

[Home](#) [Basic MySQL](#) [MySQL Stored Procedures](#) [MySQL Triggers](#) [MySQL Views](#)
[MySQL Functions](#) [MySQL Administration](#) [MySQL Tips](#)

Import CSV File Into MySQL Table

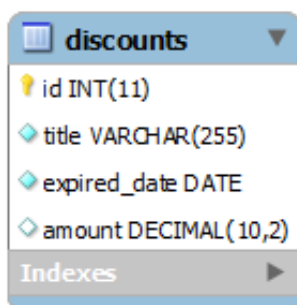
This tutorial shows you how to use `LOAD DATA INFILE` statement to import CSV file into MySQL table.

The `LOAD DATA INFILE` statement allows you to read data from a text file and import the file's data into a database table very fast.

Before importing the file, you need to prepare the following:

- ▶ A database table to which the data from the file will be imported.
- ▶ A CSV file with data that matches with the number of columns of the table and the type of data in each column.
- ▶ The account, which connects to the MySQL database server, has `FILE` and `INSERT` privileges.

Suppose we have a table named `discounts` with the following structure:



MySQL Tutorial Newsletter

Sign up to receive updates about MySQL Tutorials and find out what's new in MySQL.

MySQL Quick Start

[Install MySQL Database Server](#)

[Download MySQL Sample Database](#)

[Load Sample Database](#)

MySQL Programming Interfaces

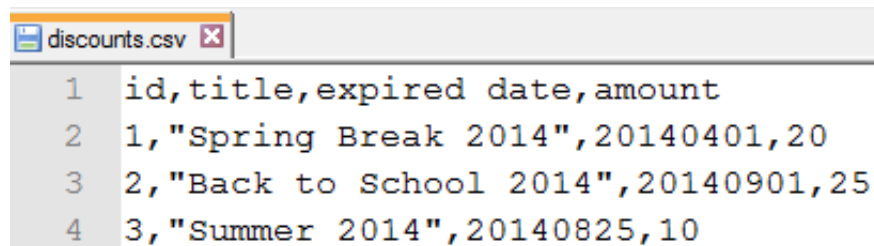
[PHP MySQL Tutorial](#)

[Perl MySQL Tutorial](#)

We use [CREATE TABLE statement](#) to create the `discounts` table as follows:

```
1 CREATE TABLE discounts (  
2   id INT NOT NULL AUTO_INCREMENT,  
3   title VARCHAR(255) NOT NULL,  
4   expired_date DATE NOT NULL,  
5   amount DECIMAL(10,2) NULL,  
6   PRIMARY KEY (id)  
7 );
```

The following `discounts.csv` file contains the first line as column headings and other three lines of data.



```
1 id,title,expired date,amount  
2 1,"Spring Break 2014",20140401,20  
3 2,"Back to School 2014",20140901,25  
4 3,"Summer 2014",20140825,10
```

The following statement imports data from `c:\tmp\discounts.csv` file into the `discounts` table.

```
1 LOAD DATA INFILE 'c:/tmp/discounts.csv'  
2 INTO TABLE discounts  
3 FIELDS TERMINATED BY ','  
4 ENCLOSED BY '"'  
5 LINES TERMINATED BY '\n'  
6 IGNORE 1 ROWS;
```

The field of the file is terminated by a comma indicated by `FIELD TERMINATED BY ','` and enclosed by double quotation marks specified by `ENCLOSED BY '"'`.

Each line of the CSV file is terminated by a new line character indicated by `LINES TERMINATED BY '\n'`.

Because the file has the first line that contains the column headings, which should not be imported into the table, therefore we ignore it by specifying `IGNORE 1 ROWS` option.

Now, we can check the `discounts` table to see whether

Other Tutorials

[MySQL Full-Text Search](#)

[MySQL Cheat Sheet](#)

[MySQL Books](#)

[MySQL Hosting](#)

[MySQL Resources](#)

the data is imported.

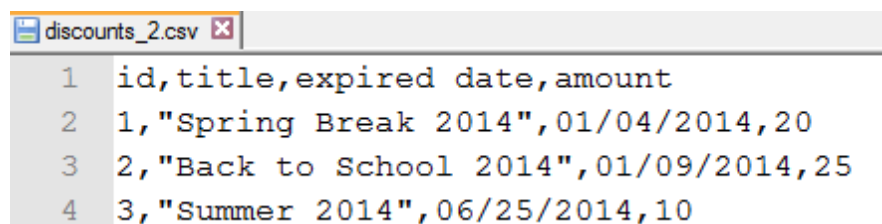
```
1 SELECT * FROM discounts;
```

| | id | title | expired_date | amount |
|---|----|---------------------|--------------|--------|
| ▶ | 1 | Spring Break 2014 | 2014-04-01 | 20.00 |
| | 2 | Back to School 2014 | 2014-09-01 | 25.00 |
| | 3 | Summer 2014 | 2014-08-25 | 10.00 |

Transforming data while importing

Sometimes the format of the data does not match with the target columns in the table. In simple cases, you can transform it by using the `SET` clause in the `LOAD DATA INFILE` statement.

Suppose the expired date column in the `discount_2.csv` file is in `mm/dd/yyyy` format.



```
discounts_2.csv
1 id,title,expired date,amount
2 1,"Spring Break 2014",01/04/2014,20
3 2,"Back to School 2014",01/09/2014,25
4 3,"Summer 2014",06/25/2014,10
```

When importing data into the `discounts` table, we have to transform it into MySQL date format by using `str_to_date()` function as follows:

```
1 LOAD DATA INFILE 'c:/tmp/discounts_2.csv'
2 INTO TABLE discounts
3 FIELDS TERMINATED BY ',' ENCLOSED BY '"'
4 LINES TERMINATED BY '\n'
5 IGNORE 1 ROWS
6 (title,@expired_date,amount)
7 SET expired_date = STR_TO_DATE(@expired_date, '%m/%d/%Y');
```

Importing file from client to a remote MySQL database server

It is possible to import data from client (local computer) to a remote MySQL database server using the `LOAD DATA INFILE` statement.

When you use `LOCAL` option in the `LOAD DATA INFILE`, the client program reads the file on the client and sends it to the MySQL server. The file will be uploaded into the database server operating system's temporary folder e.g.,

`C:\windows\temp` on Windows or `/tmp` on Linux. This folder is not configurable or determined by MySQL.

Let's take a look at the following example:

```
1 LOAD DATA LOCAL INFILE 'c:/tmp/discounts.csv'
2 INTO TABLE discounts
3 FIELDS TERMINATED BY ','
4 ENCLOSED BY '"'
5 LINES TERMINATED BY '\n'
6 IGNORE 1 ROWS;
```

The only difference is the `LOCAL` option in the statement. If you load a big CSV file, you will see that with `LOCAL` option, it will be a little bit slower to load the file because it takes time to transfer the file to the database server.

The account that connects to MySQL server doesn't need to have the `FILE` privilege to import the file when you use the `LOCAL` option.

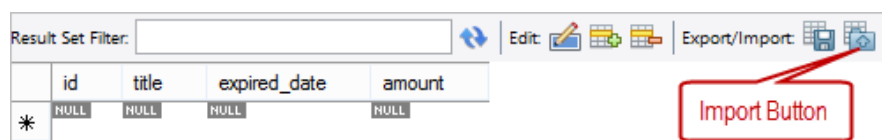
Importing the file from client to a remote database server using `LOAD DATA LOCAL` has some [security issues](#) that you should be aware of to avoid potential security risks.

Importing CSV file using MySQL Workbench

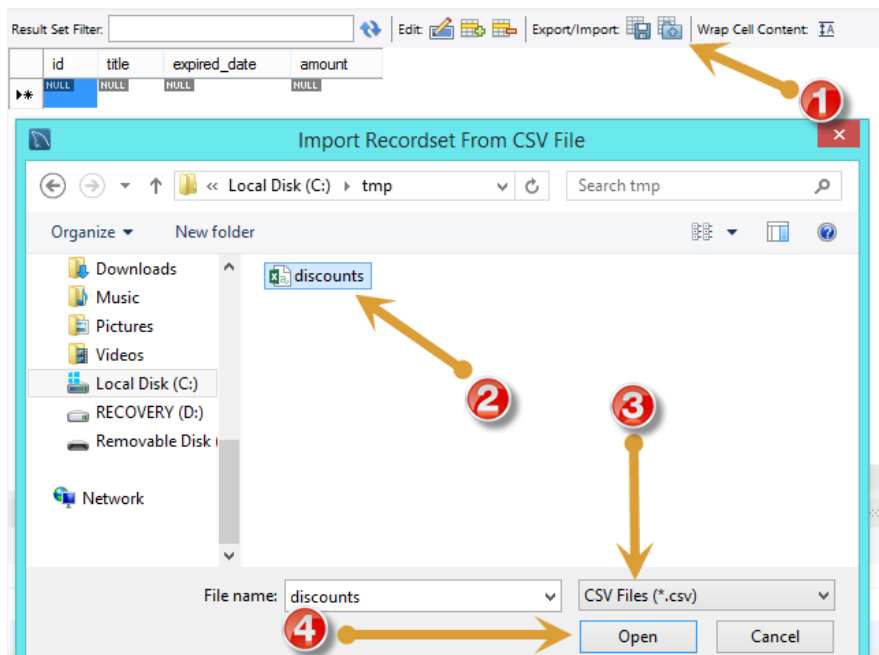
MySQL workbench provides a tool to import data into a table. It allows you to edit data before making changes.

The following are steps that you want to import data into a table:

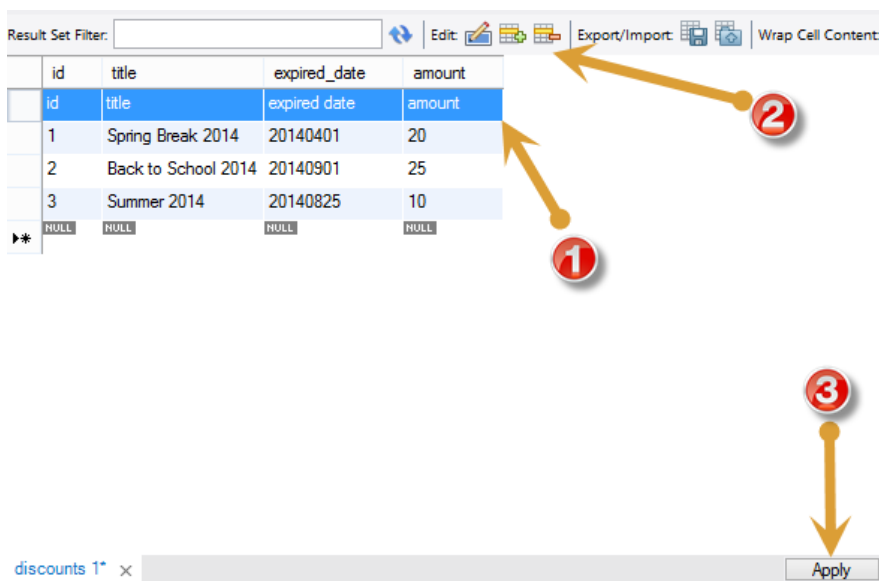
Open table to which the data is loaded.

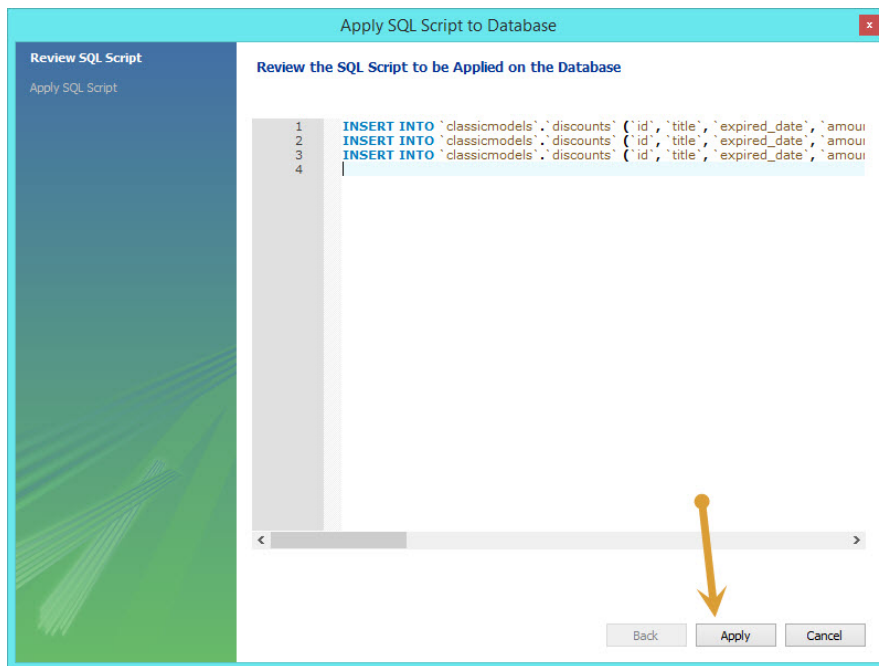


Click Import button, choose a CSV file and click Open button



Review the data, click Apply button.





MySQL workbench will display a dialog “Apply SQL Script to Database”, click Apply button to insert data into the table.

We have shown you how to import CSV into MySQL table using `LOAD DATA LOCAL` and using MySQL Workbench. With these techniques, you can load data from other text file formats such as tab-delimited.

Share this:



Next Tutorial: [MySQL Export Table to CSV](#) >>

About MySQL Tutorial Website

MySQLTutorial.org is a website dedicated to MySQL database. We regularly publish useful MySQL tutorials to help web developers and database administrators learn MySQL

Recent MySQL Tutorials

[MySQL Export Table to CSV](#)
[Raising Error Conditions with SIGNAL / RESIGNAL Statements](#)
[MySQL Error Handling in Stored Procedures](#)

Site Links

[About Us](#)
[Contact Us](#)
[Request a Tutorial](#)
[Privacy Policy](#)

fast and use MySQL effectively.

Our MySQL tutorials are practical and easy-to-follow, with SQL script and screenshots available. [More About Us](#)

MySQL is trademark of Oracle Corp.

[MySQL Stored Function](#)

[Import CSV File Into MySQL Table](#)

[MySQL Natural Sorting with ORDER BY Clause](#)

[Modifying MySQL Events](#)

[Working with MySQL](#)

[Scheduled Event](#)

[PHP MySQL BLOB](#)

[PHP MySQL Transaction](#)

Copyright © 2014 by www.mysqltutorial.org. All Rights Reserved.