Installing and using XAMPP

About

This document explains how to install and use the XAMPP package (specifically for students using Windows 7).

What is XAMPP

XAMPP is a single package or distribution of the server side applications mySQL, Apache and PHP specifically for the Windows platform (which is where the acronym XAMPP is derived from). MySQL is a database, Apache is a webserver and PHP is a server side programming language all bundled together in the download.

Downloading and installing XAMPP

Download the latest version of XAMPP from http://www.apachefriends.org/en/xampp-windows.html (figure 1) - there are various versions available – choose the installer version, which contains an executable file that places all the files in the correct places automatically (figure 2 and 3)

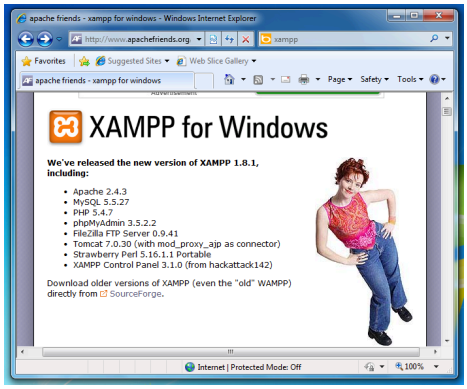


Figure 1

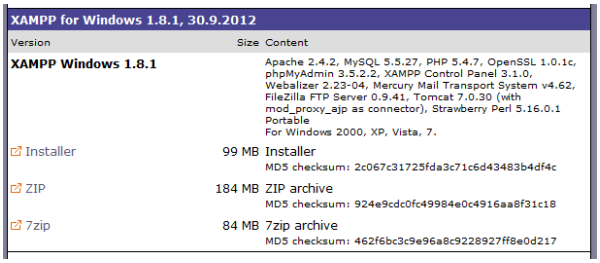


Figure 2

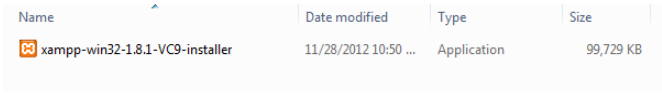


Figure 3

Double click the installation file and follow the instructions – you may find that a pop up dialog box tells you that you need to download a Visual C++ Package for XAMPP to work. If so download and install the package (figure 4).

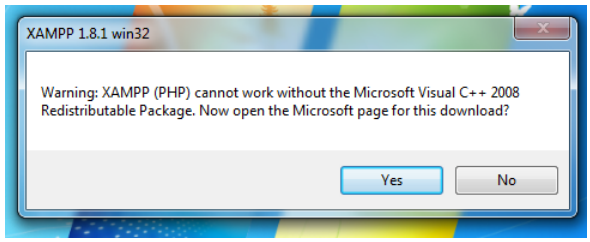


Figure 4

Install XAMPP into the default directory, c:\xampp (figure 5)

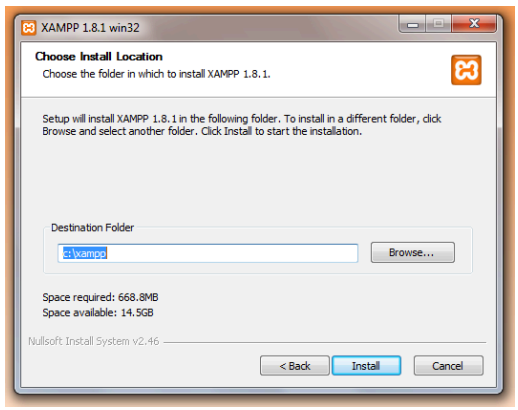


Figure 5

Running XAMPP

XAMPP is a collection of services that run in the background of the machine. These are *started* and *stopped* using a control panel, which must be running.

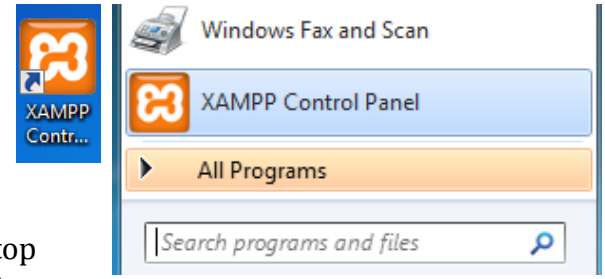


Figure 6

Start the XAMPP control panel either by using the desktop icon, or through the Start button – Search Box (figure 6).

Click "Start" to get both the Apache and the MySQL server running (figure 7) – for ITB and Web Scripting you won't need the other options to be running.

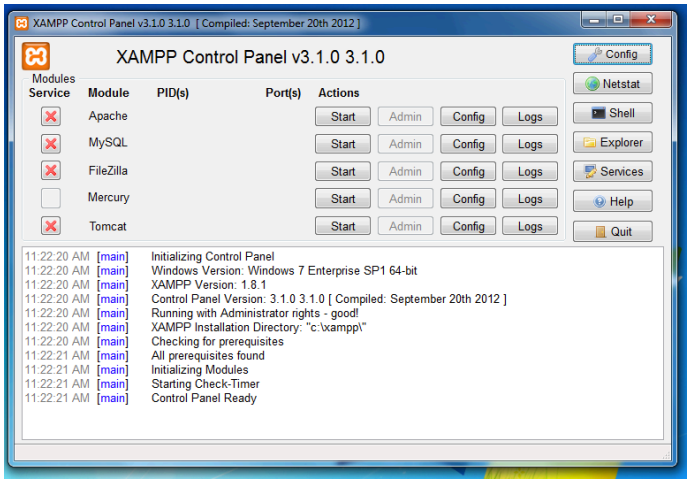


Figure 7

You may find that the built in Windows Firewall asks as to whether the webserver (Apache) and the database (MySQL) should be allowed to work – choose "Allow Access" for both (figure 8)

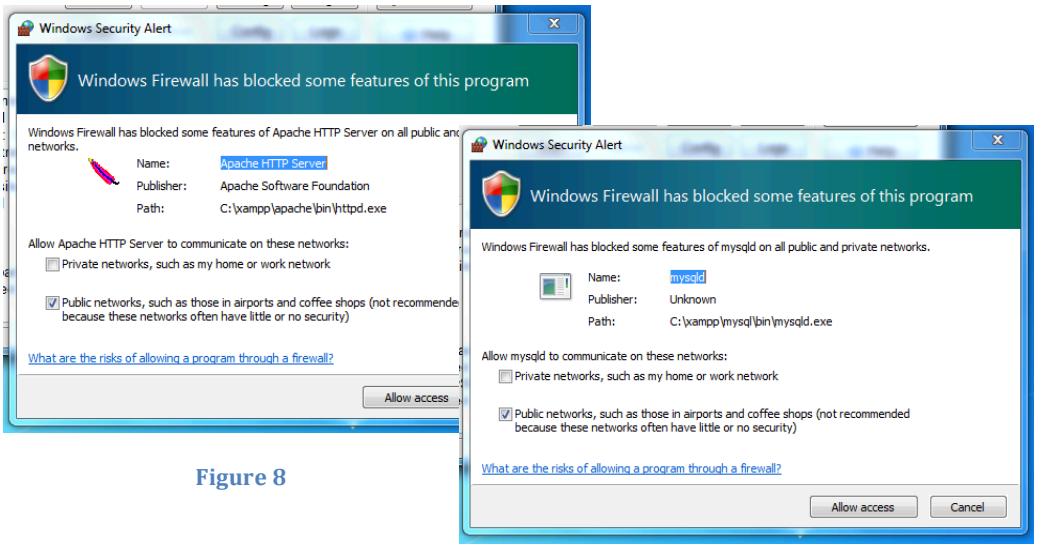


Figure 8

Important: If you close the XAMPP control panel, the services will be still running in the background. To bring the control panel back again, click on the small icon in the toolbar (figure 9)

Figure 9

Depending on your configuration, XAMPP may start your default web browser to show you the initial startup page. If it doesn't come up, start a web browser and navigate to http://localhost

The first time you try this, you may be asked for your default language (figure 10). If everything is working correctly the default XAMPP homepage should be displayed (figure 11).

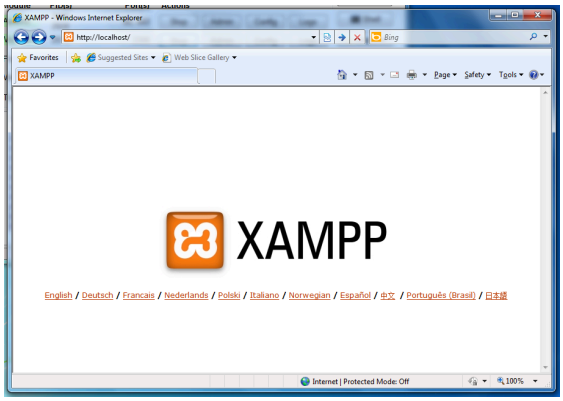


Figure 10

Figure 11

XAMPP is a collection of server side services so there is no (one) single interface for PHP, Apache and MySQL. The best way to administer and use mySQL is through the phpMyAdmin application. Look for this in the column on the left (figure 12)

Figure 12

Databases are listed down the column on the left, activities that you can perform are shown in tabs across the top (figure 13).

Hint: Before you do anything else – you must **always** either select a database from the column on the left (or create a new one).

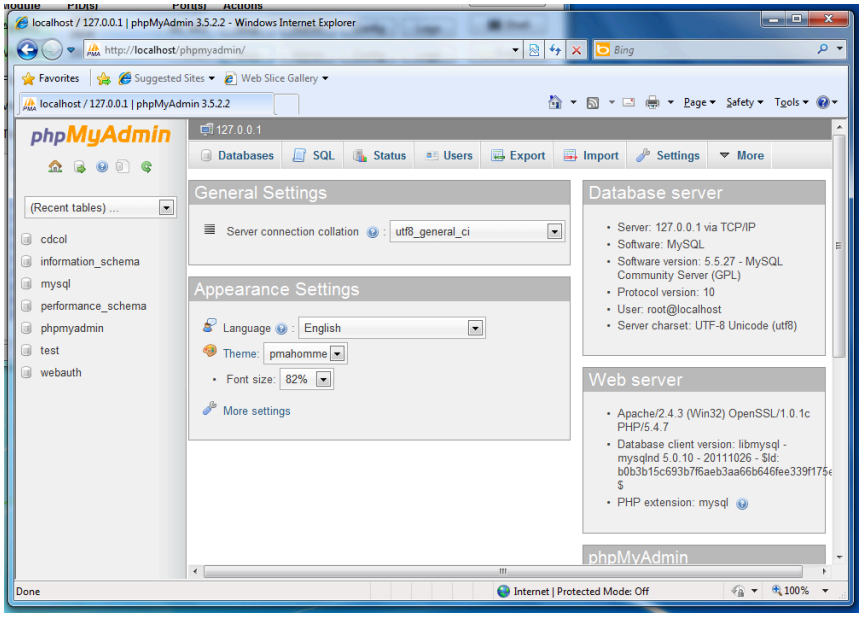


Figure 13

Using MySQL to create and use databases

The employee database is used in various SQL notes – these steps show how to create the *employee* database, with its EMP, DEPT and GRADE tables.

From the *Databases* tab use the *Create new database* option to create a database called *employee* (figure 14)

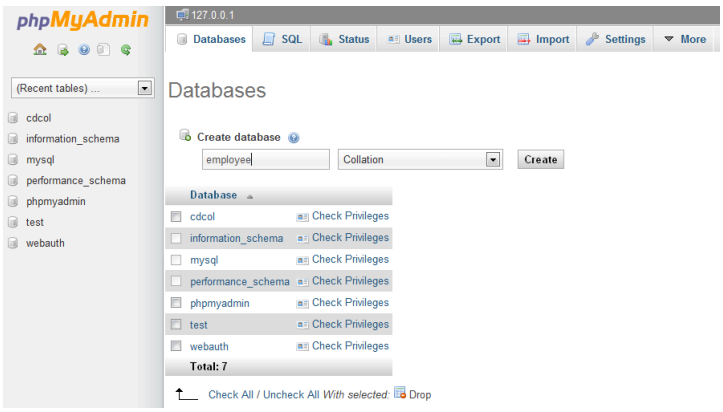


Figure 14

You should then be taken into the empty database employee. Note how the tabs change to show the different actions that you can perform on the *employee* database (figure 15)

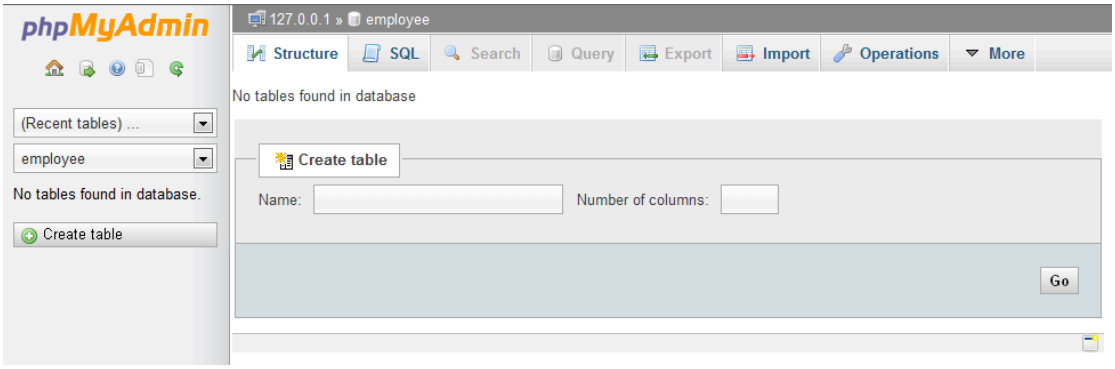


Figure 15

The key here is to remember that you should always select the database you wish to work with in the column on the left before attempting to run any queries, otherwise you won't have the correct tabs/functionality across the top of the page (figure 16).

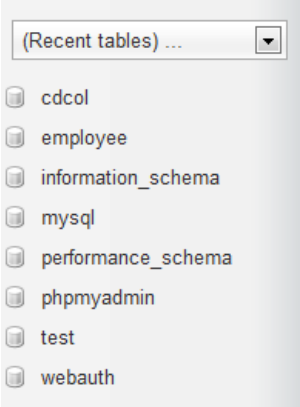


Figure 16

Creating the EMP, DEPT and GRADE tables

Rather than using the interface to create tables and insert records, we can run a batch set of SQL statements to set the tables up.

Download the zip file on the following web page and extract the text file inside

http://www.barryavery.com/blog/2009/10/24/relational-databases-session-1/

This file contains SQL statements to *create* and *insert* the three tables used in the examples (figure 17)

```
create table emp (
empno int,
ename char(50),
job char(50),
mgr int,
hiredate char(50),
sal int,
comm int,
deptno int
);
insert into emp values (405,"MARCH","ADMIN",938,"13/06/1997",18000,null,2);
insert into emp values (535,"BYRNE","SALES",734,"15/08/1997",26000,300,3);
insert into emp values (557,"BELL","SALES",734,"26/03/2000",22500,500,3);
insert into emp values (602,"BIRD","MANAGER",875,"31/10/1997",39750,null,2);
insert into emp values (690,"AHMAD","SALES",734,"05/12/1997",22500,1400,3);
insert into emp values (734,"COX","MANAGER",875,"11/06/2002",38500,null,3);
insert into emp values (810,"POLLARD","MANAGER",875,"30640",34500,null,1);
insert into emp values (824,"REES","ANALYST",602,"05/03/2000",40000,null,2);
insert into emp values (875,"PARKER","PRESIDENT",null,"09/07/2002",60000,null,1);
insert into emp values (880,"TURNER","SALES",734,"04/06/2001",25000,0,3);
insert into emp values (912,"HAYES","ADMIN",824,"04/06/2001",21000,null,2);
insert into emp values (936,"CASSY","ADMIN",734,"37460",19500,null,3);
insert into emp values (938,"GIBSON","ANALYST",602,"05/12/1997",40000,null,2);
insert into emp values (970,"BLACK","ADMIN",818,"21/11/1997",23000,null,1);

create table dept (
deptno int,
dname char(50),
loc char(50)
);
insert into dept values (1,"ACCOUNTING","LONDON");
insert into dept values (2,"RESEARCH","YORK");
insert into dept values (3,"SALES","BIRMINGHAM");
insert into dept values (4,"OPERATIONS","LEEDS");

create table grade (
grade int,
losal int,
hisal int
);
insert into grade values (1,17000,21999);
insert into grade values (2,22000,23999);
insert into grade values (3,24000,29999);
insert into grade values (4,30000,49999);
insert into grade values (5,50000,99999);
```

Figure 17

In phpMyAdmin, click on the SQL tab and copy/paste in all the SQL commands from the text file. Click the *Go* button to execute the statements (figure 18) - note that you MUST have previously selected the *employee* database for this to work (by clicking on it in the column on the left)

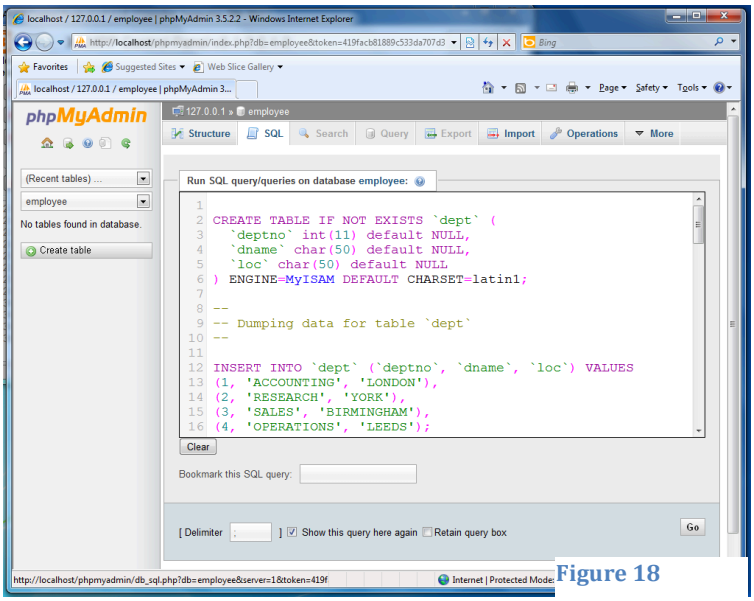


Figure 18

If this has worked correctly you should get a “your query has been executed successfully” banner, along with three tables in the column on the left (figure 19).

You can use the SQL tab to run any SQL statement (or series of statements separated by ‘;’).

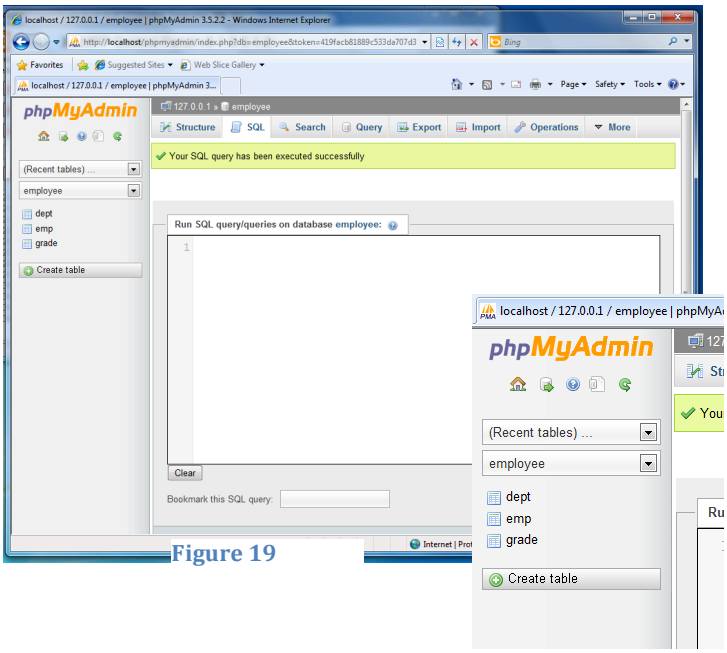
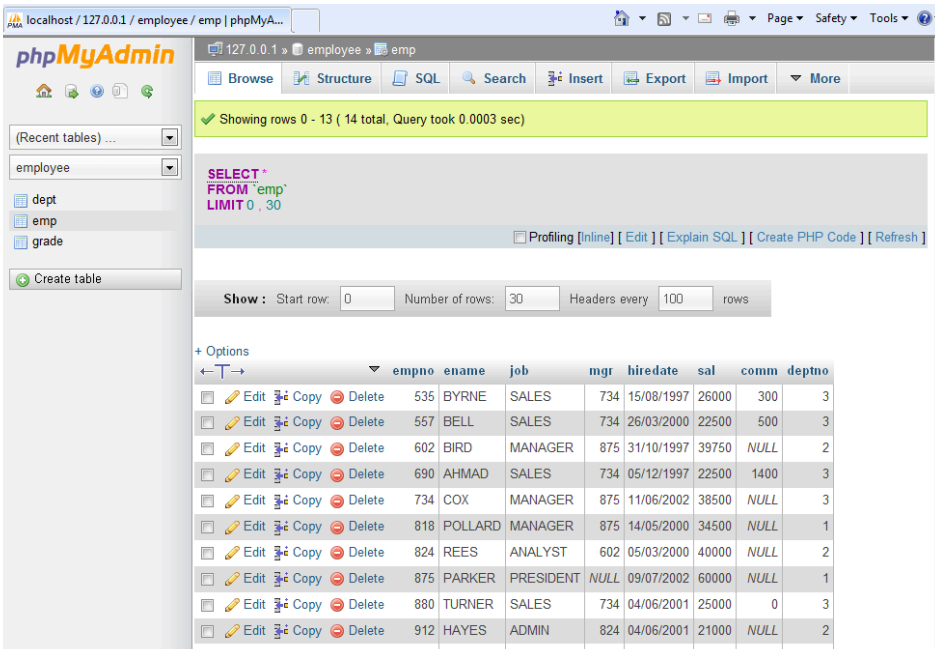


Figure 19

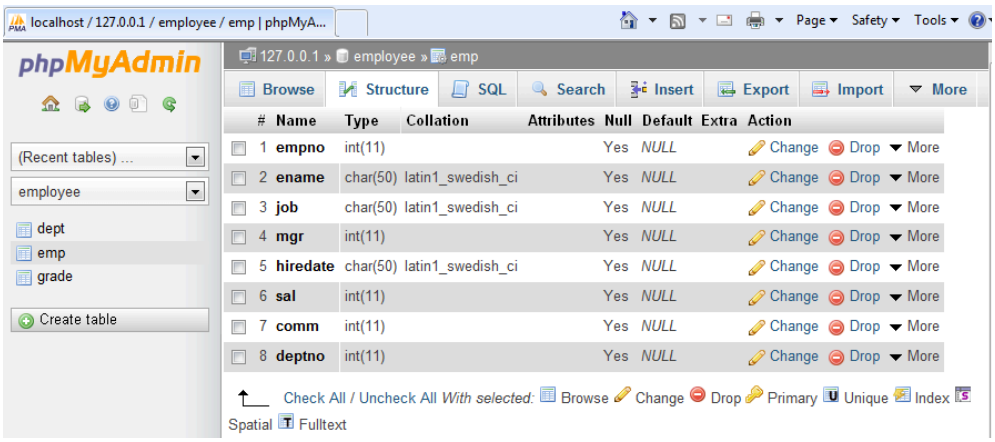
Other parts of the interface

Click on a table name (in the column on the left) to be able perform the following actions

Browse a table's data



See a table's structure



Run SQL statements (not just on the selected table but on any table)

You can also *Insert* rows (records), *Export* or *Import* a table's data in a variety of formats, *Empty* a table (i.e. delete all the rows) or *Drop* a table (remove the table entirely).

For learning and using SQL – the most important functionality comes from the SQL panel