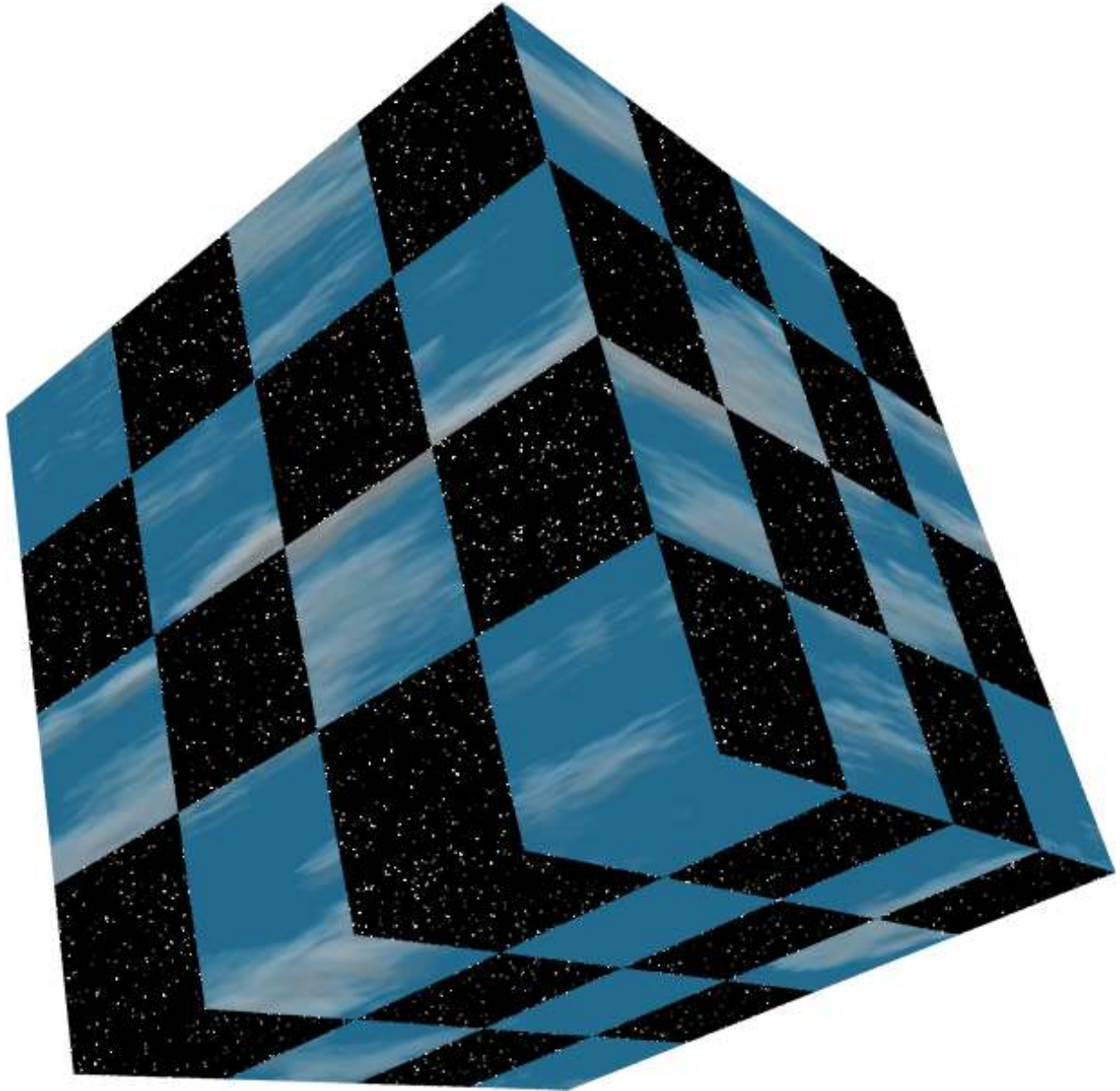


# MySQL for Other Applications



*Copyright © 2013 Jerry Stratton*

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.1. A copy of the license is included in the section entitled “GNU Free Documentation License”

*October 25, 2013*

Introduction .....	1
Other applications .....	1
What is MySQL? .....	1
Documentation .....	1
Installation .....	3
Sequel Pro .....	3
The Command Line .....	3
MySQL .....	3
Download package .....	3
Install package .....	4
Start MySQL .....	4
Connect to your server .....	5
Test Version .....	5
Set Password .....	5
Create a database .....	6
Create a working user .....	7
Turn on your firewall .....	7
Working with data .....	9
Connect .....	9
Change password .....	9
Choose database .....	9
About Tables and Columns .....	9
Basic field types .....	10
Dates .....	10
Create a table .....	10
Record Information .....	11
Import data .....	11
View data .....	13
Text like this .....	15
Distinct .....	15
Concatenating items .....	16
Formatted dates and times .....	17
Backup Data .....	18
Manipulating Data .....	19
Statistics .....	19
Update Data .....	19
Group Selection .....	20
Replacing text .....	20
Multiple tables .....	21
Import songs .....	21
Grouping songs .....	23
Joining tables .....	23
Indexing columns .....	23
Conflicting column names .....	24
Missing records .....	25
Quotes in statements .....	26
Using IDs .....	26
Separating data .....	28
Security .....	31
Other Applications .....	33
Dreamweaver .....	33
Create Select Statement .....	33
Display Select Results .....	36
More with Dreamweaver .....	41
PHP .....	41
Python .....	42
Perl .....	44
More Information .....	47
Links .....	47
GNU Free Documentation License .....	47

# Introduction

## Other applications

If you're going to use MySQL to display information on the web or in another application, you will eventually need to understand the structure of your database and how to construct SQL queries.

Two of the most common applications you'll use with MySQL are PHP and Dreamweaver. PHP is a programming language. As soon as you start using MySQL with PHP, you run into the `mysql_query()` function. PHP has no built-in MySQL functionality. You construct a MySQL query, give that to PHP, and PHP hands it, intact, to the MySQL server.

Dreamweaver will insulate you from MySQL queries for the first few minutes. But as soon as you start doing anything out of the ordinary, you'll run up against the "advanced" section of your recordset window. That "SELECT... FROM... WHERE" phrase in the advanced window is nearly a pure MySQL query.

Much of this is inter-related. If you click the "code" button on a Dreamweaver page you've added a recordset to, you'll see PHP code. Dreamweaver creates the PHP code for you.

## What is MySQL?

MySQL is a way of storing databases. Each database contains *tables*. Each table contains *rows* and each row contains *columns*. Rows and columns might be more familiar to you as records and fields.

MySQL is *only* a database application. It contains no user interface of its own. It does ship with a sample command-line application, but this is really meant as a programming sample so that programmers can write better interfaces for MySQL.

## Documentation

The on-line documentation for MySQL is available at <http://dev.mysql.com/doc/mysql/>. The on-line documentation is very comprehensive and useful. If you want print documentation, I recommend the New Riders book, "MySQL" by Paul DuBois. It is a well-written reference to using MySQL that covers the issues most likely to arise.



# Installation

## Sequel Pro

If you are using Mac OS X, I strongly recommend the Sequel Pro application. It is a fairly simple and reliable means of connecting to a MySQL database without having to use the command line. We'll do a little bit of command line work in this tutorial in case you need to import or work with data from behind a firewall, but only a little. If at all possible, I recommend using Sequel Pro or a program similar to it, to manage your MySQL databases.

Download Sequel Pro from <http://www.sequelpro.com/>. It requires Mac OS X 10.5 or higher.

## The Command Line

If you are not using Sequel Pro, you'll need to use some other interface to MySQL, or use the command-line “mysql” application that comes with MySQL. With the Mac OS X installation, the mysql install is in `/usr/local/mysql`. You'll use the mysql command line by going to the terminal (in your Utilities folder) and typing:

```
/usr/local/mysql/bin/mysql -h localhost -u USERNAME -p
```

Replace “username” with the username you created or were given by your database administrator.

The big difference between the statements in this tutorial and what you'll type is that you need to always end your statements with semicolons.

## MySQL

We'll be installing the full MySQL server on your desktop computer. This portion of the tutorial is geared pretty much exclusively to the Macintosh. Installation of MySQL on Mac OS X is quick and easy.

If you are using Linux, you may well have MySQL already installed on your system. Look at your instructions or manual (depending on your installation) to see how to enable it or access it.

### Download package

MySQL is free software. You can download it at <http://dev.mysql.com/downloads/>. As I write this, the current recommended version is MySQL 5.1. Click on that. If you are going to install the Mac

[Click here to download full PDF material](#)