

# Technical White Paper

## Configuring QuickBooks® 2007 on a Network

Published October 16, 2006, v. 1.1

George Jaquette

QuickBooks Platform Product Manager

The information contained in this document is intended to help users and administrators install and configure QuickBooks in a network, and to determine where to keep QuickBooks company files on that network. This document reflects the views and understandings of Intuit at publication. Intuit cannot guarantee the accuracy of any information contained herein, and changes may have occurred after the date of publication.

This white paper is for informational purposes only. INTUIT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE ACCURACY OR COMPLETENESS OF INFORMATION IN THIS DOCUMENT.

Trademarks used in this document belong to their respective owners.

© 2006 Intuit Corp. All rights reserved.

## TABLE OF CONTENTS

<b>Introduction .....</b>	<b>3</b>
<b>Who Should Read this Document .....</b>	<b>3</b>
<b>QuickBooks Configurations: Standard, Multi-User Hosting, and Server-Only Installation.....</b>	<b>4</b>
A simple installation (one user, one machine) still includes a database.....	4
Using one QuickBooks machine as a host on a network .....	4
Dedicating one machine as a database server on a network.....	5
A database server is NOT just like a file server .....	6
<b>Frequently Asked Questions - General.....</b>	<b>8</b>
What does "multi-user hosting" mean? .....	8
What is the ND file? .....	8
What is the Alternate Mode Configuration? .....	8
What are some of the issues relative to mapped network drives? .....	8
Do we need A QuickBooks license for the File Server?.....	8
<b>Frequently Asked Questions - QuickBooks 2007 compared to QuickBooks 2006 .....</b>	<b>8</b>
In QuickBooks 2007, does the new Database Server Manager eliminate the need to open every new data file on the server before you can access it across the network?.....	8
In QuickBooks 2007, do you still need to have Power User or Administrator permissions to run QuickBooks?.....	9
Will QuickBooks 2007 still need to create .ND files for each company file?.....	9
<b>Verifying Network Configuration Inside QuickBooks .....</b>	<b>9</b>
Correcting an "Alternate" Mode Configuration .....	10
<b>Troubleshooting .....</b>	<b>10</b>
Everything is set up correctly and I have a database connection that works, but the performance of QuickBooks is much slower than our earlier version of QuickBooks. ....	11
QuickBooks reports an error 6177 (see dialog in Figure 19 below) connecting to the database and asks me to go to the server and open the data file. ....	11
Cannot open a company file on the network.....	12

## Introduction

QuickBooks 2007 uses a database to store company data, and that database can be accessed and updated by multiple users on a network at the same time. There are three typical ways to install QuickBooks:

1. Standard installation: The database will be installed on the same machine with the QuickBooks application, used by one person.
2. Multi-user hosting installation: The database and the application will be installed on one machine, and the company files on the machine can be accessed by other QuickBooks users on the network.
3. Server-only installation: Only the database will be installed on a dedicated server -- without the QuickBooks application -- and the company files on that server can be accessed over the network.

The server-only installation option is new in QuickBooks 2007, and this feature enables you to designate a machine as the central database server without installing the QuickBooks application there. Other machines on the network can share access to the company data files on this central server, and the entire office can benefit from investment in a fast, dedicated machine.

This white paper describes several different ways to install and configure QuickBooks on your network, and the benefits of each configuration. Troubleshooting hints are provided at the end. This document complements the installation guides and in-product help provided with QuickBooks 2007, and where conflicts exist please recognize that this document was published in October 2006 and we are constantly updating the application and in-product help.

## Who Should Read this Document

This document is intended for office managers and system administrators who install QuickBooks software or manage QuickBooks company files. It covers installation and administrative functions, such as automated backup routines.

# QuickBooks Configurations: Standard, Multi-User Hosting, and Server-Only Installation

*A simple installation (one user, one machine) still includes a database*

When you install the QuickBooks application on a computer, you are also installing a database. Figure 1 below shows QuickBooks installed on a single machine, for one user at a time. The familiar QBW file is just one of the files that QuickBooks uses, and it is accessed via the database. The client (application) and the server (database) run on the same Windows machine, and communicate without any complexity.

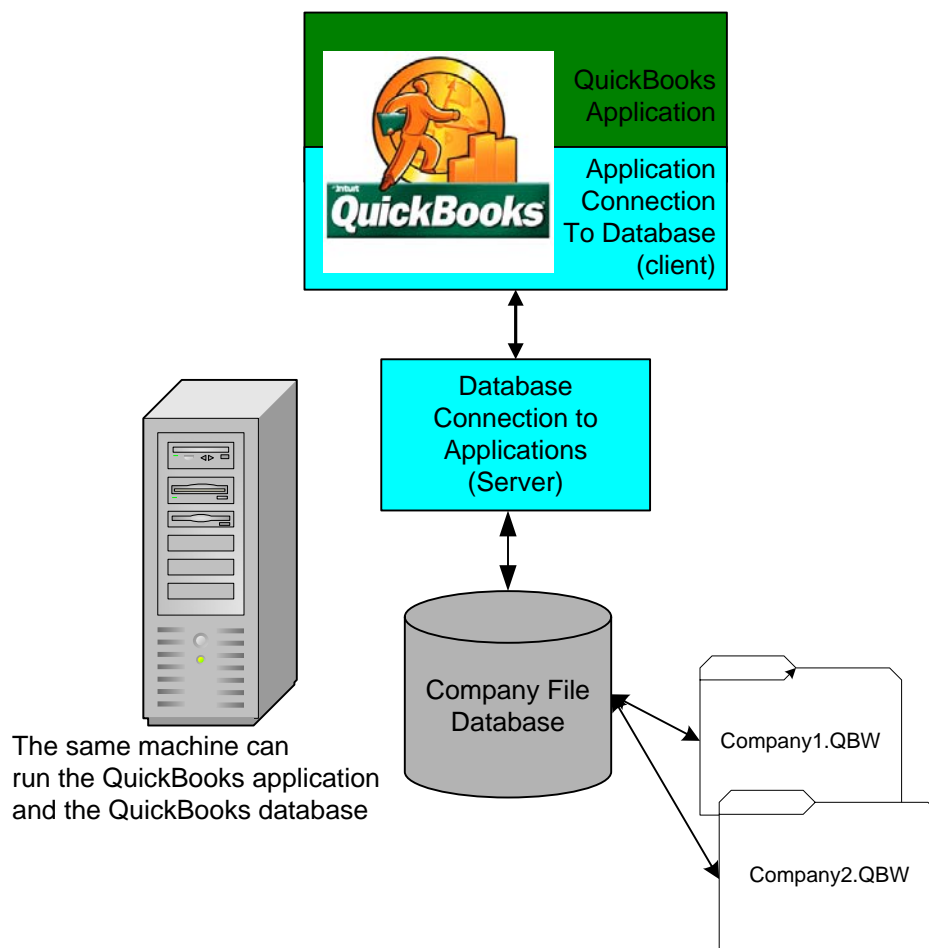


Figure 1: A Standard QuickBooks Installation, One User on One Machine

On a network, where more than one user will share a company file, you should perform a "standard" installation on all of the machines except the server.

*Using one QuickBooks machine as a host on a network*

Many businesses need to share access to QuickBooks company files among more than one user. This can be done by configuring one of the user's machines to

be a server for the other machines on the network, which we call *multi-user hosting*. To configure a network in this way, install the standard configuration on each of the client machines and choose the “multi-user hosting” installation on the shared machine.

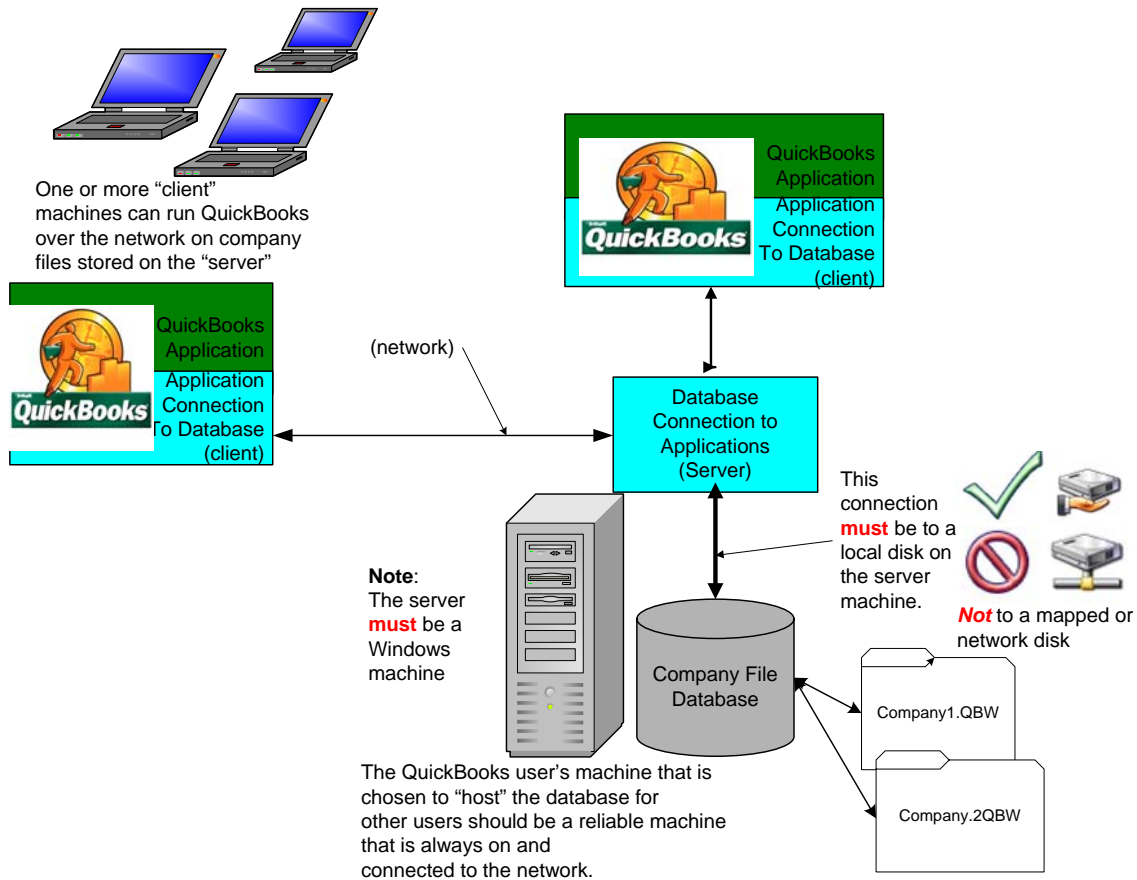


Figure 2: Multi-User Hosting, With the QuickBooks Application on the Server

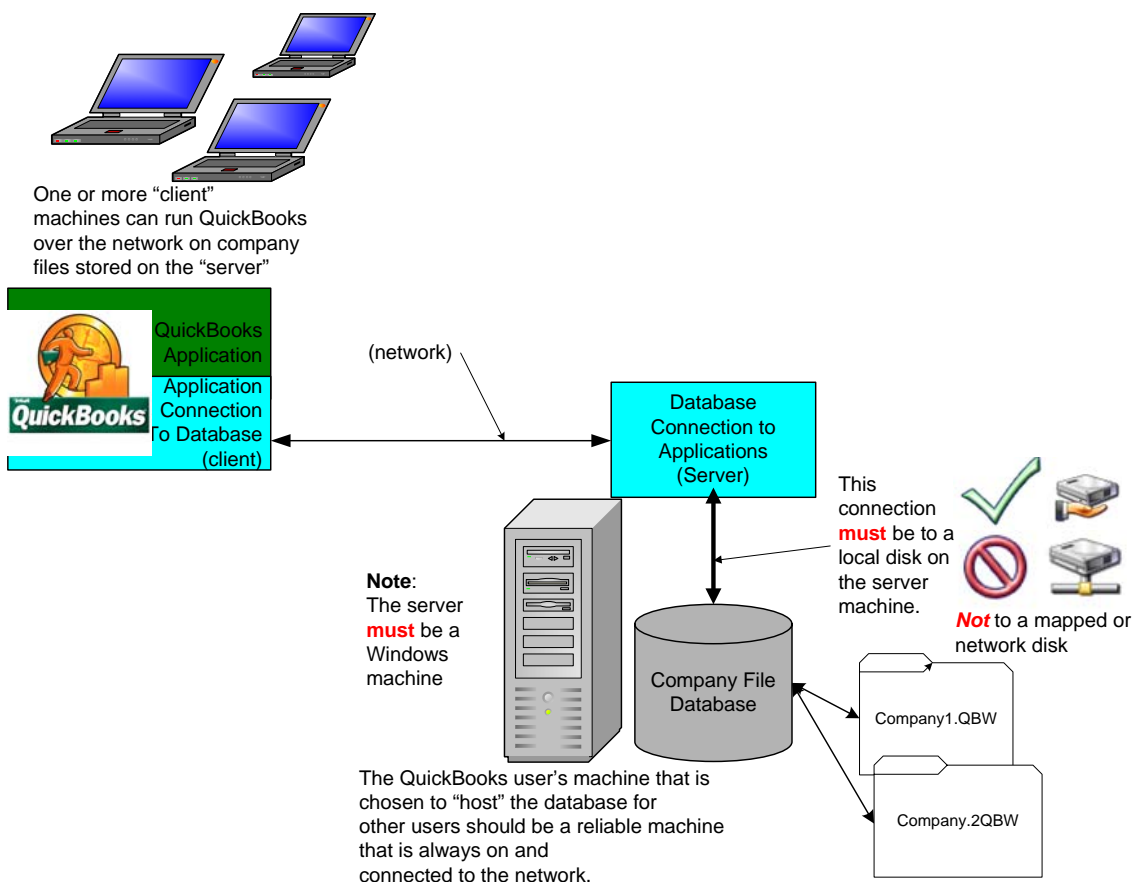
1. Share the folder containing company files on the server (use Windows file sharing tools)
2. Open a company file, and then choose to **Host Multi-User Access** (File -> Utilities menu option)
3. **Switch to Multi-User Hosting** on the server (File menu option)

### *Dedicating one machine as a database server on a network*

Some businesses which share access to QuickBooks company files on the network also have a dedicated file server, often also used to share printers or backup devices. This file server can also be used as your QuickBooks database server, but you will have to install the QuickBooks database server there. The database server is accessed over the network by the clients, and “*hosts*” the company files for those clients. Note that the database server does use processing power and memory, and database performance will be affected by the other applications running on this server.

### *A database server is NOT just like a file server*

The QuickBooks database is a running process, not a data file. **Figure 3** below shows the QuickBooks server-only configuration on a network. This *client-server* architecture enables you to configure which machines are running the QuickBooks application, and which hosts the database. The QuickBooks *client* (the functionality and interface seen by the user) can be installed on many machines, and one *server* (the machine with the database containing company data files) can be shared by many clients on a network.



**Figure 3: QuickBooks Server-Only Installation Configuration**

1. Share the folder containing company files on the server (use Windows file sharing tools)
2. Indicate the folder containing QuickBooks company files to the QuickBooks Database Manager which is launched at the end of the server installation.
3. Scan the folder (or drive) to create network information files (ND files, explained below).

When you choose the “server-only” installation option, a separate application is also installed to help manage the database. That application can be accessed via the ‘Start’->‘Programs’->‘QuickBooks Database Manager’ after installation.

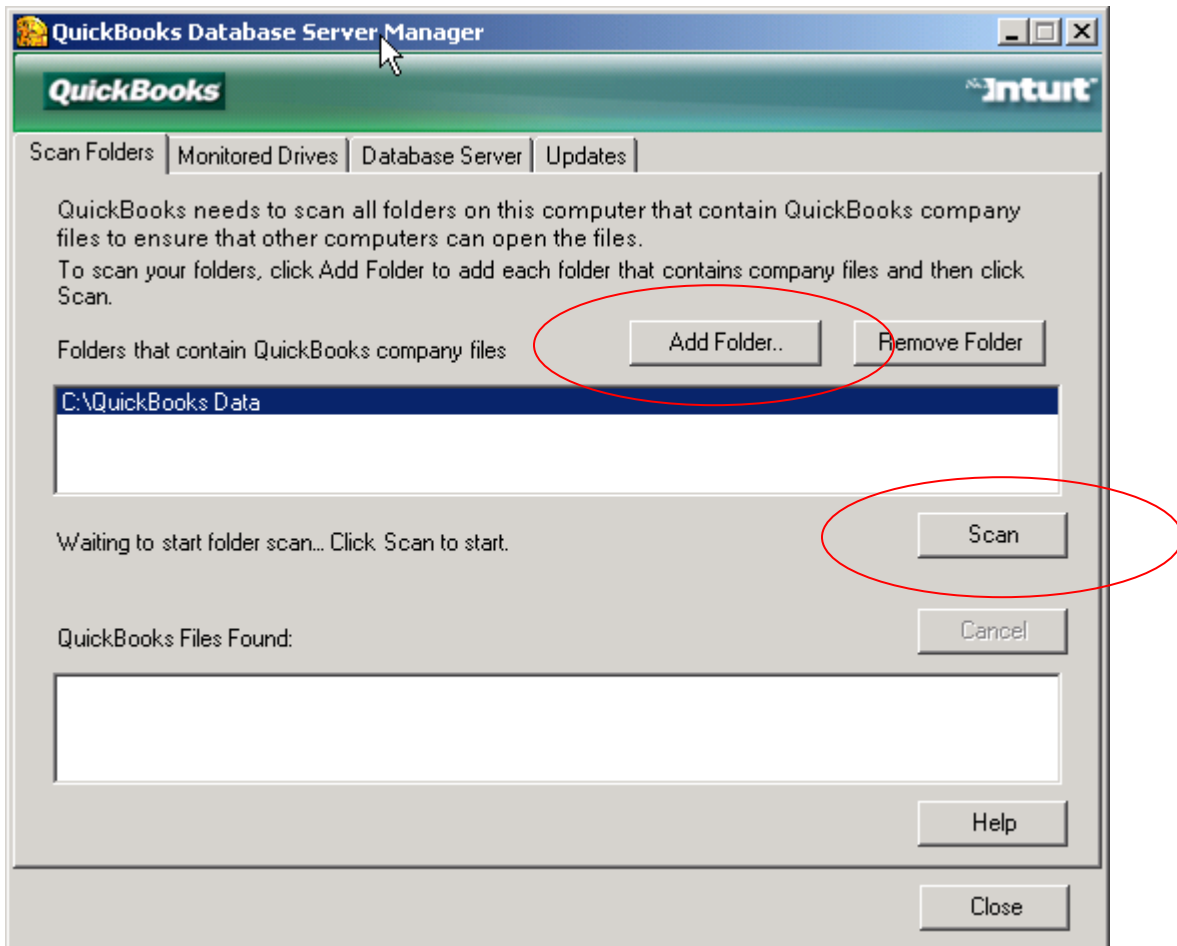


Figure 4: QuickBooks Database Manager Application

The database manager application should be left running on the server; it will automatically determine that new company files have been created on (or copied onto) the server and will create the necessary network data files.

## Frequently Asked Questions - General

### *What does "multi-user hosting" mean?*

QuickBooks must be run in single-user mode for certain operations (including backup and restore operations). When more than one person needs to access the company file at the same time, the server should be configured to "host" company files for other users. On the "File" menu, you will be able to (1) **Switch to Multi-User Hosting** when in single-user mode; or (2) **Switch to Single-User Mode** when in multi-user hosting. Essentially you are enabling other users to access the company file, akin to sharing a file on a network.

### *What is the ND file?*

ND files ("network descriptor" files) contain IP addresses and file locations for QuickBooks company files. The database server creates the ND files to help QuickBooks clients find and access company files.

### *What is the Alternate Mode Configuration?*

Keeping QuickBooks company files on a file server that does NOT have QuickBooks installed, and accessing those files across the network, has been euphemistically called "alternate" mode. Running in this configuration (either accidentally, because disks are mapped on the network and appear to be local, or intentionally) will result in very degraded performance and increased network traffic. Avoid this configuration if possible; the troubleshooting section explains how to diagnose and correct it.

### *What are some of the issues relative to mapped network drives?*

Accessing a company file on a mapped network drive can dramatically degrade performance in QuickBooks 2007. Effectively, QuickBooks needs to pull every piece of data across the network twice (once to read, once to write) for every transaction.

### *Do we need a QuickBooks license for the File Server?*

You do not need a separate license for the server unless a user is planning to actually *use* QuickBooks on this machine on a regular basis.

## Frequently Asked Questions - QuickBooks 2007 compared to QuickBooks 2006

### *In QuickBooks 2007, does the new Database Server Manager eliminate the need to open every new data file on the server before you can access it across the network?*

Yes, it will automatically detect when new files are added or created. You don't need to manually run the Database Server Manager. (In contrast, the utility we released for QuickBooks 2006 required you to manually run the utility or to use Windows Scheduling to schedule it to run on a regular basis.)



*In QuickBooks 2007, do you still need to have Power User or Administrator permissions to run QuickBooks?*

No, you can now run QuickBooks from a local machine with standard level user permissions. However, in order for the Database Server Manager to run, you concurrently need to be logged in as **administrator on the machine that is hosting QuickBooks company files**. We are actively researching this situation.

*Will QuickBooks 2007 still need to create .ND files for each company file?*

Yes. An .ND file is created to establish a proper connection between the QuickBooks data file and the database server. This occurs as a result of the new, more robust database technology implemented in QuickBooks 2006. QuickBooks 2007 will install a Database Server Manager designed to automatically detect when new QuickBooks files are created or added to that machine and create a .ND file.

## Verifying Network Configuration Inside QuickBooks

Pressing the F2 key while running QuickBooks will open the product information dialog in Figure 5 below. Information on this page tells you where your data is, where the server is, and how the network is configured.

*File Information: Location* tells you where the company file is. This should NOT be a mapped network drive.

*File Information: Server IP* tells you the network address (Internet Protocol address) of the server hosting this company file.

*File Information: Server Name* tells you the network name (assigned by your office administrator) of the server hosting this company file.

*Local Server: Server IP* tells you the network address (Internet Protocol address) of the database server.

*Local Server: Server Name* you the network name (assigned by your office administrator) of the database server.

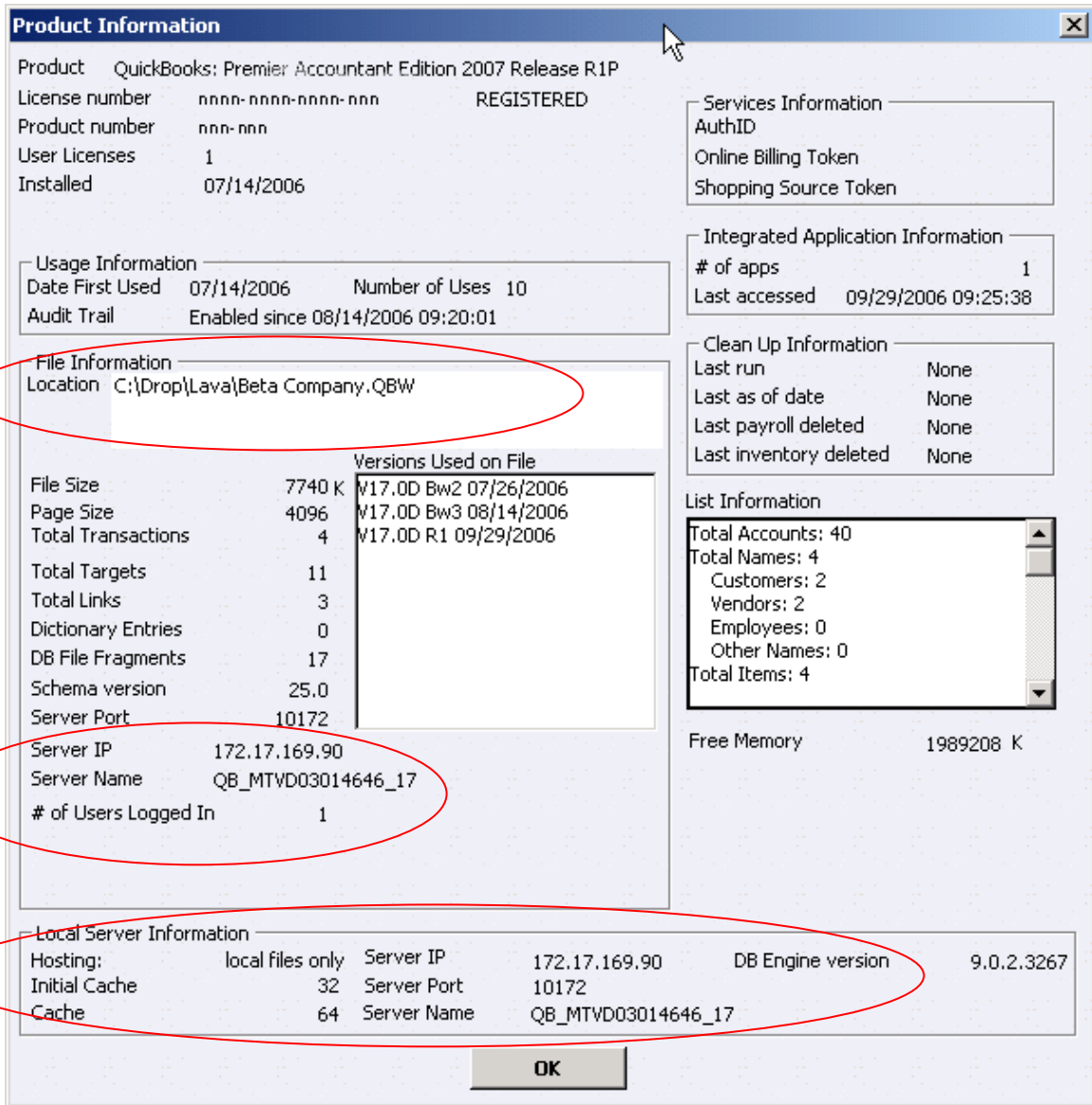


Figure 5: Product Information Dialog for a Multi-User Host Acting As A Server for Local Files

### Correcting an "Alternate" Mode Configuration

If you have installed QuickBooks, and the F2 window indicates that you are in alternate mode (file is on another machine, where QuickBooks is not installed), you should move the company files or install QuickBooks database on the file server machine.

## Troubleshooting

Here are common errors or problems that you may experience.

Everything is set up correctly and I have a database connection that works, but the performance of QuickBooks is much slower than our earlier version of QuickBooks.

Running in "alternate" mode can appear to work, but operates poorly. Verify that QuickBooks is installed on the machine where the company files are stored, and that you are using the right machine as a server (see section on "Verifying Network Configuration Inside QuickBooks" above).

QuickBooks reports an error 6177 (see dialog in Figure 19 below) connecting to the database and asks me to go to the server and open the data file.



Figure 19: 6177 Error Dialog

QuickBooks is unable to find a Network Descriptor (ND) file for the given company file; that descriptor file would contain the server name and the path to the file relative to the server. Run the QuickBooks Database Manager application on the server.

## Cannot open a company file on the network

When creating or opening a company file over a network, QuickBooks reports that it cannot access the database server (see dialog in Figure 27 below).

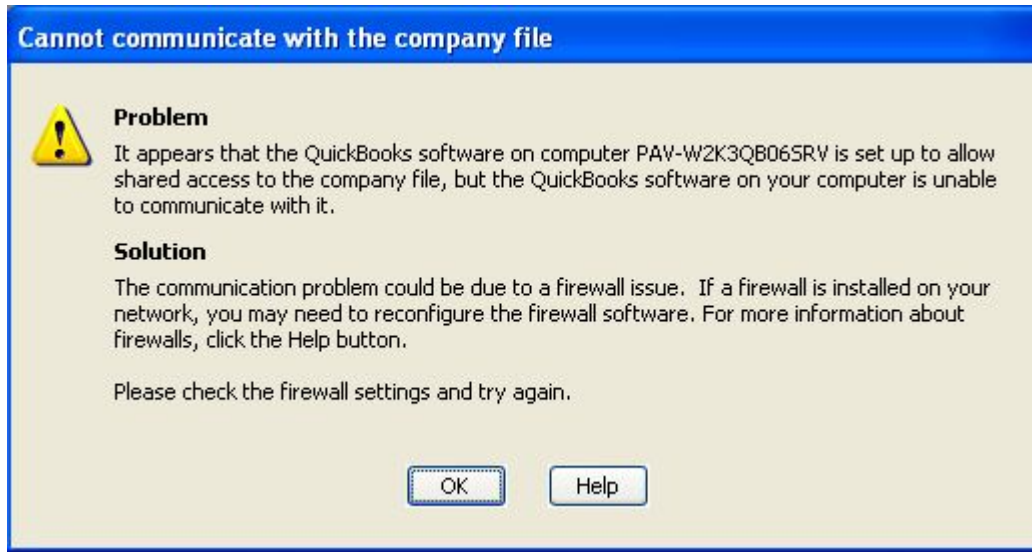


Figure 27: Unable to Communicate with Server

The solution presented in the dialog box identifies the most common cause of problems. QuickBooks communicates with its database server on TCP/IP port 10160, be sure that the firewall on both the server machine and on the machine running QuickBooks is set up to permit TCP/IP traffic on port 10160.

*George Jaquette is a product manager for QuickBooks. Comments and suggestions for improving this paper, or requests for other similar information, can be made directly at [George\\_Jaquette@intuit.com](mailto:George_Jaquette@intuit.com)*

© 2006 Intuit Inc. All rights reserved. Intuit, the Intuit logo, and QuickBooks, among others, are registered trademarks and/or registered service marks of Intuit Inc. in the United States and other countries. Other parties' trademarks or service marks are the property of their respective owners and should be treated as such.