

MassTransit 6.0 Installation Guide for Enterprise and Professional Servers on Macintosh

GroupLogic

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Using This Document

Before You Begin

To install MassTransit 6.0 on Mac OS X 10.4 client or later, or Mac OS X 10.4 Server or later, you will need to have:

- a USB hardware key (dongle)
- a version 6 serial number

ADB dongles are no longer supported. This new serial number is provided with your MassTransit 6.0 CD or with your download package. Please contact Group Logic Support at 703-527-7979 or support@grouplogic.com if you need to obtain either the hardware key or the serial number.

Note that if you already have MassTransit installed, you should use the MassTransit 6.0 upgrading document, not this document, which assumes you are doing a fresh MassTransit installation.

You should be logged in as a user with administrative privileges (but not root) to install MySQL and MassTransit 6.0.

System Requirements

For a complete listing of all system requirements, please see the MassTransit ReadMe. We strongly recommend that you contact the Group Logic MassTransit team to consult with them prior to purchasing or upgrading a system to run MassTransit. Using their expertise in this area, the team can evaluate with you your specific needs and determine the optimal system configuration for use with MassTransit under those conditions. Group Logic has discontinued support for Mac OS 9 and Mac OS 10.3.9. Only the MassTransit Web Client will be supported on Mac OS 10.3.9.

Note on Intel Mac support: MassTransit can be installed and run on Macs that use Intel CPUs. MassTransit is a PowerPC-based application that runs using Rosetta emulation. The MassTransit 6.0 web client plug-in runs natively on Intel Macs.

Install MySQL 5

Prior to installing MassTransit, you will need to install MySQL 5.0.78; this is also provided on your MassTransit 6.0 CD or with your download package. MassTransit is dependent upon MySQL, so if it is not running, then MassTransit cannot be installed. MassTransit 6.0 requires MySQL 5.0.

Note: If you have an earlier version of MySQL already installed, you must restart MySQL after you have successfully upgraded to MySQL 5.0.78 to complete the installation. For additional information, go to <http://dev.mysql.com/doc/refman/5.0/en/upgrade.html>.

Installing MySQL

Follow the below instructions to install and launch MySQL.

1. Unzip the MySQL installation files by double-clicking the appropriate mysql .dmg file located on your CD or with your download package. A directory opens containing the required installers. To install on an Intel Mac OS 10.4, use the mysql-classic-5.0.78-osx10.4-i686.dmg. To install on a PPC Mac OS 10.4, use the mysql-classic-5.0.78-osx10.4-powerpc.dmg. To install on an Intel Mac OS 10.5, use the mysql-classic-5.0.78-osx10.5-x86.dmg. To install on a PPC Mac OS 10.5, use the mysql-classic-5.0.78-osx10.5-powerpc.dmg.
2. To install the MySQL engine, double click the mysql-classic-5.0.78 .pkg file.
3. An "Introduction" window appears. Select the **Continue** button to proceed.
4. The "ReadMe" window appears. After reading, select **Continue** to proceed.
5. The "License" window appears. Read the License and select **Continue** to proceed.
6. A dialog then appears asking you to accept the terms of the agreement. Select the **Agree** button to continue or select the **Disagree** button to cancel the installation.
7. If the "Select Destination" window appears, select your desired destination. It is highly recommended to use the default destination. Once you make your selection select **Continue**.
8. The "Installation Type" window appears; select **Install** for the basic installation. You will need to authenticate using your Mac administrative password to allow the installation to proceed.
9. Once the installation is complete a window appears stating the software was successfully installed. Select the **Close** button.

MySQL has now been successfully installed; if you installed to the default location, it is located in the /usr/local/ folder.

Configure MySQL to launch when your machine starts up, using the following steps.

10. Double click MySQLStartupItem.pkg.
11. An "Introduction" window appears. Select the **Continue** button to proceed.
12. The "Select Destination" window appears next and the default destination is highlighted. Make your selection and select the **Continue** button.
13. The "Installation Type" window appears; select **Install** or **Upgrade** for the basic installation.
14. Once the installation is complete a window appears stating the software was successfully installed. Select **Close**.

Set the root password using the following steps. You should use a strong root password of 8 or more characters with a variety of letters, numbers, and symbols.

15. Open the Terminal application in the Applications/Utilities folder.
16. At the terminal prompt, enter the following commands to restart the MySQL server with the new settings. Note that the first command may fail if MySQL is not running; if this occurs just run the second command.


```
sudo /Library/StartupItems/MySQLCOM/MySQLCOM stop
sudo /Library/StartupItems/MySQLCOM/MySQLCOM start
```
17. Enter the following command:


```
/usr/local/mysql/bin/mysql -uroot
```
18. Enter the following at the MySQL prompt:

```
UPDATE mysql.user SET Password=PASSWORD('MyNewPass') WHERE User='root';
FLUSH PRIVILEGES;
Quit;
```

Enter your desired root password in place of MyNewPass in the first command. Your MySQL root password has now been changed. You may close the Terminal.

Make the necessary customizations to the MySQL installation using the following steps.

19. Open the Terminal application in the Applications/Utilities folder.
20. Enter the following command:
`sudo pico /etc/my.cnf`
21. Type your administrative password for the machine at the password prompt.
22. If the following is not the first line of the file, add it to the top of the file.
`[mysqld]`
23. Add the following line of text on the second line of the file (right after the `[mysqld]`):
`temp-pool=0`
24. Type Control-X to exit. Type Y at the prompt to save your changes. Type Enter at the prompt to use the default file name.
25. At the terminal prompt, enter the following commands to restart the MySQL server with the new settings.
`sudo /Library/StartupItems/MySQLCOM/MySQLCOM stop`
`sudo /Library/StartupItems/MySQLCOM/MySQLCOM start`

MySQL is now correctly configured.

Security Configurations for MySQL

It is critical that the directory where the MySQL database files are stored (`/usr/local/mysql/data` by default) and the Mac temp directory (`/tmp` or `/var/tmp`) be excluded from virus scan and server backups. Both virus scan tools and backup tools can lock key files in these folders and interrupt operation of the MySQL server, and by extension, MassTransit.

To backup the MySQL databases, it is recommended that you use the MySQL or other standard tools to automatically save the backup files to a directory or volume that can then be processed by your backup or archiving solution.

By default, MySQL uses TCP/IP port 3306 to accept client communications. It is recommended to restrict traffic on this port by setting appropriate firewall rules. Normally, the only remote computers that should be allowed to access MySQL on the MassTransit server are those running the MassTransit Administrator (or those running the MassTransit Engine or MTWeb in the rare configurations where MySQL is not running on the same server as MassTransit).

Installing MySQL GUI Tools

Below are instructions for installing the MySQL GUI tools. Two of the most commonly used tools for administering and troubleshooting the MassTransit server are the MySQL Administrator and the MySQL Query Browser.

If you are upgrading from MySQL 4 to MySQL 5, you will need to install the updated versions of the MySQL Administrator and MySQL Query Browser. The tools are available in the `mysql-gui-tools-5.0-r12-osx10.4-universal.dmg` disk image in the MySQL folder of your MassTransit 6.0 CD or with your download package.

To install the MySQL GUI Tools

1. Double-click "`mysql-gui-tools-5.0-r12-osx10.4-universal.dmg`". A directory opens containing the MySQL Tools icon.

2. Install the tools by dragging the MySQL Tools icon to your Applications folder.

Installing the MySQL.PrefPane

To start and stop the MySQL server from your System Preferences, you will need to install the MySQL Preference Pane.

1. Double-click MySQL.prefPane. This is located in the same directory that opened after you double-clicked the appropriate mysql .dmg file on your CD or with your download package.
2. A dialog appears asking if you want to install the preference pane for just you or all users. Select your option and select the **Install** button.
3. The MySQL preference pane opens and shows you MySQL is running and that the checkbox **Automatically Start MySQL Server on Startup** is selected.



Install MassTransit

Installing MassTransit

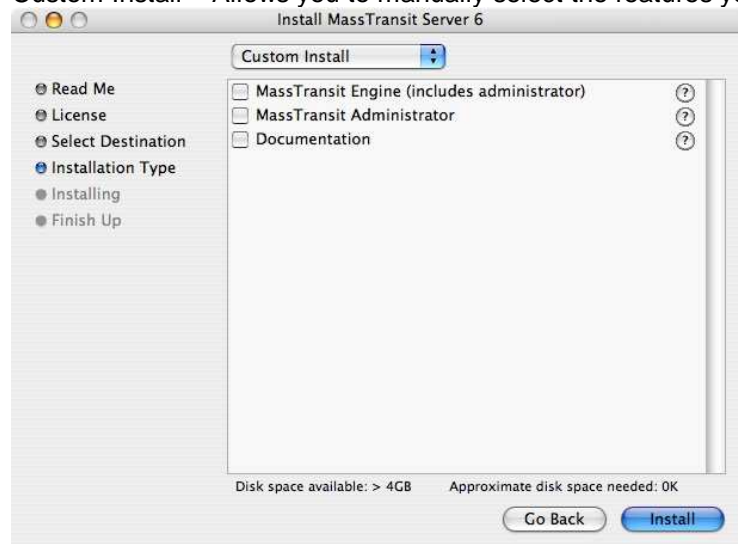
1. Verify MySQL 5.0.78 is running. You can determine this via either the MySQL Preference Pane in System Preferences or look at the Activity Monitor.

NOTE: If MassTransit is running on a remote server, separate from where MySQL is installed you will need to execute the following command on the MySQL command prompt before installing MassTransit:

```
GRANT ALL PRIVILEGES ON *.* TO 'root'@'<REMOTE IP ADDRESS>' identified
by '<PASSWORD>' WITH GRANT OPTION
```

In the above statement, replace <REMOTE IP ADDRESS> with the MassTransit Server IP Address and replace '<PASSWORD>' with the root MySQL password.

2. Double click **Install MassTransit Server 6** located on your CD or with your download package to launch the InstallShield Wizard.
3. The “ReadMe” window appears first. Read it and select the **Continue** button to proceed.
4. The “License Agreement” window appears next. Once you have read and agreed with the license agreement, select **Continue** to proceed.
5. A dialog then appears asking you to accept the terms of the agreement; select **Agree** to continue or **Disagree** to cancel the installation.
6. The “Select Destination” window appears next. The default is the Applications folder; you may select a different destination. Once you make your selection select the **Continue** button.
7. The “Installation Type” window appears next. You have two choices available via the spin box: Easy Install or Custom Install.
 - a. Easy Install (default) – Installs the MassTransit Engine, MassTransit Administrator, and Documentation.
 - b. Custom Install – Allows you to manually select the features you want.



- i. Checking the MassTransit Server Engine will install both the Engine and the MassTransit Administrator; this is necessary so you can configure the Engine.
- ii. Checking just the MassTransit Administrator will install just the Administrator. Starting in MassTransit 5.0, the file transfer engine runs as a headless application and can be accessed for viewing and administration by a separate

application, the MassTransit Administrator. MassTransit Enterprise and Professional allow local and remote Administrators to connect. When remote administration is enabled, the MassTransit server can be administered from both Macintosh and Windows machines. Additional details can be found below in the Configuring Remote Administration section.

- iii. Checking the MassTransit Documentation will install manuals and documentation.
 - c. Once you have made your selection, select **Install** to continue.
8. While installing, the “Registration Preferences” dialog appears. All fields are mandatory.

- a. Enter your **Server Name**; this is the name of the computer where you are installing MassTransit.
 - b. Enter the name of your **Organization**.
 - c. Enter the **Serial Number** provided by Group Logic.
 - d. Select **OK** to continue.
9. The “MySQL Settings” dialog appears next.

- a. In the MySQL MassTransit Account section, the following information is required:
 - i. Hostname: [default: localhost] Leave this setting configured as “localhost” so MassTransit can access the local database. *Do not use your local IP address.* If MassTransit is on a remote server, enter the IP address of the machine where MySQL is installed.
 - ii. Port: [default: 3306] Leave this setting configured to “3306” unless you have changed the TCP port used by the MySQL database server (this is rare).
 - iii. Username: [default: masstransit] This will be the name of the user account created in MySQL that MassTransit will use to access the database. You may change it to any username you wish. *Do not use root.*
 - iv. Password: This will be the password for the user account created in MySQL that MassTransit will use to access the database. You may change it to any password you wish.
 - v. “Enable remote login for this account”: [default: not selected] If you wish to allow administration of the MassTransit server using the MassTransit Administrator from other machines, you will need to check this option. If it is not checked, your MassTransit server will not allow remote administration, although you will be able to administer the server locally. If you wish to allow remote administration, it is recommended that you enable it at this time; if you do not enable it now, you will later have to manually configure the proper permissions for both MassTransit

- and MySQL. Instructions on how to manually configure this can be found below in the [Configuring Remote Administration](#) section of this document.
- b. Enter your MySQL root password. If you did not, leave this field blank. The root password is required so that the MassTransit installer can create the new user account in MySQL.
 - c. Select **OK** to continue.
10. Once the installer validates the entered information, a dialog appears stating, “MySQL account configured successfully!” Select **OK** to continue.
11. Two additional dialogs will appear while MassTransit is being installed:
- a. The first dialog will ask, “Do you want to automatically optimize your network settings for broadband?” Select **Yes** to optimize the TCP/IP stack for MassTransit protocol connections. Select **Yes** or **No** to continue.
 - b. The second dialog will ask, “MassTransit stores files received from and files being sent to other contacts in the User Mailboxes folder. Do you wish to share this folder with File Sharing?” Sharing your user mailboxes folder will allow users to connect from other machines and access files in the standard user mailboxes for MassTransit. If you do not share this folder now, you will need to manually share the folder after MassTransit is installed if you want to allow remote access to these folders. Select **Yes** or **No** to continue.
12. The “Finish Up” window appears when the installation is complete. You have two options:
- a. Select **Quit** to exit the installer.
 - b. Select **Continue** and the “Installation Type” window will reappear; you can install additional MassTransit features.

Troubleshooting

Problem: I did not get a dialog stating “MySQL account configured successfully!” while installing MassTransit.

Solution:

1. Is MySQL running? You can determine this via either the MySQL Preference Pane in System Preferences or look at the Activity Monitor.
2. Did you enter the correct MySQL Root password?
3. Did you incorrectly leave the MySQL Root password field blank?
4. If MySQL is on a separate server, did you follow the directions for remote server install in step 1?

Launching the MassTransit Engine

Double click the MassTransit Engine file located in the root MassTransit folder; the default location is /Applications/MassTransit Server 6 Folder/. The MassTransit Engine icon appears on the dock and remains there while running.

Shutting Down the MassTransit Engine

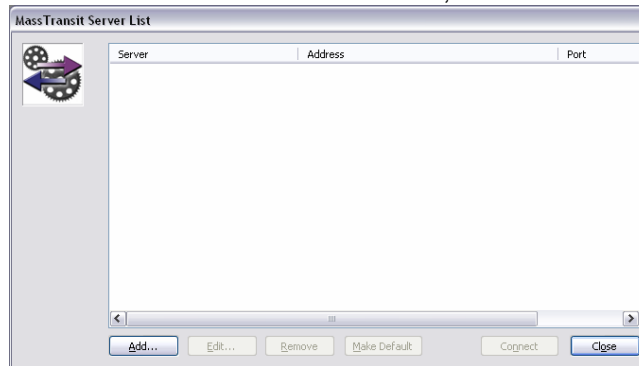
To shut down the MassTransit Engine, select the MassTransit Engine from the dock, go the **MassTransit Engine** menu and select **Quit MassTransit Engine**.

Launching the MassTransit Administrator

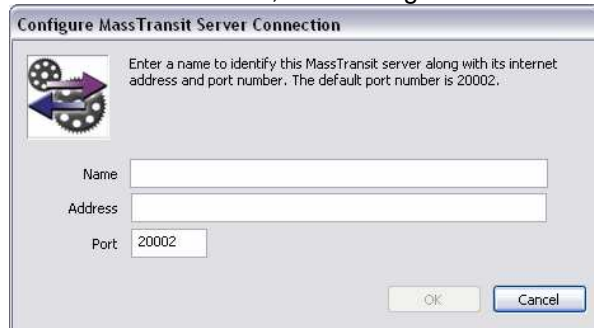
1. Double click the MassTransit Administrator file located in the root MassTransit folder; the default location is /Applications/MassTransit Server 6 Folder/. The splash screen appears for a moment and then the MassTransit Administrator icon appears on the dock and remains there while running.
2. To connect to your MassTransit server, go to the **File** Menu and select **Connect to Server**; the “MassTransit Servers” window appears.



3. Add the server you wish to connect to:
 - a. Select the **Edit Server List...** button; the “MassTransit Server List” appears.



- b. Select the **Add** button; the “Configure MassTransit Server Connection” dialog appears.



- c. Add the name and address of the server you are connecting to; all fields are required. If Remote Administration is enabled and you are connecting to a remote server, enter that machine’s information; see the [Remote Administration](#) section of this document for additional information.

- i. Enter the server **Name** (or localhost if you are connecting locally); this is just a name to identify the server you're connecting to.
 - ii. Enter the server IP **Address** (or localhost if you are connecting locally).
 - iii. Enter the **Port**. Use 20002 (the default) unless the MassTransit server has been configured to use a different port.
 - d. Select **OK** to continue.
 4. After selecting **OK** you return to the "MassTransit Server List" window and see the server you just created.
 5. To connect, highlight the server entry and select **Connect**.
Note: You will be able to connect to the server only when the Engine is running, otherwise a dialog will appear stating that a connection cannot be made to the server.
 6. On connection, the "MassTransit" toolbar appears with the following buttons: **Contacts, Status, Files, Log, and Setup**. Click any button to go to the corresponding window.

HINT: If you always want the MassTransit Administrator to connect to the same server, go to **Edit Server List...** and highlight that server in the list. Then click the **Make Default** button and click **Close**. Now when you launch the MassTransit Administrator it will automatically connect to the default server.

Shutting Down the MassTransit Administrator

To disconnect from the server only, go to the **File** menu and select **Disconnect From Server**. This will not shut down the Administrator. To exit the MassTransit Administrator go the **MassTransit Administrator** menu and select **Quit MassTransit Administrator**. If you are currently connected to a server, you will be disconnected before the Administrator quits.

Troubleshooting

Problem: The MassTransit Engine shut down immediately upon launch.

Solution:

1. Open the Console located at: /Applications/Utilities/. Look at the console.log file.
2. Open the log in the root MassTransit folder: /Applications/MassTransit Server 6 Folder/Logs/. The file names are timestamp folders, so open the most current log file, i.e. log-3.20.06.11.36.AM.txt.
3. Open the logs located at: ~/Library/Logs/Crash Reporter/. Look for a file with the following name: MassTransit Engine.crash.log.
4. Make sure you have MySQL 5 installed. MassTransit 6.0 will not run if MySQL 4 is installed.
5. Verify that MySQL is running.

Problem: The MassTransit Administrator shut down immediately upon launch.

Solution:

1. Verify the Engine is running. When the engine is not running, a MassTransit dialog appears stating, "An error occurred with MassTransit: Unable to connect to the MassTransit server."
2. Open the Console located at: /Applications/Utilities/. Look at the console.log file.
3. Open the log in the root MassTransit folder: /Applications/MassTransit Server 6 Folder/Logs/. The file names are timestamps, so open the most current log file, i.e. UI-log-3.20.06.11.36.AM.txt.
4. Open the logs located at: ~/Library/Logs/Crash Reporter/. Look for a file with the following name: MassTransit Administrator.crash.log.

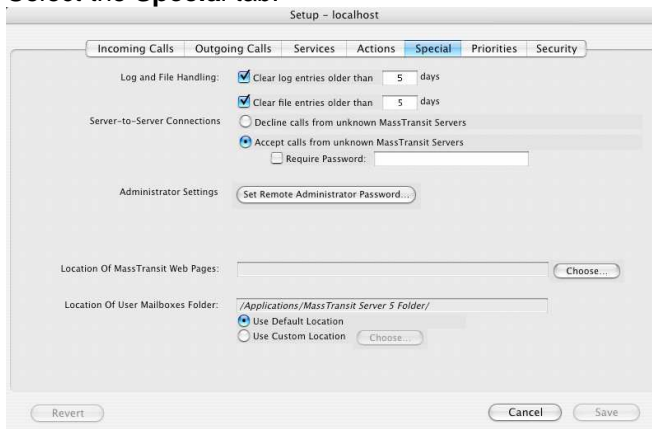
Configuring Remote Administration of MassTransit

Starting in MassTransit 5.0, the file transfer engine runs as a service and can be accessed for viewing and administration by a separate application, the MassTransit Administrator. MassTransit Enterprise and Professional allow local and remote Administrators to connect. When remote administration is enabled, the MassTransit server can be administered from both Macintosh and Windows machines. Remote administration must be enabled for both MySQL and the MassTransit Engine.

The easiest way to configure remote administration for MySQL is to check the checkbox when you install MassTransit 6.0. If you already have MassTransit installed and want to enable Remote Administration, use the following instructions. Both MassTransit and MySQL will need to be configured before remote connections will be accepted.

Configuring Remote Administration in MassTransit

1. Via the MassTransit Administrator connect to the local server.
2. Select the **Setup** button on the toolbar.
3. Select the **Special** tab.

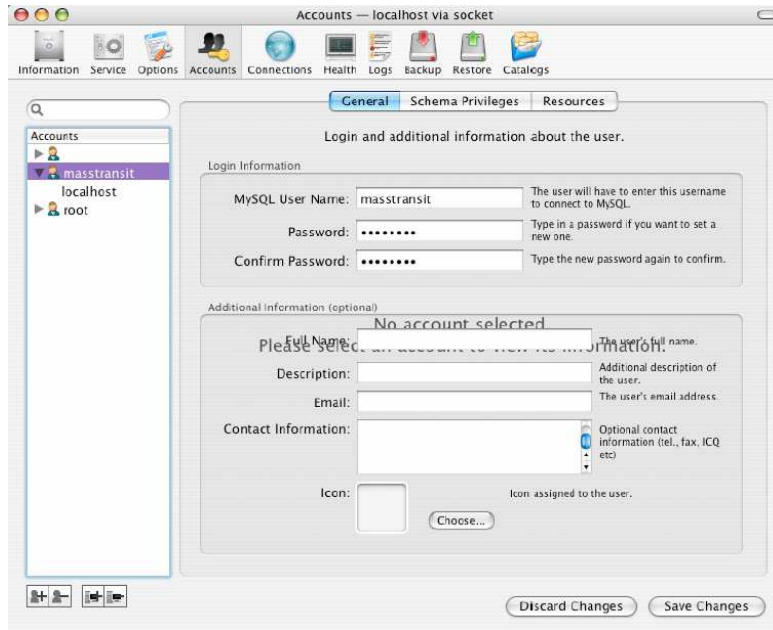


4. Click the **Set Remote Administrator Password...** button.
5. The “Enter Password” dialog appears; enter your password. This password will have to be entered by a Remote Administrator when attempting to connect to your server.
6. Select the **OK** button and now any Remote Administrators with the password can connect to your server.

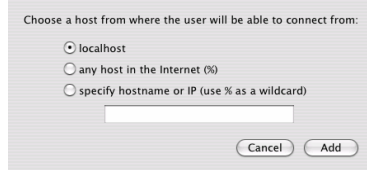
Configuring Remote Administration in MySQL

Note: This is unnecessary if you selected the **Enable remote login for this account** during installation.

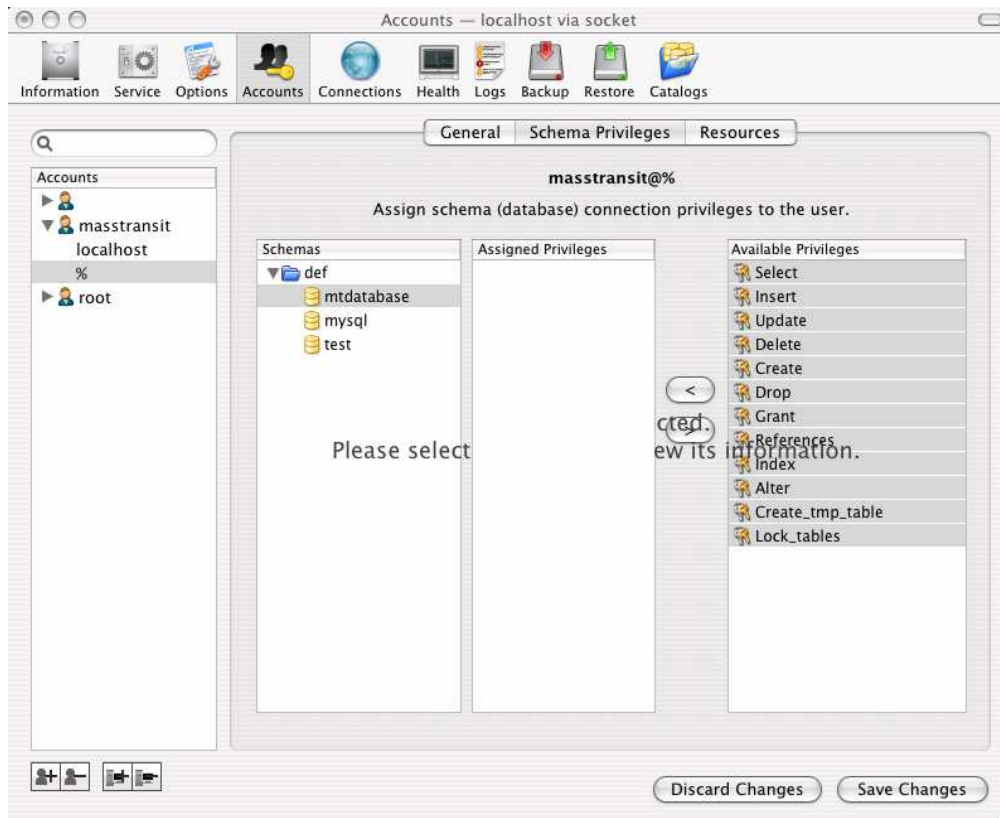
1. Launch the MySQL Administrator.
2. Go to the Accounts tab.
3. To the left of General tab, expand and highlight the “masstransit” account. This account may have a different name depending on the username you entered on the “MySQL Settings” dialog during the installation of MassTransit.



- a. Select the Add a host...button to add a host to the masstransit account. This is the third button from the left below the Accounts listing.
- b. A dialog appears with three options:



- i. **localhost** – only the local machine (this won't help you for remote administration).
 - ii. **any host in the Internet (%)** - this will allow any machine to connect to the database.
 - iii. **specify hostname or IP (use % as a wildcard)** – this allows you to specify a specific hostname or IP address from which remote administration will be allowed. This is more secure than “any host”, but you will need to add a host for every machine from which you wish to administer the MassTransit server.
 - iv. Select **Add** to continue.
- c. The password on the General tab auto-populates the MySQL password used when you installed MassTransit. Remote administrators will not need to know this password to connect.
 - d. Select the **Save Changes** button.
4. Verify the host you just created in the Accounts section is highlighted and select the Schema Privileges Tab.
 - a. In the Schemas section, highlight mtdatabase.
 - b. Go to the Available Privileges Section and highlight all of the items listed.



- c. Click the < button so all of the Available Privileges become Assigned Privileges.
 - d. Select the **Save Changes** button.
5. Go to the Resources tab.
 - a. In the Max. Questions: field enter the number of queries the user can execute within one hour. "Unlimited" is the default when the MassTransit installer creates this account.
 - b. Select the **Save Changes** button.

Now that you have configured both MySQL and MassTransit, Remote Administration is enabled.

Troubleshooting

Problem: A dialog appears stating, "An error occurred with MassTransit: Remote Administration is disabled because the required password has not been configured."

Solution: Remote Administration is not enabled in MassTransit; follow [steps 1-6](#) to configure it.

Problem: A dialog appears stating, "An error occurred with MassTransit: Failed to connect to server due to problems initializing – most likely a database issue."

Solution: Remote Administration is not enabled in MySQL; follow [steps 1-5](#) to configure it.

Web Configuration for Enterprise Servers Only

For information about configuring MassTransit for use with web servers, see the Web Configuration Instructions document located on the MassTransit Latest Releases web page in the MassTransit 6.0 Documentation section: <http://www.grouplogic.com/files/glidownload/mtreleases.cfm>.

Auto-starting MassTransit

For information about configuring MassTransit to launch automatically when your machine starts up, see the following Knowledge Base article located at:

http://www.grouplogic.com/knowledge/index.cfm/fuseaction/view_Bug/docID/223.

Other MassTransit 6.0 Resources

Go to <http://www.grouplogic.com/files/mt/60/OtherMassTransit60Resources.html> for additional articles to help you set up, configure, and use MassTransit 6.0 and its new features. The [Group Logic Knowledge Base](#) contains many articles that provide detailed information on MassTransit 6.0 and its features and components. The HTML version of this file, "OtherMassTransit60Resources.html", is provided with your MassTransit 6.0 CD or with your download package.

Group Logic MassTransit Technical Support

Please contact Group Logic Technical Support if you need assistance with installing MassTransit. Email support@grouplogic.com or call 703-527-7979. For a complete listing of the latest official release versions and documentation, go to <http://www.grouplogic.com/files/glidownload/mtreleases.cfm>.