

Installing QuickBooks Enterprise Solutions Database Manager On Different Linux Servers

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QuickBooks Enterprise Solutions and Linux

Welcome to the QuickBooks Enterprise Solutions Linux guide. Use this guide to install and configure the QuickBooks Enterprise Solutions Linux Database Server Manager on your Linux server.

To install and set up the QuickBooks Enterprise Solutions software on a Windows client or a terminal server, refer to the QuickBooks Enterprise Solutions Installation and Setup Guide.

(http://quickbooksenterprise.intuit.com/resources/white_papers.jhtml)

By running the QuickBooks Database Server on Linux, you can now store your QuickBooks data on a Linux server and use QuickBooks Enterprise Solutions running on your Windows desktop client to access that data. This enables you to utilize the server operating system of your choice to meet the needs of your business environment.

In this document, you will learn how to install QuickBooks Enterprise Solutions on the following Linux distributions:

- CentOS 5
- Debian (Lenny)
- Fedora 6 / 7 / 8
- Mandriva
- OpenSuSE 10.2
- Ubuntu 6.06 / 7.04 / 7.10 / 8.04

Note: We officially support OpenSUSE 10.2, fedora 6, and Novell Open Workgroup Suite SBE

Audience of This Guide

The QuickBooks Enterprise Solutions Linux Database Server Manager Installation Guide has been prepared for a system administrator who is familiar with the Linux operating system, understands network operations, and has permissions to properly install and configure the QuickBooks Enterprise Solutions Linux Database Server Manager.

What is the Linux Database Server Manager?

The Linux Database Server Manager contains the QuickBooks Enterprise Solutions database server, which stores the QuickBooks company files. Users running QuickBooks Enterprise Solutions 8.0 and later versions on a Windows client computer can access the QuickBooks company files to perform Enterprise Solutions operations and request data. QuickBooks Enterprise Solutions 8.0 or a later version must be installed on a user's Windows client computer so they can perform Enterprise Solutions operations and request data from the Linux Database Server Manager. To install the QuickBooks Enterprise Solutions application on a Windows client, refer to the *QuickBooks Enterprise Solutions Installation and Setup Guide*.

(http://quickbooksenterprise.intuit.com/resources/white_papers.jhtml)

Components

The Linux Database Server Manager consists of the following components:

1. **The Database server files** enable QuickBooks Enterprise Solutions users to read and write data from the QuickBooks company files located on the Linux server.
2. **The qbmonitord daemon** continually monitors the directories that contain the QuickBooks company files to ensure that each directory has a qbdir.dat file. When connected to a Linux server, the QuickBooks client uses the qbdir.dat file to generate a network definition (ND) file for each QuickBooks company file (.qbw and .qba). The ND file enables the QuickBooks client to request data and perform operations on QuickBooks company files. If a qbdir.dat file for a monitored directory is deleted or modified, the qbmonitord daemon creates a new one.
3. **The qbmonitord configuration file** (qbmonitord.conf) specifies the directories that the qbmonitord daemon monitors. These directories contain the QuickBooks company files. Each time you modify the qbmonitord.conf file, the qbmonitord daemon automatically re-reads the file and immediately monitors the specified directories.

System Requirements

The following is the hardware and software requirements for installing the Linux Database Server Manager.

Processor

Minimum: 1.2 GHz Intel Pentium III

Recommended: 2 GHz Intel Pentium IV

RAM:

Minimum: 1 GB of RAM

Recommended: As much as possible

Disk Space:

1GB for the database manager + extra space for any QuickBooks company files.

Operating Systems:

CentOS 5

Debian (Lenny)

Fedora 6 / 7 / 8

Mandriva

OpenSuSE 10.2

Ubuntu 6.06 / 7.04 / 7.10 / 8.04

Note: We officially support OpenSUSE 10.2, fedora 6, and Novell Open Workgroup Suite SBE

QuickBooks Enterprise Solutions Package Dependencies

QuickBooks Database Manager requires certain packages to be installed on the Linux machine in order for the manager to run and communicate with the Windows client machines. These packages will vary based on the distribution of Linux installed on the server. The following packages are the minimum versions that we require to run the QuickBooks Database Manager:

Gamin - 0.1.7.7 or newer or Fam - 2.7.0 or newer

Glibc - 2.5-3 or newer, or Libc6 - 2.5-3 or newer

Libgcc - 4.2.1 or newer

Libstdc++ - 4.2.1 or newer

Samba - 2.2.12 or newer

To verify packages in Linux systems that use rpm packages, type the following:
`rpm -qa | grep <package name>` (ex. Libstdc*)

To verify packages in Linux systems that use deb packages, type the following:
`dpkg --get-selections | grep -v install`

Next Step: Setting up Samba (for all Linux systems)

Samba is a software package that allows a Windows-based client to connect to Linux/Unix based servers. All Linux users, irrespective of which Linux distribution you're using, must do a Samba setup.

The directory on your Linux server that contains the QuickBooks Enterprise Solutions company files must be configured as a Samba share so that it can be mapped as a drive on your Windows client computers. The following procedure provides an example of how to create and configure a Samba share and users and set the permissions to allow Samba users to connect.

1. Go into the command prompt, make sure that you are running in SU (sometimes called Super User) mode. To verify that you are in SU mode, look at the prompt. If the prompt has a # (ex. [user@Linux]:#) symbol at the end of the prompt, you are in SU mode.
2. Add the user groups (ex. `groupadd QuickBooks`)
3. Add the user accounts (`useradd -d <home directory for the user (ex. /home/username) > -g <group you just created> <username>`)
4. Set the Samba password for the account you just created (`smbpasswd -a <user account>`)
5. Make the folder where the datafile will reside (`mkdir /qbdata`)
6. Change the ownership of the folder (`chown <user account>:<group> /qbdata`)
7. Change permissions on the folder (`chmod -R 775 /qbdata`)
8. Edit the `/etc/samba/smb.conf` file to configure the newly created QuickBooks folder to be shared through Samba. Add the following to the `smb.conf` file:

```
[qbdata] → share name to be shown in Windows
path = (local path of your QuickBooks files)
comment = (comment about the share)
valid user = (samba user accounts accessing this share)
public = no
writeable = yes
printable = no
```

create mask = 0765

9. Restart Samba by typing `/etc/init.d/samba restart`

10. Once you have the folder setup, log into a Windows machine to test to see if the folder is working properly. The first time you log into the Samba folder from a Windows machine, you should get a login prompt. At this login prompt, use a Samba username and password that you created in the above steps.

11. Once you are successful with logging into the folder, test to see if you have the appropriate permissions that you will need to work with QuickBooks files. Try creating a file, then modifying it, then deleting the file. If this works fine, the permissions are set correctly

QuickBooks Database Manager Installation

Once the Samba is setup and functioning correctly, then the next step is to download and install the QuickBooks Database Manager.

1. Download the QuickBooks Database Manager and Public Key from the following link:

<http://qbes.com/linux>

When downloading the files, save the file to the desktop, so you can find it easily. Once your done installing, you can either delete the file, or move the file to another folder to take it off your desktop.

2. If you are running a version of Linux that uses .deb type install files, you will need to download and install a program that will convert .rpm files to a .deb file. One program that can do this is called Alien.

To download Alien, go to the command prompt, switch to SU mode, then type `apt-get install alien`. This will download and install the Alien program.

Once you have the Alien program installed, convert the .rpm file to a .deb file by typing `alien qbdbm-18.0-8.i386.rpm`. When the alien tool is finished, you will have a file that will have the .deb extension.

3. To install the Database Manager, type the following commands:

For RPM installations: `rpm -ivh qbdbm-18.0-8.i386.rpm`

For Debian installations: `dpkg -i packagename` (where 'packagename' is the name of the debian package which alien created when the file was converted)

4. When the install is successfully done, you need to configure the `qbmonitord.conf` file. This file is located in the `/opt/qb/util` folder. Open the file in a text editor which you can edit the file. When you open the file, you will see that it already has an entry there, `/QBData`. If this is not the local path to the Samba share for your QuickBooks company files, you will need to edit this. Remember though, Linux is case sensitive, so any upper-case letters in the path must be typed here as well. Once you have changed the path, save and close the file.

5. Restart the syslog daemon, to allow the `qbmonitord.log` to be created.

a. **To do this in Fedora, CentOS, Mandriva and Red Hat** – type `/etc/init.d/syslog restart`

b. **To do this in Ubuntu or Debian**, type `/etc/init.d/syslog restart`

Once you have restarted the system logs, QuickBooks will be able to write to the system logs.

6. Check to see what processes are running in memory, do this by typing `ps -e`. This will show you what processes are actively running. You should see two processes running for QuickBooks, `qbdbmgrn_18` and `qbmonitord`. If only one of these processes is running, QuickBooks database manager is not running properly.

If one of the processes are not running, try typing in the following command at the command prompt: `/etc/init.d/XXX start`, where XXX is the service that isn't started.

a. If the `qbdbmgrn_18` process is not showing, then XXX would be `qbdbmgrn_18`.

b. If the `qbmonitord` process is not showing, then XXX would be `qbdbfilemon`

When you start these processes, you may encounter an error saying "touch: cannot touch `./var/log/subsys/(process name)': No such file or directory". This should be ok.

Once you start the process, type `ps -e` again to check that the process did start and is running.

7. Once the processes are running in memory, go to the folder which you are going to place your company files. You should see a file in this folder called `qmdir.dat`. If this file is not there, here's a couple of things to check:

a. check the qbmonitord.conf file to make sure you have the correct local path (case included).

b. check that the qbmonitord process is still running

8. After you have verified that the qbdir.dat file has been created, then you can copy your company file(s) into this directory, or you can create company files and place them into this shared folder.

9. Once the company files are moved onto the Linux server, open up QuickBooks Enterprise Solutions, and try to connect to the file.

Troubleshooting

When troubleshooting issues with Linux servers, always make sure that you have installed the latest QuickBooks updates for your version. The versions of QuickBooks that support Linux servers are:

QuickBooks Enterprise Solutions 8.0 and above.

QuickBooks Enterprise Solutions 7.0 R8 and above.

You can also go to the QuickBooks Enterprise Support site to check on Knowledge Base articles on Linux. The address for the Support site is www.quickbooks.com/support.

Error Message	Description
An error occurred when QuickBooks tried to access the company file. Please try again. If the problem persists, contact Intuit Technical Support and provide the following error code (-6000, -83)	This indicates that the folder where the company files are located is not being monitored by qbmonitord process. Check the qbmonitord.conf file in the /opt/qb/util folder on the Linux machine. Make sure that the directory matches the local path to the folder on the Linux server. Remember, Linux file systems are case sensitive. Also, check that the qbmonitord process is running.
QuickBooks is giving a -6176, 0 error code when trying to open the file in MU mode.	The Windows machine is having problems connecting to the Linux Server.

	<p>To solve this problem, go to the C:\Windows\system32\drivers\etc directory on the Windows client, add the IP address and the Linux server hostname or FQDN (Fully Qualified Domain Name) into the Hosts file.</p>
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Error Message	Description
<p>An error occurred when QuickBooks tried to access the company file. Please try again. If the problem persists, contact Intuit Technical Support and provide the following error code (-6000, -82)</p>	<p>User permissions have not been set properly.</p> <p>Check the Linux permissions to the company files folder have been set properly.</p> <p>Check that the user is a valid user in the smb.conf and /etc/group file, and that they have a valid Samba username and password.</p>
<p>You are trying to work with a file located on another computer and this copy of QuickBooks cannot reach the server on that computer. (H202)</p>	<p>The workstation is unable to connect to the Linux server.</p> <ol style="list-style-type: none"> 1. Make sure that port 10172 (QBES 7.0) or 10180 (QBES 8.0) are open and communicating. 2. Make sure that the qbdbmgrn_18 process is running. 3. Add the Linux server's Ip address and hostname or FQDN to the C:\Windows\system32\drivers\etc\hosts file. 4. You are trying to connect to the server using a NetBios name setup in the smb.conf file. The qbmonitord daemon does not recognize this name, it only recognizes the actual

	machine hostname.
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