

## Installing Apache, PHP, MySQL

The main steps are:

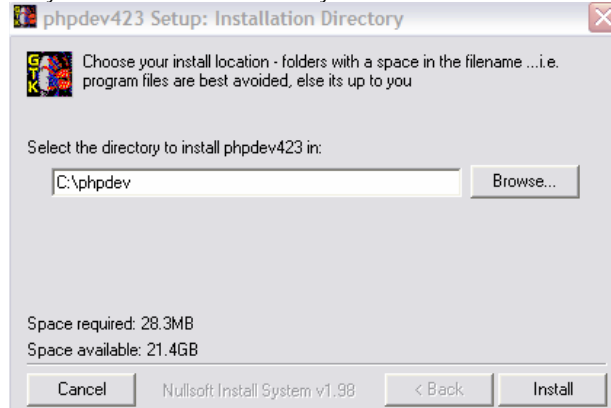
1. Get the installation bundle.
2. Run the installation.
3. Check the installation.

### Get the installation bundle

We use a 'PHP+Apache+MySQL' distribution called phpdev423. It comes in a single exe file and can be downloaded from <http://www.firepages.com.au/phpdev41.htm> and is about 11MB in size.

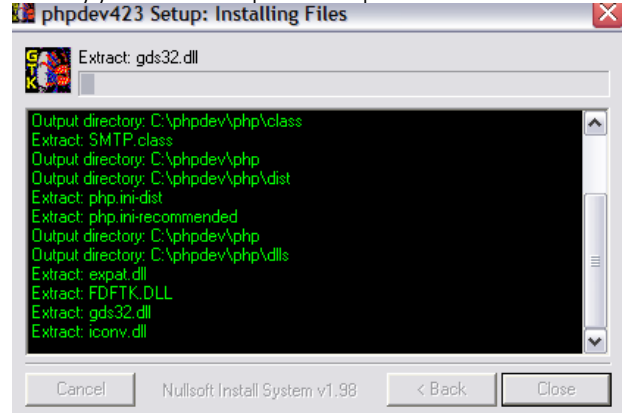
### Run the installation.

Run the phpdev423.exe file. It will open-up an installation window and ask you for an 'installation directory'.

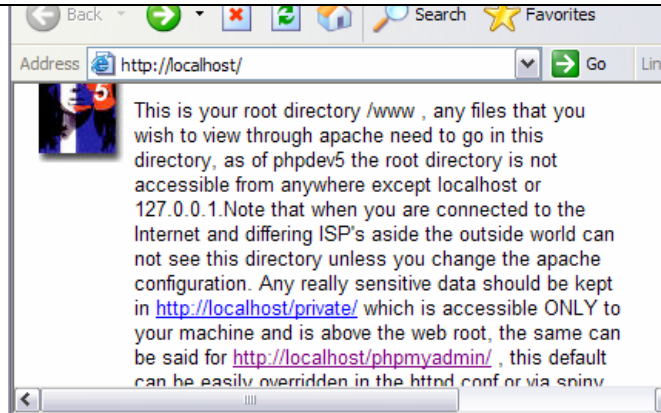


Just accept the default, which is C:\phpdev and click the 'Install' button.

You will see a progress window where you will see all the software needed for you to work in this course is extracted and installed at the directory you chose in the previous step.



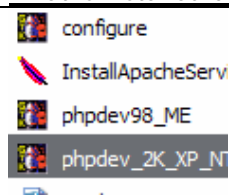
Now you are ready to check the installation.



Usually at the end of the installation you will see a web browser opening at <http://localhost/>. If this doesn't happen you will have to run the **install** script manually. Just run the **C:\phpdev\install\_phpdev.bat** batch file. Then to start the environment run the **2K-NT-XP-phpdev\_start.bat** batch file. (If you are running Windows 98 run the **98-ME-phpdev\_start.bat** file). This will start apache mysql and open your preferred browser hopefully at localhost. If your browser does not open, open it yourself and type **http://localhost/** in the address bar and hit enter/click go.

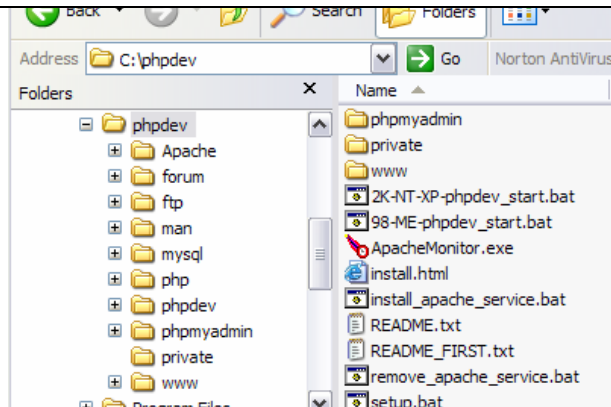
Congrats! You have now setup the environment that we need to do Internet Programming.

### What is installed by phpdev?



#### The Program Group & Desktop Icon

The phpdev installations create a program group called phpdev. It contains (among others) a link to **start Apache+MySQL** (The link to click, if you are running Win 2000 or XP is highlighted in the picture. If you are using Win 98 use the link above it) The link at the top called 'Configure' is to configure the Apache and MySQL installations. You usually don't need to run this. A **desktop icon** for Configure is also created.

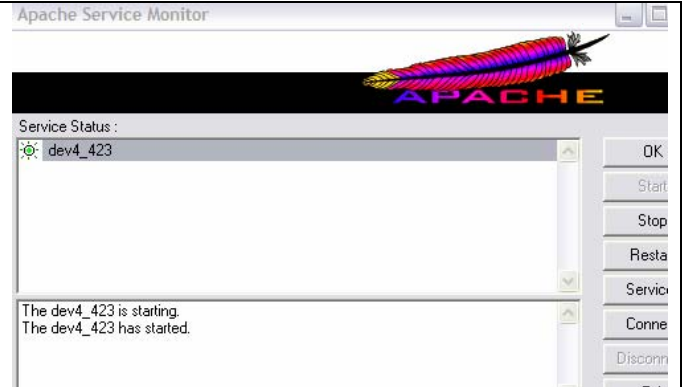


#### Installation Directory

To see what was installed have a look at the installation directory. Open Windows Explorer and navigate to the directory where you installed phpdev: if you accepted the default it would be **C:\phpdev**. Have a look at the directory structure. Notice that we have separate directories for the **Apache web server**, **MySQL database server**, **PHP**, and **Cerberus FTP server**. It also installs **phpmyadmin**, an easy to use PHP web application that let's you manage a MySQL database server.

Look at the batch files in the C:\phpdev directory. The program group links actually points to these batch files.

**[Optional Step] Installing Apache as a Service**  
 You could run the `install_apache_service.bat` file, which will install the Apache web server as a Windows Service. (To uninstall the service just run `uninstall_apache_service.bat`)  
 Installing as a service simply means that apache will be running whenever you start your computer, you can control the apache service by running the program `C:\phpdev\apachemonitor.exe`. It will show a small feather-like icon in the Windows System Tray (that is where you see the clock!)



### Uninstalling phpdev

To uninstall:

1. If Apache was installed as a service: run the batch file `C:\phpdev\uninstall_apache_service.bat`
2. Delete the directory `C:\phpdev`
3. Delete the Program Group `phpdev`

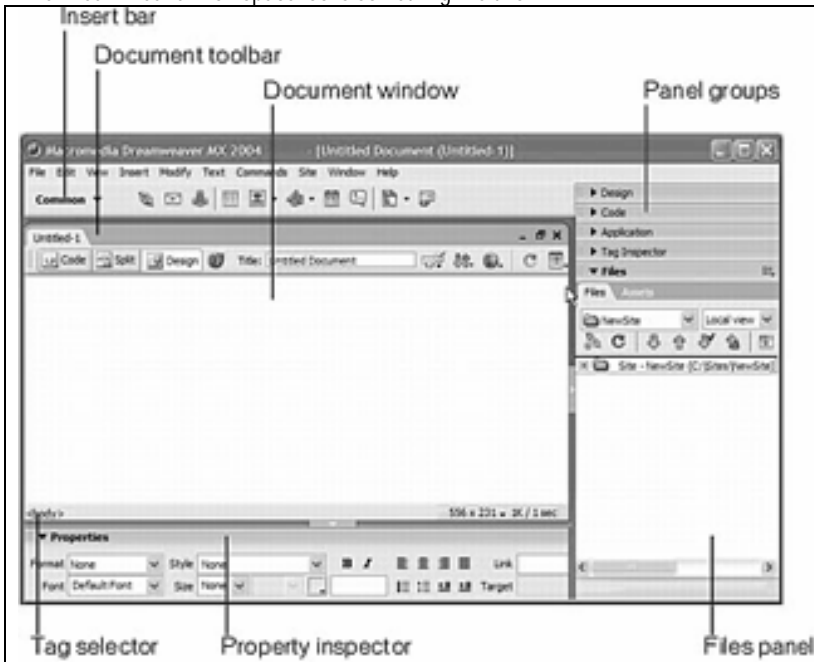
### Using DreamWeaver

Reference: Macromedia DreamWeaver MX 2004 Help. (Open DreamWeaver and Go to **Help** → **Getting Started and Tutorials**)

DreamWeaver (The screenshots in the note were taken from a computer running DreamWeaver MX 2004), is a web development tool by Macromedia. It makes the whole process of designing and developing both simple web pages and large dynamic web applications very easy through its features such as: syntax highlighting, code completion, integrated help, site management and dozens others. (It sure beats Notepad)

### DreamWeaver Interface

The DreamWeaver workspace looks something like this.



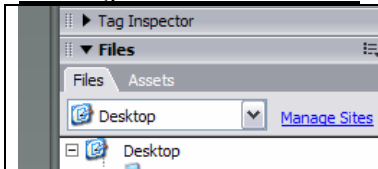
**Document Window** is where you work with your web pages. It contains two views: **code view** (you see the actual HTML or PHP code) and **design view** (where you don't see the code but get to work on a view that looks very similar to how the finished page is going to look in a browser). You can either see one of the two views or have them both displayed at the same time. (Use the three buttons on the **Document Toolbar**)

The **Tag Inspector** shows the tag hierarchy of the code element where you are working at the moment. It is very useful! You can click on a tag on the Tag Inspector and the relevant section of code will be selected in both views, and the **Property Inspector** will show the tags properties (attributes).

The **Insert Bar** contains buttons (divided into several groups) that let you insert various elements in to your web page. e.g. Forms, Tables, Lists etc. etc.

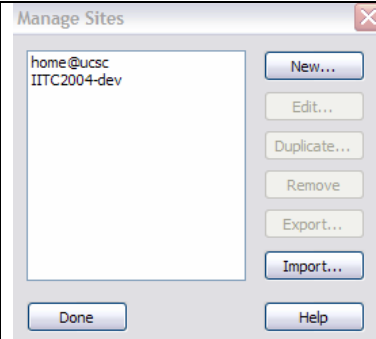
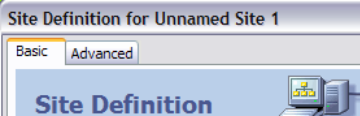
The **Panel Groups** is where most of the power of DreamWeaver is found. But it is easy to get overwhelmed by the sheer number of panels! The best thing to do is to take them one by one- start with the **Files panel**.

### Defining a DreamWeaver site



The first thing that we should do when we use DreamWeaver to develop our website is to define a **Dreamweaver site**. Doing that makes it a whole lot easier to manage our files both in the 'local machine' that we actually work on and the 'remote machine' where we host our website.

Select the **Manage Sites** link in the Files Panel.

	<p>It will open up a dialog where you will see a list of already defined sites. You can select an existing site on the left and click on the <b>Edit</b> button to modify its definition.</p> <p>There is also a <b>New</b> button which will let you define a new site. Select <b>New...</b> → <b>Site</b> The Site Definition Window will be shown.</p> <p>The Site Definition Window as two modes: Basic and Advanced. Usually it will open-up the Basic mode. (You can switch between modes by clicking its name on top)</p>  <p>You can always press the Help button (or press F1 key) to get additional help. Here's a step by step walkthrough of defining site using the Basic mode.</p>
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**Step 1:** Give the site a name. Press Next.

What would you like to name your site  
  
 Example: mySite

**Step 2:** Specify that you want to use PHP MySQL by selecting the Yes radio button.

Do you want to work with a server technology such as:

No, I do not want to use a server technology.  
 Yes, I want to use a server technology.

Then select the PHP MySQL option from the combo box that is shown. Press Next.

No, I do not want to use a server technology.  
 Yes, I want to use a server technology.

Which server technology?

**Step 3:** Next you have to answer this question.

How do you want to work with your files during development?

Edit and test locally (my testing server is on this computer)  
 Edit locally, then upload to remote testing server  
 Edit directly on remote testing server using local network

The answer is easy. It is the first option because you have PHP MySQL Apache installed on the local machine.

**Step 4:** You also have to specify where you want your files to be stored in the local machine. You can type in the directory path or, use the browse button on the right to select a directory. You can select any directory but it is recommended (at the beginning) to select a subfolder of **C:\phpdev\www**

Where on your computer do you want to store your files?

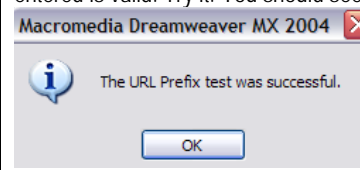
Press Next.

**Step 5:** Now we need tell DreamWeaver the address where our site gets published. Since we saved under a subdirectory of **C:\phpdev\www** (the Apache web root) called **s7777** we can access the web pages in that folder by using the URL you see in the picture below.

Dreamweaver communicates with your testing server using to know the URL of your site's root folder.

What URL would you use to browse to the root of your site?  
  
 Example: http://ServerOne/RootFolder/

You can press the Test URL button to check whether what entered is valid. Try it. You should see a confirmation.



**Step 6:** Now it asks whether you want to setup a remote server (explained later) Just answer No (It is the default)

When you are done editing a file, do you copy it to another machine web server or a staging server that you share with team members?

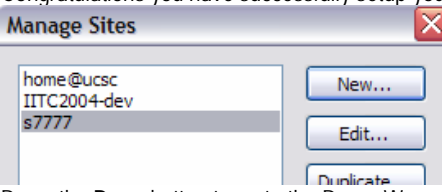
Yes, I want to use a remote server  
 No

**Step 7:** You are almost done. All the settings are shown for you to verify. If you see a mistake you can press the **Back** button to go back and correct them. Otherwise press **Done**.

Your site has the following settings:

**Local info:**  
 Site Name: s7777  
 Local Root Folder: C:\phpdev\www\s7777\

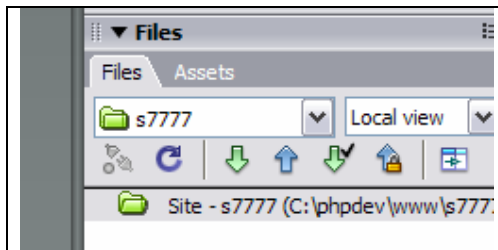
Congratulations you have successfully setup your first DreamWeaver web site!



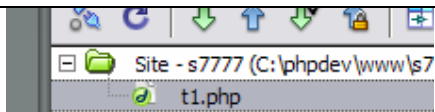
Press the **Done** button to go to the DreamWeaver workspace and start developing great websites!

**Create a Web Page and Test it in a Browser**

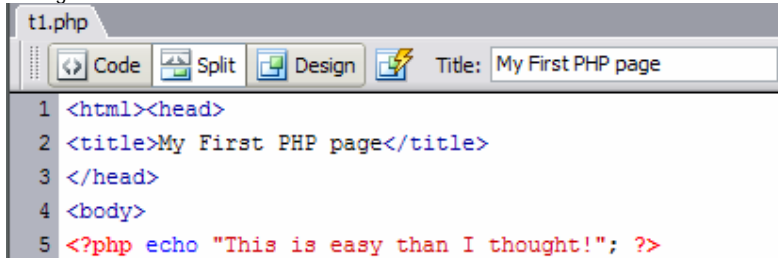
<p>Look at the Files Panel now. You will see that it now shows your sites files.</p>	<p>Now you can create new HTML and PHP files and save them under the local root folder.        Right click on the folder icon (with the text <b>Site – s7777</b> ...) and select 'New File'        A new PHP file will be created and you give it a suitable name.</p>
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The Drop Down Box showing the text **s7777** it for selecting a site to work with. (You will define more sites as you progress through this course). The drop down box showing the text 'Local View' lets you choose one of four views that you can see. (see the next section)

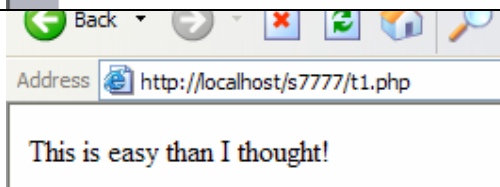


Double click it to open the file you just created. It will be opened in the document Window.  
 Now you can get to work!  
 Select either the Design | Code | Split view using the buttons at the top and start coding!



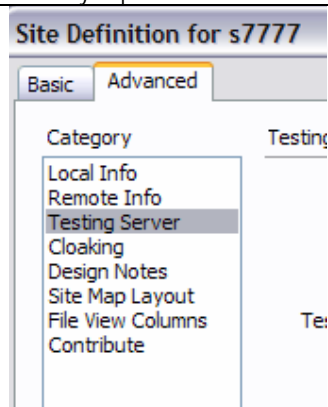
To test the page.  
 Open up a web browser and in the address bar type:  
**http://localhost/s7777/t1.php**

**Note:** Look at the URL and identify how the subdirectory that we created under the Apache root folder is accessed.



### More about DreamWeaver Sites

You may skip this section in a first reading.



Open up a site definition window and switch to advance mode. And look at the settings that you can define. Use the Help button to get to know what these setting mean.

#### Overview

A **website** is a collection of web pages on a web server. These pages are located in a directory on the computer that runs the web server software. (**Note:** that the term web server is used both for a software product like Apache and for the computer that runs that software)

In DreamWeaver the concept of a site has a little more meaning attached to it- It includes not only the actual 'remote site' but the 'local site' and the 'test site'

**Remote Site:** This refers to the collection of files in a directory at the real web server. We call this directory, the **remote root folder**.

**Local Site:** This is a collection of files in a directory of the computer that you are working on. We call this directory, the **local root folder**.

**Test Site:** This is a collection of files in a directory at a third computer that you use for testing purposes. We call this directory, the **testing server root folder**. Often we don't use a third machine but use the local machine itself as a testing server. (This is the case with our environment, since we have installed phpdev in our local machine)

**Note:** Once you have defined a test site, you can press the F12 button to automatically open a browser with the currently selected web page opened.