Singularity

MySQL Setup

Empowering People with Information that *Moves*

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Version 1.0 - M2

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Revision History

Name	Date	Reason For Changes	Version
Tom Rose	2001-01-09	M2 Release	1.0

Introduction

The purpose of this document is to define quick setup and configuration procedures for the MySQL Database. It is not intended to replace any of the MySQL installation manuals, and is only meant accelerate the installation and configuration procedures for the database for a quick setup. Singularity can be run on many RDBMS platforms open source and commercial however, MySQL is the first database that has been tested.

Singularity source contains no specific code for MySQL or any other RDBMS. However, Singularity does package the MySQL client libraries for setup convenience. This is specifically allowed via the FLOSS license provided by MySQL AB. http://www.mysql.com/company/legal/licensing/foss-exception.html Because of this license, the mere inclusion of the client libraries does not in any way affect the terms Apache 2.0 license that Singularity is distributed under.

MySQL Windows Install

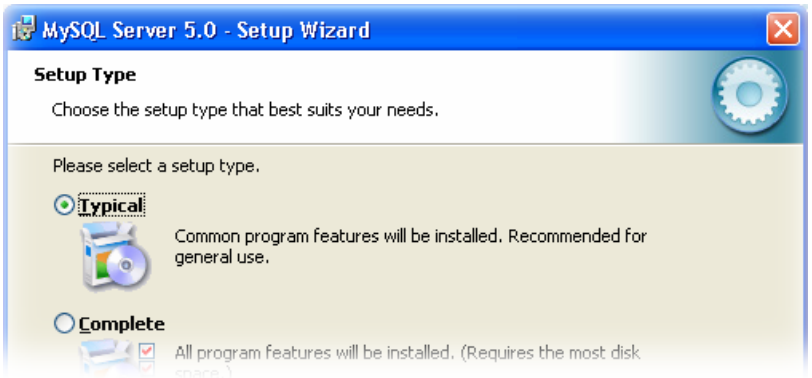
If you already have MySQL 4.x or 5.x installed Skip to "**Database Configuration**."

MySQL Can be obtained from:
MySQL Home (http://dev.mysql.com/)
MySQL 5.0 Documentation (http://dev.mysql.com/doc/refman/5.0/en/index.html)

MySQL can be obtained In either a GNU Public License or Commercial License.
The only configuration constraint that Singularity has on the MySQL Configuration is the use of InnoDB tables instead of MyISAM. This constraint is because MyISAM tables will not support database transactions.

For your convenience, the following are steps and screen shots from the windows installation of MySQL for a typical installation and configuration. If there is a step that is missing just take the defaults for that screen if you are unsure.

1. Install MySQL 5.x using the "Typical" installation option.

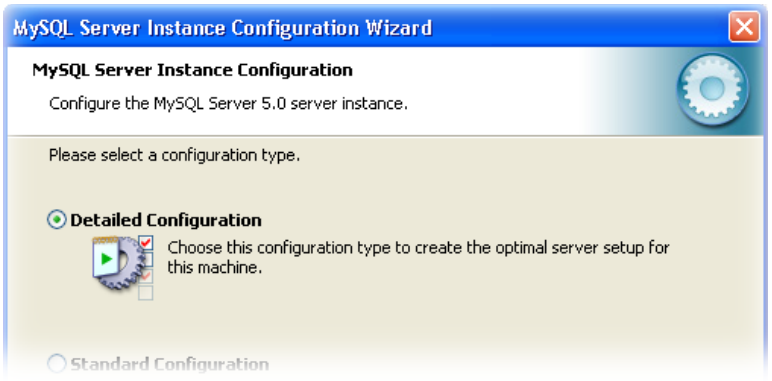


2. MySQL.com Sign-Up

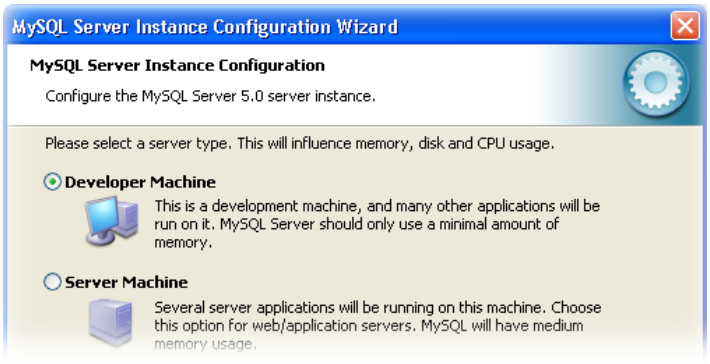
Select desired option. If unsure please "Skip Sign-Up"

3. After the database installs the final screen will ask to configure the server. Select the "Configure the MySQL Server now" option, click next.

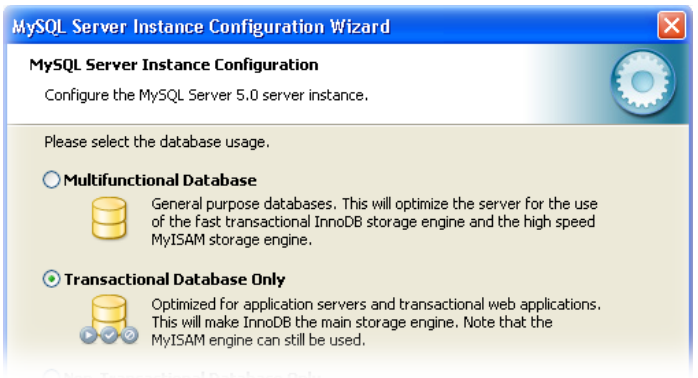
4. Select “Detailed Configuration”



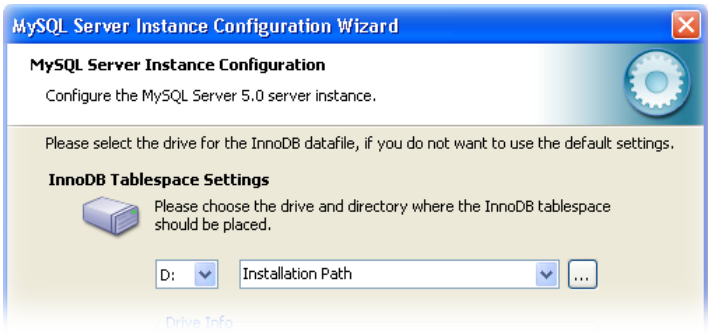
5. Select “Developer Machine” for the lowest memory footprint.



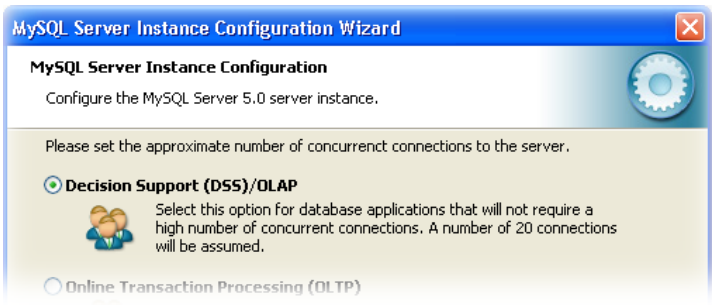
6. Select “Transactional Database Only” this will make all default databases InnoDB.



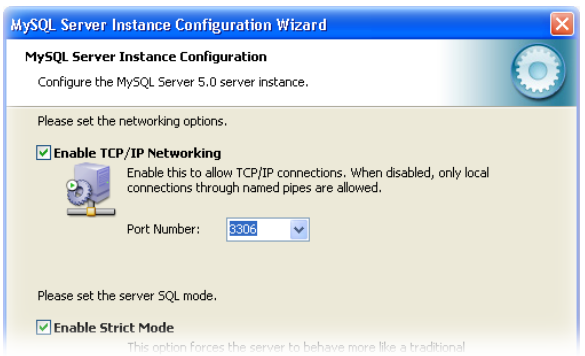
7. You can take the defaults of modify to individual preference.



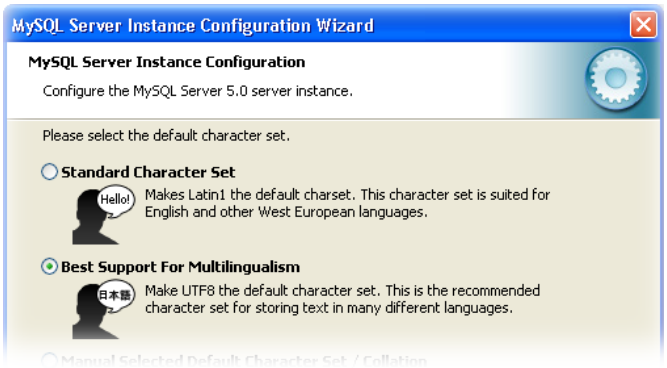
8. Default of 20 connections is fine.



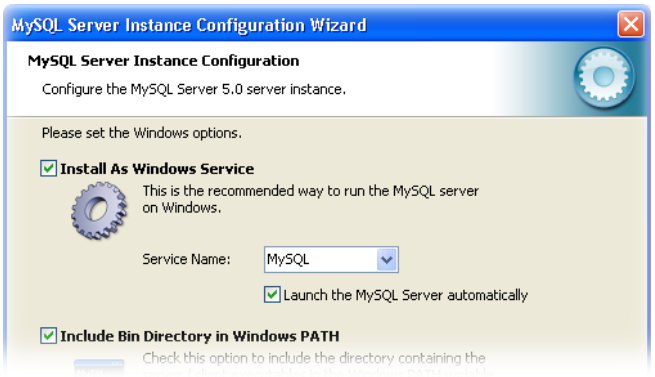
9. Default port and “Enable Strict Mode” Remember the port number if something else is selected it is required for Singularity Installation.



10. Select UTF-8 for multinational character support. Not required unless you use a multi-byte language. However, UTF-8 supports all language character sets.



11. Defaults are fine, or make whatever choices you like.

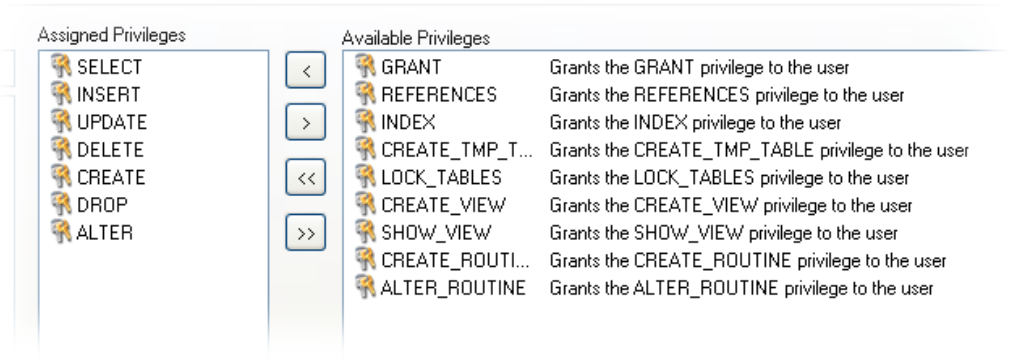


12. Modify the security setting, add a root password, leave remote root access un-checked, and do not allow anonymous access. These are not requirements of Singularity, just best practice guidance.

Also Download and install MySQL Administration tool to easily create user accounts, and databases that are required in the following steps. Or you can create them from the command line MySQL tools.

Database Configuration

Create an InnoDB database of any name (i.e. singularity), just remember what it is as you will need it during the installation of Singularity. If you followed the install steps outlined in this document then this is the default database type for the MySQL installation. Also create an account with **Select**, **Insert**, **Update**, **Delete**, **Create**, **Drop**, and **Alter** privileges on the Singularity database. The Create, Drop, and Alter privileges are only used during the install process under the same account, and are not required for the runtime use of Singularity. So these three privileges can also be removed after installation of Singularity.



This completes the database installation and configuration.