

# COP 4610L: Applications in the Enterprise Fall 2005

## Introduction to PHP – Part 1

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# Introduction to PHP

- PHP is officially known as PHP: Hypertext Preprocessor and is very rapidly becoming the most popular server-side scripting language for creating dynamic web pages.
- PHP was created in 1994 by Rasmus Lerdorf (who currently works for Linuxcare, Inc. as a senior open-source researcher) to track users at his Web site. Lerdorf originally called it Personal Home Page Tools in a package he released in 1995. It eventually became an Apache Software Foundation project.
- PHP2 featured built-in database support and form handling. In 1997, PHP3 was released and featured a new parser which substantially increased performance and led to an explosion in PHP use.



# Introduction to PHP (cont.)

- PHP4 featured the Zend Engine and was considerably faster and more powerful than its predecessors and further enhanced the popularity of PHP.
- The current release is PHP5.0.5 and features the Zend Engine 2, which provides further increases in speed and functionality. You can download the latest version of PHP at [www.php.net](http://www.php.net). For more details on the Zend Engine 2 see [www.zend.com](http://www.zend.com).
- Today more than 17 million domains utilize PHP technology.
- All of the examples we'll be looking at use the latest stable version of PHP which is 5.0.5 and was released in September 2005.



# Introduction to PHP (cont.)

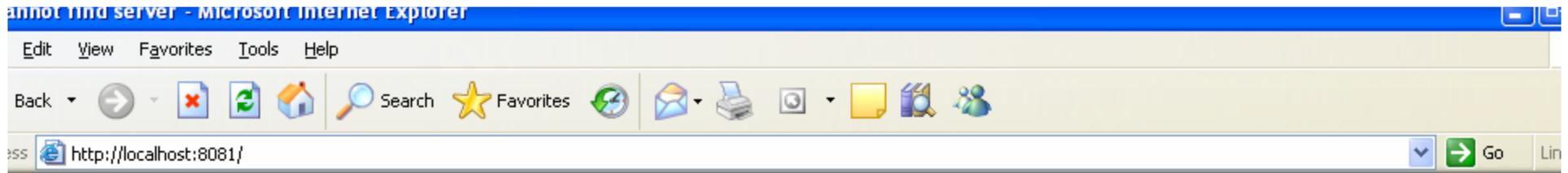
- The power of the Web resides not only in serving content to users, but also in responding to requests from users and generating Web pages with dynamic content.
- Interactivity between the user and the server has become a crucial part of Web functionality. While other languages can also perform these functions, PHP was written specifically for interacting with the Web.
- PHP code is embedded directly into XHTML documents. This allows the document author to write XHTML in a clear, concise manner, without having to use multiple `print` statements, as is necessary with other CGI-based languages.



# Introduction to PHP (cont.)

- PHP script file names usually end with `.php`, although a server can be configured to handle other file extensions.
- To run a PHP script, PHP must first be installed on your system. Download PHP5.0.5 from [www.php.net](http://www.php.net). (Most recent version is 5.0.5, but any of the 5.0.x versions should be ok.)
- Although PHP can be used from the command line, a Web server is required to take full advantage of the scripting language. I would suggest the Apache server available from [www.apache.org](http://www.apache.org). (Note: this is not the Tomcat server you've already used.) Current version is 2.0.55 which just fixed a few simple bugs from some of the earlier versions (mostly in the security area). I would expect that any of the 2.0.x versions would be ok for what we will be doing.





You can see this, it means that the installation of the [Apache web server](#) software on this system was successful. You may now add content to this directory and replace this page.

## Seeing this instead of the website you expected?

This page is here because the site administrator has changed the configuration of this web server. Please **contact the person responsible for maintaining this server with questions**. The Apache Software Foundation, which wrote the web server software this site administrator is using, has nothing to do with maintaining this site and cannot help resolve configuration issues.

Apache [documentation](#) has been included with this distribution.

You are free to use the image below on an Apache-powered web server. Thanks for using Apache!



Note: since we will ultimately want to integrate Tomcat with Apache so that we can continue to run our servlets and JSPs through Tomcat, we'll set-up Apache on a different port than Tomcat. I've set-up Apache on port 8081, you can use whatever port you would like that does not cause conflicts with existing port assignments.

# Apache Server Set-up

- Once you get the Apache Server downloaded and running on your machine...you've seen the screen on the previous page, you'll need to configure Apache to work with PHP.
- There are a couple of steps required to accomplish this task:
  1. Assume that you've downloaded PHP and placed it in the directory `c:/php`.
  2. Add the PHP directory to the PATH statement.
  3. Setup a valid configuration file for PHP. Do the following:
    - a) Copy `php.ini-recommend` inside `c:/php` and rename it to `php.ini`.

Details for obtaining the Apache HTTP server and PHP 5.0.5 begin on page 40.



# Apache Server Set-up (cont.)

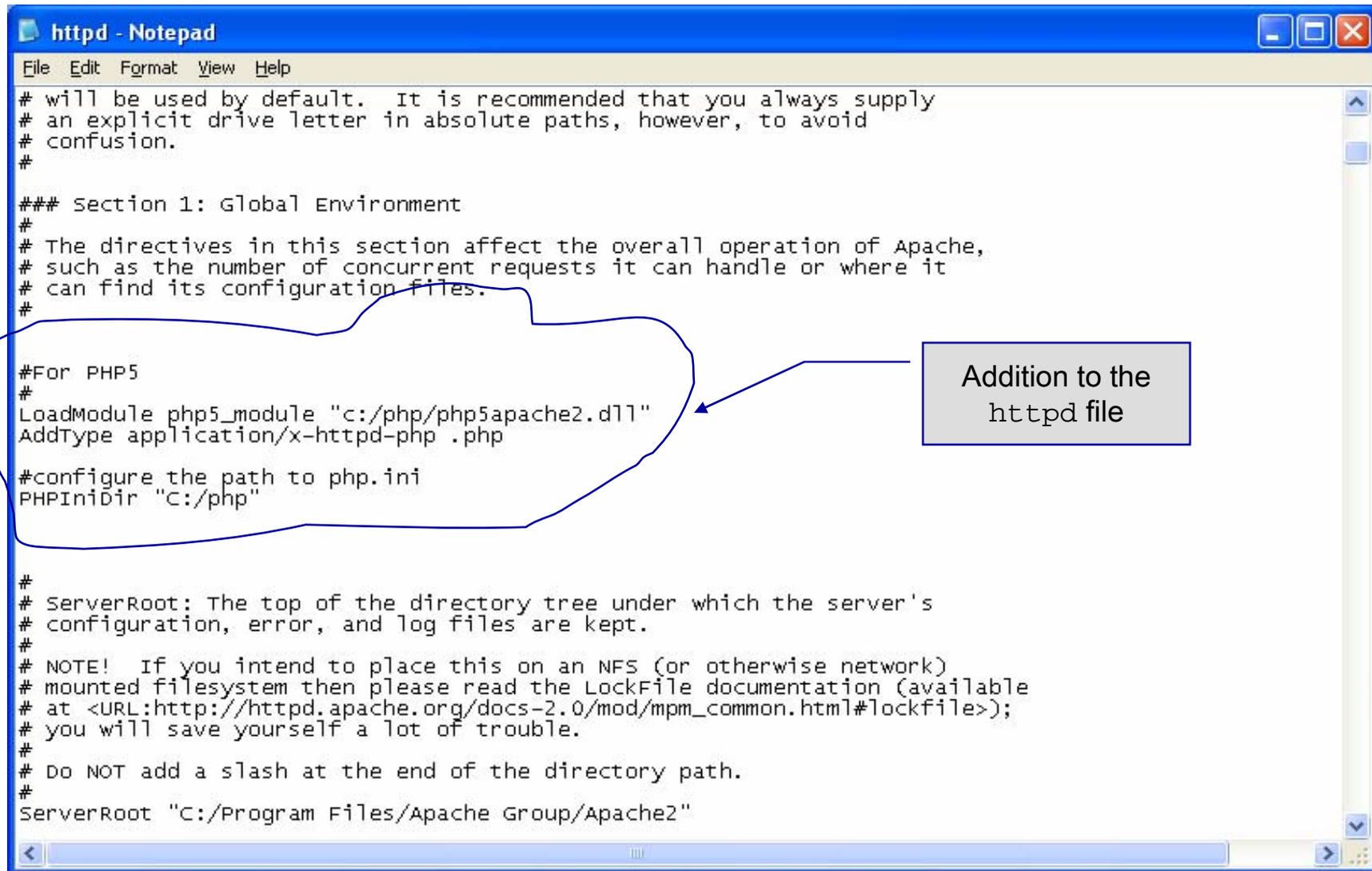
4. Install PHP as an Apache module by doing the following:
  - a) Edit the Apache `httpd.conf` file found in the `Apache conf` directory.
  - b) Add the following lines to this file in Section1: Global Environment. (screen shot on next page shows location of this edit)

```
#For PHP5
#
LoadModule php5_module "c:/php/php5apache2.dll"
AddType application/x-httpd-php .php
#configure the path to php.ini
PHPIniDir "C:/php"
```

5. Once these steps are completed, Apache is configured to run PHP (basic components – more later). When you've completed these steps, you can begin writing PHP code.



# Apache Server Set-up (cont.)



```
File Edit Format View Help
# will be used by default. It is recommended that you always supply
# an explicit drive letter in absolute paths, however, to avoid
# confusion.
#
### Section 1: Global Environment
#
# The directives in this section affect the overall operation of Apache,
# such as the number of concurrent requests it can handle or where it
# can find its configuration files.
#
#For PHP5
#
LoadModule php5_module "c:/php/php5apache2.dll"
AddType application/x-httpd-php .php
#configure the path to php.ini
PHPIniDir "C:/php"
#
# ServerRoot: The top of the directory tree under which the server's
# configuration, error, and log files are kept.
#
# NOTE! If you intend to place this on an NFS (or otherwise network)
# mounted filesystem then please read the LockFile documentation (available
# at <URL:http://httpd.apache.org/docs-2.0/mod/mpm_common.html#lockfile>);
# you will save yourself a lot of trouble.
#
# Do NOT add a slash at the end of the directory path.
#
ServerRoot "C:/Program Files/Apache Group/Apache2"
```



# A PHP Test Example

Create this file named `hello.php` and save it to the `htdocs` folder in Apache. Then start the Apache server, enter the URL: <http://localhost:8081/hello.php> and you should see output similar to that shown on the next slide.

```
<html>
<head>
<title>Hello From PHP</title>
</head>
<body style = "font-family: arial, sans-serif;
    background-color: #856363" background=image1.jpg>
<h1> Hello From PHP</h1>
```

```
<?
    print "Current Information";
    phpInfo();
?>
```

```
</body>
</html>
```

This is  
PHP



# ello From PHP

rent Information

## PHP Version 5.0.5



System	Windows NT MARK-PC 5.1 build 2600
Build Date	Sep 5 2005 15:50:13
Configure Command	oscript /nologo configure.js "--enable-snapshot-build" "--with-gd=shared"
Server API	Apache 2.0 Handler
Virtual Directory Support	enabled
Configuration File (php.ini) Path	C:\WINDOWS
PHP API	20031224
PHP Extension	20041030
Zend Extension	220040412
Debug Build	no
Thread Safety	enabled
Zend Memory Manager	enabled
IPv6 Support	enabled
Registered PHP Streams	php, file, http, ftp, compress.zlib
Registered Stream Socket Transports	tcp, udp

This program makes use of the Zend Scripting Language Engine:  
Zend Engine v2.0.5, Copyright (c) 1998-2004 Zend Technologies

Powered By



## Finding the details of your PHP set-up

PHP Version 5.0.5



System	Windows NT MARK-PC 5.1 build 2600
Build Date	Sep 5 2005 15:50:13
Configure Command	cscript /nologo configure.js "--enable-snapshot-build" "--with-gd=shared"
Server API	Apache 2.0 Handler
Virtual Directory Support	enabled
Configuration File (php.ini) Path	C:\WINDOWS
PHP API	20031224
PHP Extension	20041030
Zend Extension	220040412
Debug Build	no
Thread Safety	enabled
Zend Memory Manager	enabled
IPv6 Support	enabled

The default directory for the `php.ini` file will be the system directory `C:\WINDOWS` unless you set the path to the `c:\php` directory using the technique shown on page 7

## inding the details of your PHP set-up

PHP Version 5.0.5



System	Windows NT MARK-PC 5.1 build 2600
Build Date	Sep 5 2005 15:50:13
Configure Command	cscript /nologo configure.js "--enable-snapshot-build" "--with-gd=shared"
Server API	Apache 2.0 Handler
Virtual Directory Support	enabled
Configuration File (php.ini) Path	C:\PHP\php.ini
PHP API	20031224
PHP Extension	20041030
Zend Extension	220040412
Debug Build	no
Thread Safety	enabled
Zend Memory Manager	enabled

The default directory for the `php.ini` file has been changed via the `httpd` configuration file from within Apache. The values in `php.ini` will now be used to configure PHP under Apache.

# A First PHP Example

- The following two pages illustrate a simple PHP “hello world” program.
- In PHP, code is inserted between the scripting delimiters `<?php` and `?>`. PHP code can be placed anywhere in XHTML markup, as long as the code is enclosed in these scripting delimiters.



# welcome.php Example

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">

<!-- welcome.php -->
<!-- XHTML file containing a PHP script. -->

<?php
    $name = "Mark";    //php declaration and assignment
?>

<html xmlns = "http://www.w3.org/1999/xhtml">

  <!-- head section of document -->
  <head>
    <title>A Simple PHP Document</title>
  </head>

  <!-- body section of document -->
  <body style = "font-size: 2em">
    <hr>
    <font color = blue><h1> Generating HTML From PHP </h1></font color>
    <p>
```

PHP code  
declaring a  
variable.



# welcome.php Example

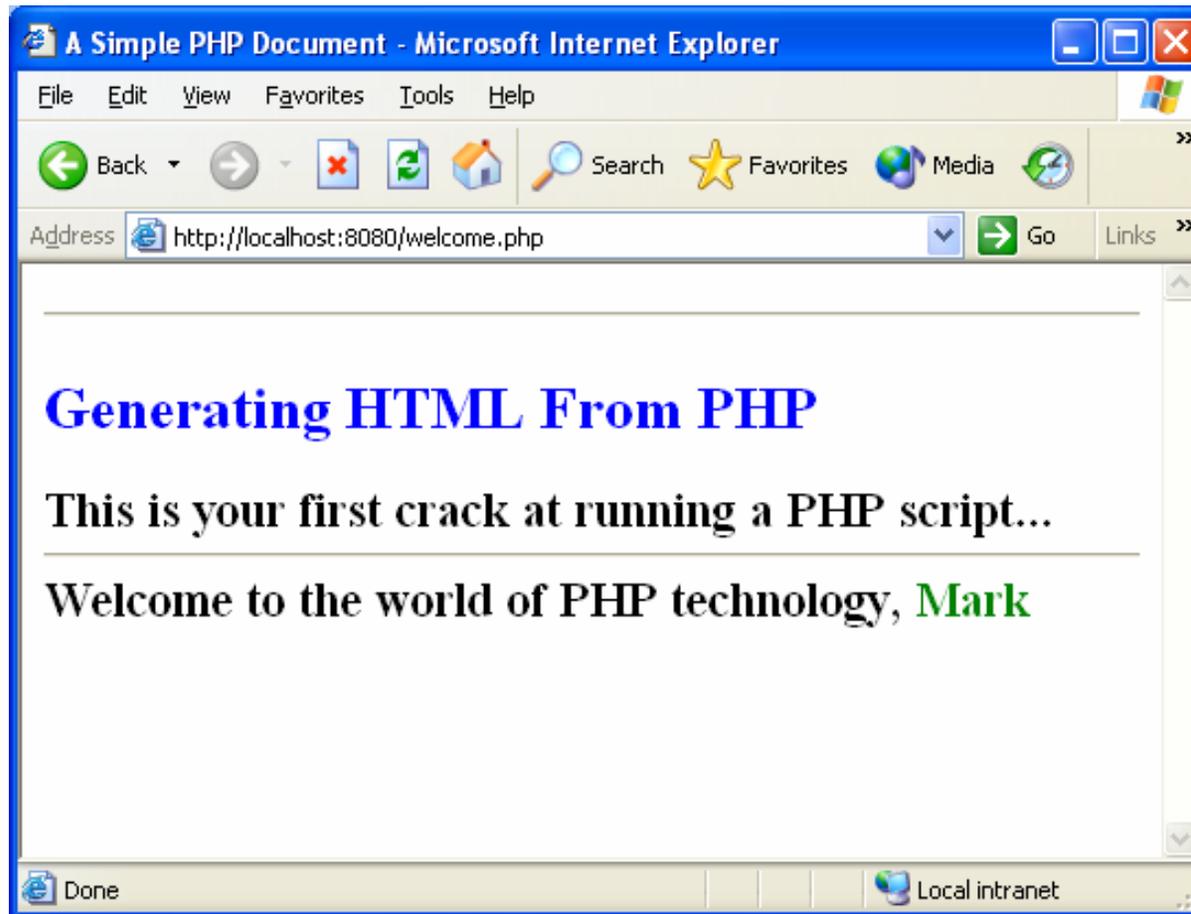
```
<strong>
  <!--print variable name's value in the message-->
  {
  <?php
    print("This is your first crack at running a PHP script...");
    print("<HR>");
    print("Welcome to the world of PHP technology, ");
  ?>
  <font color = green>
  {
  <?php
    print("$name");
  ?>
  </font color>
  }
  </strong>
</p>
</body>
</html> <!-- end XHTML document -->
```

PHP code

PHP code



# welcome.php Example Output



# Viewing Client/Server Environment Variables

- Knowledge of a client's execution environment is useful to system administrators who want to provide client-specific information.
- Environment variables contain information about a script's environment, such as the client's web browser, the HTTP host and the HTTP connection.
  - The table on the next page summarizes some of the superglobal arrays defined by PHP.
- The XHTML document on page 19 displays the values of the server's environment variables in a table. PHP stores the server variables and their values in the `$_SERVER` array. Iterating through the array allows one to view all of the server's environment variables.



# Some Superglobal Environment Arrays

Variable Name	Description
<code>\$_SERVER</code>	Data about the currently running server.
<code>\$_ENV</code>	Data about the client's environment.
<code>\$_GET</code>	Data posted to the server by the <code>get</code> method.
<code>\$_POST</code>	Data posted to the server by the <code>post</code> method.
<code>\$_COOKIE</code>	Data contained in cookies on the client's computer.
<code>\$GLOBALS</code>	Array containing all global variables.



# server.php Example

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<!-- server.php          -->
<!-- Program to display $_SERVER variables -->
<html xmlns = "http://www.w3.org/1999/xhtml">
  <head>
    <title>SERVER Variables Display</title>
  </head>

  <body style = "font-family: arial, sans-serif;
    background-color: #856363" background=image1.jpg>

    <table border = "0" cellpadding = "2" cellspacing = "0"
      width = "100%">
      <?php
        // print the key and value for each element
        // in the $_SERVER array
        foreach ( $_SERVER as $key => $value )
          print( "<tr><td bgcolor = '#11bbff'">
            <strong>$key</strong></td> <td>$value</td></tr>" );
      ?>
    </table>
  </body>
</html>
```

Iterate through the  
\$\_SERVER array to list all  
of the SERVER variables for  
the current server on which  
PHP is running.



Output from  
executing  
server.php

```

TP_ACCEPT image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, application/vnd.ms-excel, application/vnd.ms-powerpoint, application/msword,
application/x-shockwave-flash, */*
TP_ACCEPT_LANGUAGE en-us
TP_ACCEPT_ENCODING gzip, deflate
TP_USER_AGENT Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322; InfoPath.1)
TP_HOST localhost:8081
TP_CONNECTION Keep-Alive
TH c:\WINDOWS;c:\php;c:\Program Files\Common Files\Sonic Shared;C:\WINDOWS\system32;C:\WINDOWS;C:\WINDOWS\System32
\Wbem;C:\Program Files\MySQL\MySQL Server 4.1\bin;c:\WINDOWS;c:\php;c:\Sun\AppServer\bin;c:\php\ext
stemRoot C:\WINDOWS
MSPEC C:\WINDOWS\system32\cmd.exe
THEXT .COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH
NDIR C:\WINDOWS
SERVER_SIGNATURE Apache/2.0.55 (Win32) mod_jk/1.2.14 PHP/5.0.5 Server at localhost Port 8081
SERVER_SOFTWARE Apache/2.0.55 (Win32) mod_jk/1.2.14 PHP/5.0.5
SERVER_NAME localhost
SERVER_ADDR 127.0.0.1
SERVER_PORT 8081
NOTE_ADDR 127.0.0.1
DOCUMENT_ROOT C:/Program Files/Apache Group/Apache2/htdocs
SERVER_ADMIN admin@cs.ucf.edu
SCRIPT_FILENAME C:/Program Files/Apache Group/Apache2/htdocs/server.php
NOTE_PORT 3574
TEWAY_INTERFACE CGI/1.1
SERVER_PROTOCOL HTTP/1.1
REQUEST_METHOD GET
QUERY_STRING
REQUEST_URI /server.php
SCRIPT_NAME /server.php
SCRIPT_FILENAME /server.php

```

# Form Processing and Business Logic

- XHTML forms enable web pages to collect data from users and send it to a web server for processing.
- Interaction of this kind between users and web servers is vital to e-commerce applications. Such capabilities allow users to purchase products, request information, send and receive web-based email, perform on-line paging and take advantage of various other online services.
- The XHTML document on the next few pages collects information from a user for the purposes of adding them to a mailing list.
- The PHP file on page 23 validates the data entered by the user through the form and “registers” them in the mailing list database.



# form.html Example

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

```
<!-- form.html -->
```

```
<!-- Form for use with the form.php program -->
```

This XHTML document generates the form that the user will submit to the server via form.php

```
<html xmlns = "http://www.w3.org/1999/xhtml">
```

```
<head>
```

```
<title>Sample form to take user input in XHTML</title>
```

```
</head>
```

```
<body>
```

```
<h1>This is a sample registration form.</h1>
```

Please fill in all fields and click Register.

```
<!-- post form data to form.php -->
```

```
<form method = "post" action = "form.php">
```

```
<img src = "images/user.gif" alt = "User" /><br />
```

```
<span style = "color: blue">
```

```
  Please fill out the fields below.<br />
```

```
</span>
```

```
<!-- create four text boxes for user input -->
```

```
<img src = "images/fname.gif" alt = "First Name" />
```

```
<input type = "text" name = "fname" /><br />
```



```
<img src = "images/lname.gif" alt = "Last Name" />
<input type = "text" name = "lname" /><br />
<img src = "images/email.gif" alt = "Email" />
<input type = "text" name = "email" /><br />
<img src = "images/phone.gif" alt = "Phone" />
<input type = "text" name = "phone" /><br />
<span style = "font-size: 10pt">
  Must be in the form (555)555-5555</span>
<br /><br />
<img src = "images/downloads.gif"
  alt = "Products" /><br />

<span style = "color: blue">
  Which publication would you like information about?
</span><br />

<!-- create drop-down list containing magazine names -->
<select name = "magazine">
  <option>Velo-News</option>
  <option>Cycling Weekly</option>
  <option>Pro Cycling</option>
  <option>Cycle Sport</option>
    <option>RadSport</option>
    <option>Mirror du Cyclisme</option>
</select>
<br /><br />
```



```
<img src = "images/os.gif" alt = "Operating System" />
<br /><span style = "color: blue">
  Which operating system are you currently using?
<br /></span>
<!-- create five radio buttons -->
<input type = "radio" name = "os" value = "Windows XP"
  checked = "checked" />
  Windows XP
<input type = "radio" name = "os" value =
  "Windows 2000" />
  Windows 2000
<input type = "radio" name = "os" value =
  "Windows 98" />
  Windows 98<br />
<input type = "radio" name = "os" value = "Linux" />
  Linux

<input type = "radio" name = "os" value = "Other" />
  Other<br />

<!-- create a submit button -->
<input type = "submit" value = "Register" />
</form>

</body>
</html>
```



# form.php Example

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

```
<!-- form.php -->
```

```
<!-- Read information sent from form.html -->
```

```
<html xmlns = "http://www.w3.org/1999/xhtml">
```

```
<head>
```

```
<title>Form Validation</title>
```

```
</head>
```

```
<body style = "font-family: arial,sans-serif">
```

```
<?php
```

```
extract($_POST);
```

```
// determine whether phone number is valid and print an error message if not
```

```
if ( !ereg( "^\([0-9]{3}\)[0-9]{3}-[0-9]{4}$",
```

```
  $phone ) ){
```

```
  print( "<p><span style = \"color: red; font-size: 2em\">
```

```
  INVALID PHONE NUMBER:</span><br />
```

```
  A valid phone number must be in the form
```

```
  <strong>(555)555-5555</strong><br />
```

```
  <span style = \"color: blue\">
```

```
  Click the Back button, enter a valid phone number and resubmit.<br /><br />
```

```
  Thank You.</span></p></body></html>" );
```

```
  die(); // terminate script execution
```

```
}
```

```
?>
```

Function `extract` (`associativeArray`) creates a variable-value pair corresponding to each key-value pair in the associative array `$_POST`.

See page 28 for explanation of regular expressions.

Function `die()` terminates script execution. An error has occurred, no need to continue.



```

<p>Hi
  <span style = "color: blue"> <strong> <?php print( "$fname" ); ?> </strong> </span>.
  Thank you for completing the survey.<br />
  You have been added to the <span style = "color: blue">
    <strong> <?php print( "$magazine " ); ?> </strong> </span> mailing list.
</p>
<strong>The following information has been saved in our database:</strong><br />
<table border = "0" cellpadding = "0" cellspacing = "10">
  <tr>
    <td bgcolor = "#ffffaa">Name </td>
    <td bgcolor = "#ffffbb">Email</td>
    <td bgcolor = "#ffffcc">Phone</td>
    <td bgcolor = "#ffffdd">OS</td>
  </tr>
  <tr>
    <?php
      // print each form field's value
      print( "<td>$fname $lname</td> <td>$email</td> <td>$phone</td> <td>$os</td>" );
    ?>
  </tr>
</table>
<br /><br /><br />
<div style = "font-size: 10pt; text-align: center">
  This is only a sample form.  You have not been added to a mailing list.
</div>
</body>
</html>

```



Sample form to take user input in XHTML - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://localhost:8081/form.html> Go Links >>

## This is a sample registration form.

Please fill in all fields and click Register.

**User Information**  
Please fill out the fields below.

First Name

Last Name

Email

Phone

Must be in the form (555)555-5555

**Publications**  
Which publication would you like information about?

Velo-News

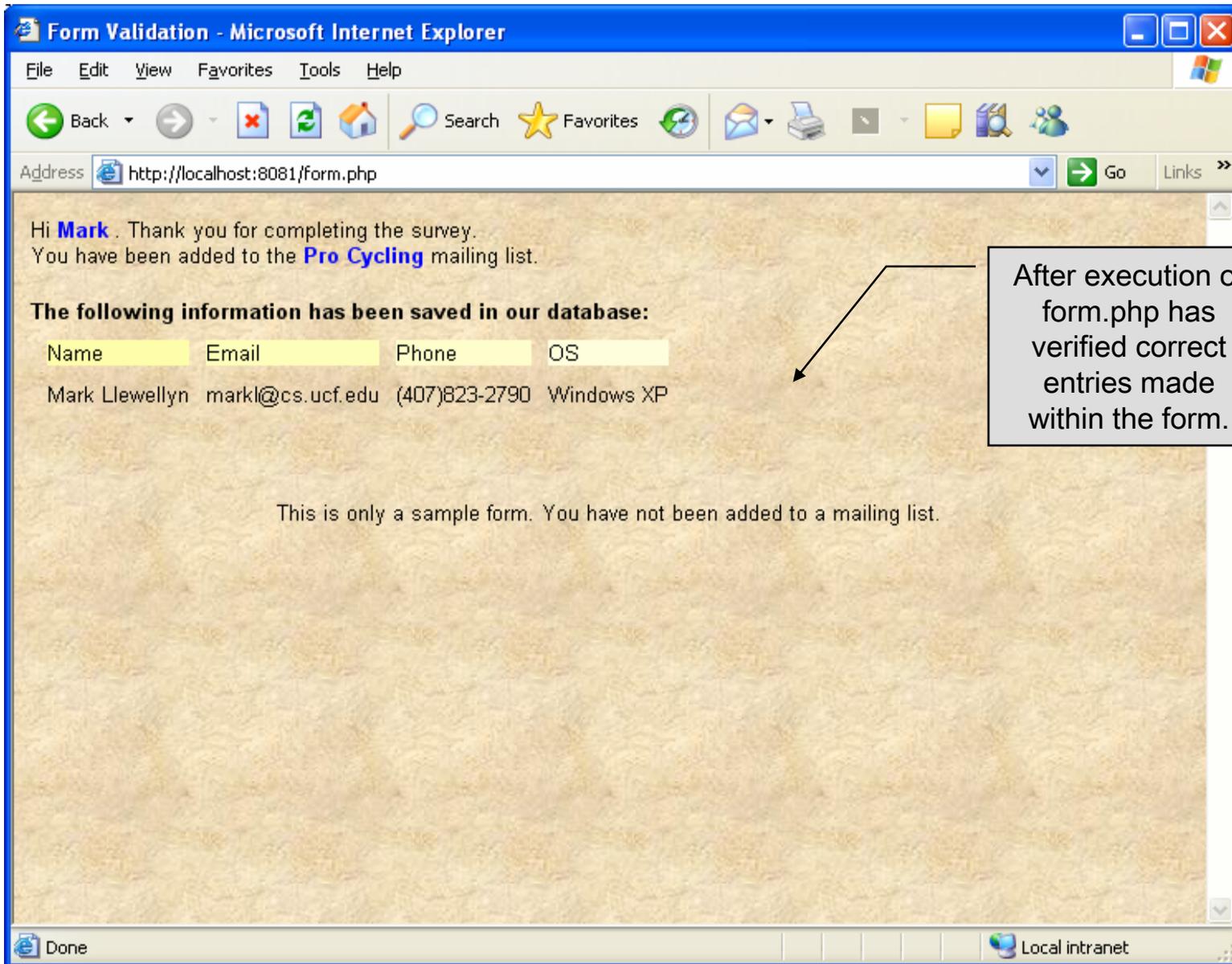
**Operating System**  
Which operating system are you currently using?

Windows XP  Windows 2000  Windows 98  
 Linux  Other

Done Local intranet

Execution of form.html within a web browser





Sample form to take user input in XHTML - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites

Address <http://localhost:8081/form.html> Go Links

# This is a sample registration form.

Please fill in all fields and click Register.

**User Information**

Please fill out the fields below.

**First Name**

**Last Name**

**Email**

**Phone**

Must be in the form (555)555-5555

**Publications**

Which publication would you like information about?

**Operating System**

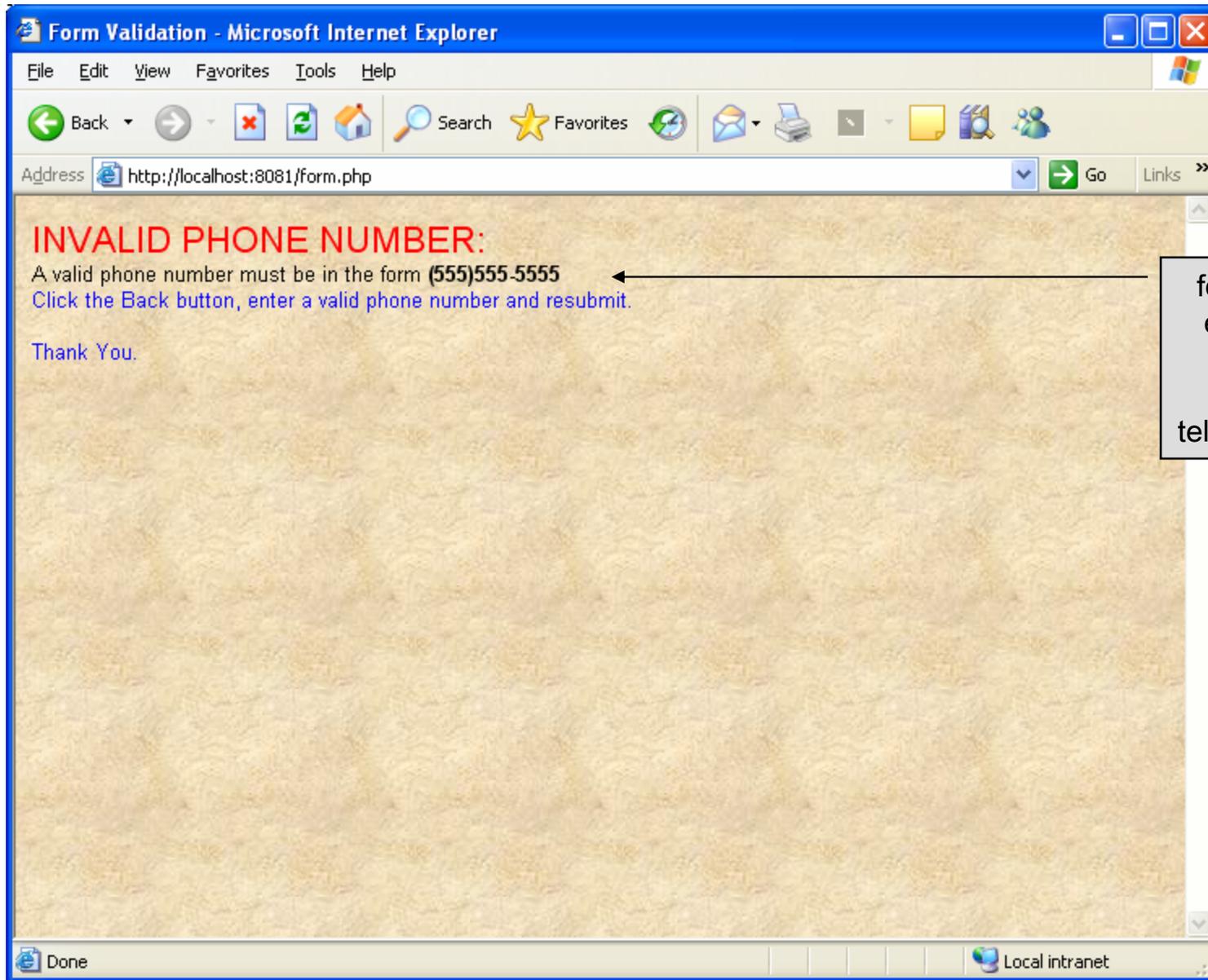
Which operating system are you currently using?

Windows XP  Windows 2000  Windows 98  
 Linux  Other

Done Local intranet

User enters an improperly formatted telephone number in the form.





form.php issues error regarding improperly formatted telephone number.



## How the Form Example Works

- The `action` attribute of the form element, indicates that when the user clicks the `Register` button, the form data will be posted to `form.php` for processing.
- Using `method = "post"` appends the form data to the browser request that contains the protocol (i.e., HTTP) and the requested resource's URL. Scripts located on the web server's machine (or accessible through the network) can access the form data sent as part of the request.
- Each of the form's input fields are assigned a unique name. When `Register` is clicked, each field's name and value are sent to the web server.
- Script `form.php` then accesses the value for each specific field through the global array `$_POST`.



## How the Form Example Works (cont.)

- The superglobal arrays are associative arrays predefined by PHP that hold variable acquired from the user input, the environment, or the web server and are accessible in any variable scope.
  - If the information from the form had been submitted via the HTTP method `get`, then the superglobal array `$_GET` would contain the name-value pairs.
- Since the HTML form and the PHP script “communicate” via the name-value pairs, it is a good idea to make the XHTML object names meaningful so that the PHP script that retrieves the data is easier to understand.



## Register\_globals

- In PHP versions 4.2 and higher, the directive `register_globals` is set to `Off` by default for security reasons.
- Turning off `register_globals` means that all variables sent from an XHTML form to a PHP document now must be accessed using the appropriate superglobal array (either `$_POST` or `$_GET`).
- When this directive was turned On, as was the default case in PHP versions prior to 4.2, PHP created an individual global variable corresponding to each form field.



# Validation of Form Generated Data

- The form example illustrates an important concept in the validation of user input. In this case, we simply checked the validity of the format of the telephone number entered by the client user.
- In general, it is crucial to validate information that will be entered into database or used in mailing lists. For example, validation can be used to ensure that credit-card numbers contain the proper number of digits before the numbers are encrypted to a merchant.
- In this case, the form.php script is implementing the **business logic** or **business rules** for our application.



# Pattern Matching in PHP

- For powerful string comparisons (pattern matching), PHP provides functions `ereg` and `preg_match`, which use regular expressions to search a string for a specified pattern.
- Function `ereg` uses **Portable Operating System Interface (POSIX) extended regular expressions**.
  - POSIX-extended regular expressions are a standard to which PHP regular expression conform.
- Function `preg_match` provides **Perl-compatible regular expressions**.
- Perl-compatible regular expressions are more widely used than POSIX regular expressions. PHP's support for Perl-compatible regular expressions eases migration from Perl to PHP. The following examples illustrate these concepts.



# expression.php - Example

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<!-- expression.php -->
<!-- Using regular expressions -->
<html xmlns = "http://www.w3.org/1999/xhtml">
  <head>
    <title>Regular expressions</title>
  </head>
  <body>
    <?php
      $search = "Now is the time";
      print( "Test string is: '$search'<br /><br />" );
      // call function ereg to search for pattern 'Now' in variable search
      if ( ereg( "Now", $search ) )
        print( "String 'Now' was found.<br />" );

      // search for pattern 'Now' in the beginning of the string
      if ( ereg( "^Now", $search ) )
        print( "String 'Now' found at beginning of the line.<br />" );

      // search for pattern 'Now' at the end of the string
      if ( ereg( "Now$", $search ) )
        print( "String 'Now' was found at the end of the line.<br />" );
```

^ matches at beginning  
of a string

\$ matches at end of a  
string



```

// search for any word ending in 'ow'
if ( ereg( "[[:<:]]([a-zA-Z]*ow)[[:>:]]", $search,
    $match ) )
    print( "Word found ending in 'ow': " .
        $match[ 1 ] . "<br />" );

// search for any words beginning with 't'
print( "Words beginning with 't' found: " );

while ( eregi( "[[:<:]](t[[:alpha:]]+)[[:>:]]",
    $search, $match ) ) {
    print( $match[ 1 ] . " " );

    // remove the first occurrence of a word beginning
    // with 't' to find other instances in the string
    $search = ereg_replace( $match[ 1 ], "", $search );
}

print( "<br />" );
?>
</body>
</html>

```

Uses a regular expression to match a word ending in "ow".



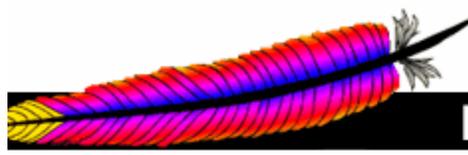
# Output From `expression.php` - Example



# Getting The Apache HTTP Server

From the main [www.apache.org](http://www.apache.org) webpage, select the HTTP Server link.





# Apache

## HTTP SERVER PROJECT



### The Number One HTTP Server On The Internet

The Apache HTTP Server Project

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows NT. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

- essentials
- [About](#)
  - [License](#)
  - [FAQ](#)
  - [Security Reports](#)

Apache has been the most popular web server on the Internet since 1995, and that more than 70% of the web sites on the Internet are using Apache.

From the main HTTP Server page, select download from a mirror site.

Server Survey found Apache to be the most popular web servers combined.

The Apache HTTP Server is a project of the [Apache Software Foundation](#).

### ApacheCon US 2005, San Diego, California, USA - 10-14 December

The Apache Software Foundation invites you to [ApacheCon US 2005!](#)

- download!
- [from a mirror](#)

Please make plans to join us in San Diego.

### Apache 2.0.55 Released

The Apache HTTP Server Project is proud to [announce](#) the release of version 2.0.55 of the Apache HTTP Server ("Apache").

- documentation
- [Apache 1.3](#)
  - [Apache 2.0](#)
  - [Apache 2.1 \(beta\)](#)
  - [Trunk \(dev\)](#)

This version of Apache is principally a security and bug fix release, and represents the best available version of Apache HTTP Server.

For further details, see the [announcement](#).

[Download](#) | [New Features in Apache 2.0](#) | [ChangeLog for 2.0.55](#) | [Complete ChangeLog for 2.0](#)

- Who's Involved
- [Mailing Lists](#)
  - [Bug Reports](#)
  - [Developer Info](#)

### Apache 2.1.9-beta Released

The Apache HTTP Server Project is proud to [announce](#) the release of version 2.1.9-beta of the Apache HTTP Server ("Apache").

This version of Apache is a Beta release of the unstable development branch. New features include Smart Filtering, Improved Caching, & IP

- [About](#)
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#### Download!

- [from a mirror](#)

#### Documentation

- [Apache 1.3](#)
- [Apache 2.0](#)
- [Apache 2.1 \(beta\)](#)
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- [Mailing Lists](#)
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#### Other projects

- [Docs](#)
- [Test](#)
- [Flood](#)
- [libapreq](#)
- [Modules](#)
- [cli \(.NET\)](#)

#### Miscellaneous

- [Contributors](#)
- [Awards](#)
- [Support](#)

If you are downloading the Win32 distribution, please read these [important notes](#).

#### Mirror

The currently selected mirror is <http://www.tux.org/pub/net/apache/dist>. If you encounter a problem with this mirror, please select another mirror. If all mirrors are failing, there are *backup* mirrors (at the end of the mirrors list) that should be available.

Other mirrors:

You may also consult the [complete list of mirrors](#).

Either accept the default mirror site or select another.

#### Apache HTTP Server 2.0.55 is the best available version

For details see the [Official Announcement](#) and the [CHANGES\\_2.0](#) list.

Apache 2.0 add-in modules are not compatible with Apache 1.3 modules. If you are running third party add-in modules, you will need to obtain new modules written for Apache 2.0 from that third party before you attempt to upgrade from Apache 1.3.

- Unix Source: [httpd-2.0.55.tar.gz](#) [PGP] [MD5]
- Unix Source: [httpd-2.0.55.tar.bz2](#) [PGP] [MD5]
- Win32 Source: [httpd-2.0.55-win32-src.zip](#) [PGP] [MD5]
- Win32 Binary (MSI Installer): [apache\\_2.0.55-win32-x86-no\\_ssl.msi](#) [PGP] [MD5]
- [Other files](#)

Choose your option from the 2.0.55 version

#### Apache HTTP Server 2.1.9-beta is also available

For details see the [Official Announcement](#) and the [CHANGES\\_2.1](#) list.

Apache 2.1 does not provide a stable binary API. It is the development branch, and contains many improvements, but may change drastically between releases.

- Unix Source: [httpd-2.1.9-beta.tar.gz](#) [PGP] [MD5]
- Unix Source: [httpd-2.1.9-beta.tar.bz2](#) [PGP] [MD5]
- [Other files](#)

#### Apache 1.3.34 is also available



### What is PHP?

PHP is a widely-used general-purpose scripting language that is especially suited for Web development and can be embedded into HTML. If you are new to PHP and want to get the idea of how it works, try [introductory tutorial](#). After that, check out the online [manual](#), and the example [driven sites](#) and some of the [other resources](#) available in the [resources section](#).

If you've wondered how popular PHP is, see the [Netcraft Survey](#).

### Links To

- [Free DNS](#)
- [Free Hosting](#)
- [Free Networks](#)
- [Free Servers](#)
- [Free Server Central](#)
- [Free Web Solutions](#)
- [Free VPS Hosting](#)
- [Free systems / HIT](#)
- [Free Open Source Lab](#)
- [Free ini A/S](#)

### Related sites

- [Apache](#)
- [SOL](#)

### PHP 4.4.1 Released

[31-Oct-2005] PHP 4.4.1 is now [available for download](#). This version is a maintenance release, that contains numerous bug fixes, including a number of security fixes related to the overwriting of the GLOBALS array. All users of PHP 4.3 and 4.4 are encouraged to upgrade to this version.

The full list of changes in PHP 4.4.1 is available in the [PHP 4 ChangeLog](#).

Select downloads from the main PHP page.

### PHP Québec 2006: call for speakers

[18-Oct-2005] [PHP Québec](#) is pleased to announce the 2006 PHP Québec conference, which will be held between March, 29th and 31th 2006. We are looking for the best speakers, willing to share their experience and skills with professional PHP developers from eastern Canada and USA. PHP Québec 2006 features 3 distinct tracks:

- Technical PHP, covering in deep details of PHP techniques.
- Professional Development, featuring tools and development methodologies to increase productivity.
- Databases, covers different databases that can be used with PHP.

Sessions will be held in French or English. For more information, see the [PHP Québec](#) website.

### Forum PHP in Paris, November 9 & 10th, 2005

[05-Oct-2005] The French [AFUP association](#) is proud to announce the fourth annual PHP meeting in Paris, on November 9th and 10th, 2005. Developers and managers will gather to meet Rasmus Lerdorf, Wez Furlong and other prominent community



### This mirror sponsored by



### Upcoming Events [\[add\]](#)

#### November

#### User Group Events

- 16. [Calgary](#)
- 16. [Miami PHP User Group](#)
- 16. [Broward Php Usergroup](#)
- 16. [Chicago PHP User Group](#)
- 16. [Nashville PHP Users Group](#)
- 17. [TriPUG](#)
- 17. [Portland Or PHP Meetup group](#)
- 17. [OINK-PUG \(Cincinnati, Ohio\)](#)
- 17. [Utah PHP Users Group Meeting](#)

aries for other systems  
o not distribute UNIX/Linux  
ies. Most Linux distributions  
: with PHP these days, so if you  
it want to compile your own, go  
ur distribution's download site.  
ies available on external  
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[Optimizer](#) for PHP 4.0.3 and  
is available on Zend  
nologies' web site

[HP-GTK](#) downloads, please  
our site dedicated to [PHP-GTK](#).

## PHP 5.0.5

### Complete Source Code

- [PHP 5.0.5 \(tar.bz2\)](#) [4,781Kb] - 05 Sep 2005  
md5: b5d4ca75bbb11ee5b830fa67213d9f7f
- [PHP 5.0.5 \(tar.gz\)](#) [5,940Kb] - 05 Sep 2005  
md5: ae36a2aa35cfaa58bdc5b9a525e6f451

### Windows Binaries

- [PHP 5.0.5 zip package](#) [7,825Kb] - 05 Sep 2005  
md5: e5201a26444b55101a113efddc529bf9
- [Collection of PECL modules for PHP 5.0.5](#) [1,483Kb] - 05 Sep 2005  
(Most of these [PECL](#) extension files come standard with PHP 4 Windows binaries but have since been moved into this separate PECL download. Files such as php\_pdf.dll, php\_zip.dll, etc.)  
md5: cec67c89356b8a95a51dfdfc22c7bbbb
- [PHP 5.0.5 installer](#) [2,336Kb] - 9 Sep 2005  
(CGI only, packaged as Windows installer to install and configure PHP, and automatically configure IIS, PWS and Xitami, with manual configuration for other servers. N.B. no external extensions included)  
md5: 0bb307c1a9185faa161fdf549348ab8e

We have a [PHP 5 / Zend Engine 2 page](#) explaining the language level changes introduced in PHP 5. The [PHP 5 ChangeLog](#) details all the other changes.

## PHP 4.4.1

### Complete Source Code

Select appropriate download for your system. For Windows, the installer version works well except it requires manual set-up for Apache. See earlier notes for details.

