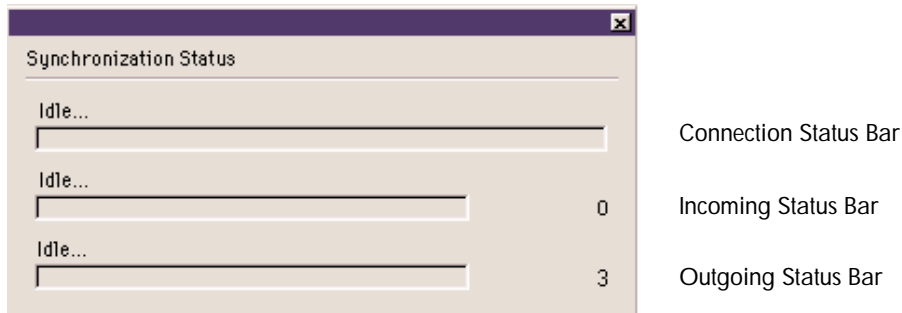


The synchronization status window (shown on the next page) appears, giving you visual feedback of the synchronization process.

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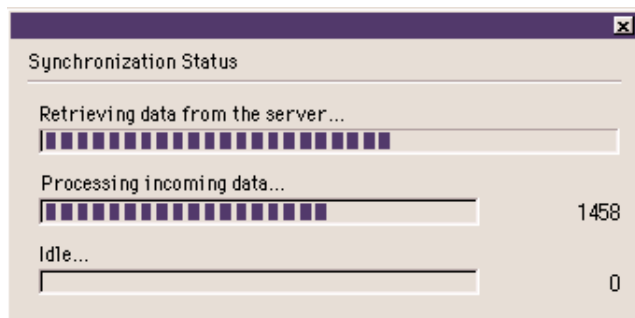
### The Synchronization Status Window

This window consists of three (3) progress bars to give you visual feedback on each part of the synchronization process. It also shows you how many incoming bundles you have received from the server and how many outgoing bundles are waiting to be sent to the server.



The first bar shows you the connection status and progress of retrieving bundles from the server. The second bar shows you the progress of processing the incoming bundles. The third shows the status of sending outgoing bundles to the server.

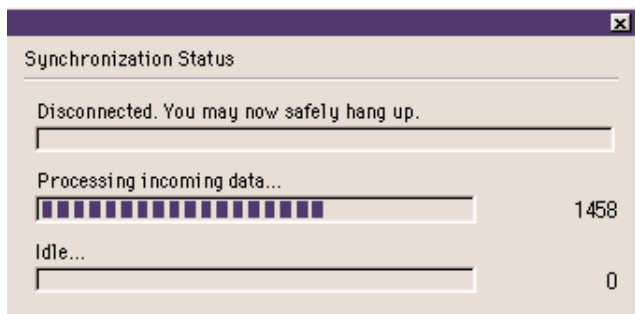
When a process is running the Synchronization Status window will be updated with information as shown in the example below.



Here you can see that more than one process can be running at a time. In this example we are getting data from the server and processing the data at the same time.

### When is it Safe to Disconnect the Line?

You can disconnect from the phone line when the connection status bar says you can hang up as shown below.



From the screen shot shown on the previous page, you can see that all the data is received from the server and the PowerTrax Pro Stand-alone is no longer connected to the server. It is OK to disconnect the line at this point.

**Note:** This message will stay for approximately 15 seconds and return to the Idle status.

### Closing the Status Window

Simply click the close box in the upper right of the window.

### Opening the Status Window

When you do a synchronization the Status window opens automatically for you. You may want to open the status window manually to check to see if all the incoming bundles were processed or if there are any outgoing bundles to send.

To open the Status window, choose **Tools > Special Functions > Show Synchronization Status**.

