A PRESENTATION ON PHP

- BY MANISH BOTHRA

A g e n d a

1. Brief History of PHP
2. INSTALLATION
3. Examples

Brief History of PHP

PHP (PHP: Hypertext Preprocessor) was created by Rasmus Lerdorf in 1994. It was initially developed for HTTP usage logging and server-side form generation in Unix.

PHP 2 (1995) transformed the language into a Server-side embedded scripting language. Added database support, file uploads, variables, arrays, recursive functions, conditionals, iteration, regular expressions, etc.

PHP 3 (1998) added support for ODBC data sources, multiple platform support, email protocols (SNMP,IMAP), and new parser written by Zeev Suraski and Andi Gutmans .

PHP 4 (2000) became an independent component of the web server for added efficiency. The parser was renamed the Zend Engine. Many security features were added.

PHP 5 (2004) adds Zend Engine II with object oriented programming, robust XML support using the libxml2 library, SOAP extension for interoperability with Web Services, SQLite has been bundled with PHP

Why is PHP used?

Easy to Use
Code is embedded into HTML. The PHP code is enclosed in special start and end tags that allow you to jump into and out of "PHP mode".

```
<html>
 <head>
<title>Example</title>
</head>
<body>

<?php
echo "Hi, I'm a PHP script!";
?>

</body>
</html>
```

Why is PHP used?

Cross Platform

Runs on almost any Web server on several operating system.

One of the strongest features is the wide range of Supported database.

Web Servers: **Apache, Microsoft IIS, Caudium, Netscape Enterprise Server**

Operating Systems: **UNIX (HP-UX,OpenBSD,Solaris,Linux), Mac OSX, Windows NT/98/2000/XP/2003**

Supported Databases: **Adabas D, dBase,Empress, FilePro (read-only), Hyperwave,IBM DB2, Informix, Ingres, InterBase, FrontBase, mSQL, Direct MS-SQL, MySQL, ODBC, Oracle (OCI7 and OCI8), Ovrimos, PostgreSQL, SQLite, Solid, Sybase, Velocis,Unix dbm**

INSTALLATION

Installing PHP on Windows

Introduction

1. Introduction and Scope
2. Choosing an installation method
3. Windows InstallShield Installation
4. Manual Installation

Installing PHP on Windows

Introduction

Scope of this presentation

- NOT for production systems
- Assumes Windows and Web Server are already installed and configured
- Developing and testing only
- Covers default installation, no extensions

Installing PHP on Windows

Introduction

Supported 32-bit Windows Platforms (Win32)

- Windows 9x (95/98/ME)
- Windows NT (NT/2000/XP)
  Workstation/Home/Professional
  Server Editions

Installing PHP on Windows

Introduction

Supported web server packages

- MS Personal Web Server (PWS) 3+
- MS Internet Information Server (IIS) 3+
- Apache Web Server 2+
- Netscape, iPlanet
- Many many more

Installing PHP on Windows

Introduction

A quick word on security

- Web servers are targets!
- Stay patched
- MS Baseline Security Analyzer
- IIS Lockdown Tool
- Work offline if possible

Installing PHP on Windows

Choosing an Installation Method

- Windows InstallShield (Beginners)
- Manual Binary Installation (Intermediate)
- Building from Source (Advanced)

Installing PHP on Windows

Choosing an Installation Method

Windows Installshield

- Quick, small, easy
- Configures some common settings for a few web servers (IIS, PWS, Xitami, Apache)
- Only installs CGI version (php.exe)
- NOT a secure or production configuration by default
- Limited extensions
- A quick-and-easy way to get your feet wet with PHP

Installing PHP on Windows

Choosing an Installation Method

Manual Binary Installation

- Bigger download, but still less than 6MB
- Configuration is manual, but DLLs are available for all supported web servers.
- Installs CGI version OR new ISAPI version.
- Forces you to consider security and performance up-front with manual configuration of php.ini
- Requires manual copying of files, and setting of permissions
- Requires manual configuration of your web server

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Choosing an Installation Method

Building from source

- A fun weekend project (not for the faint of heart)
- Poorly documented ("set and forget")
- Requires MS Visual Studio (C++)

Installing PHP on Windows

Windows InstallShield Installation (IIS)

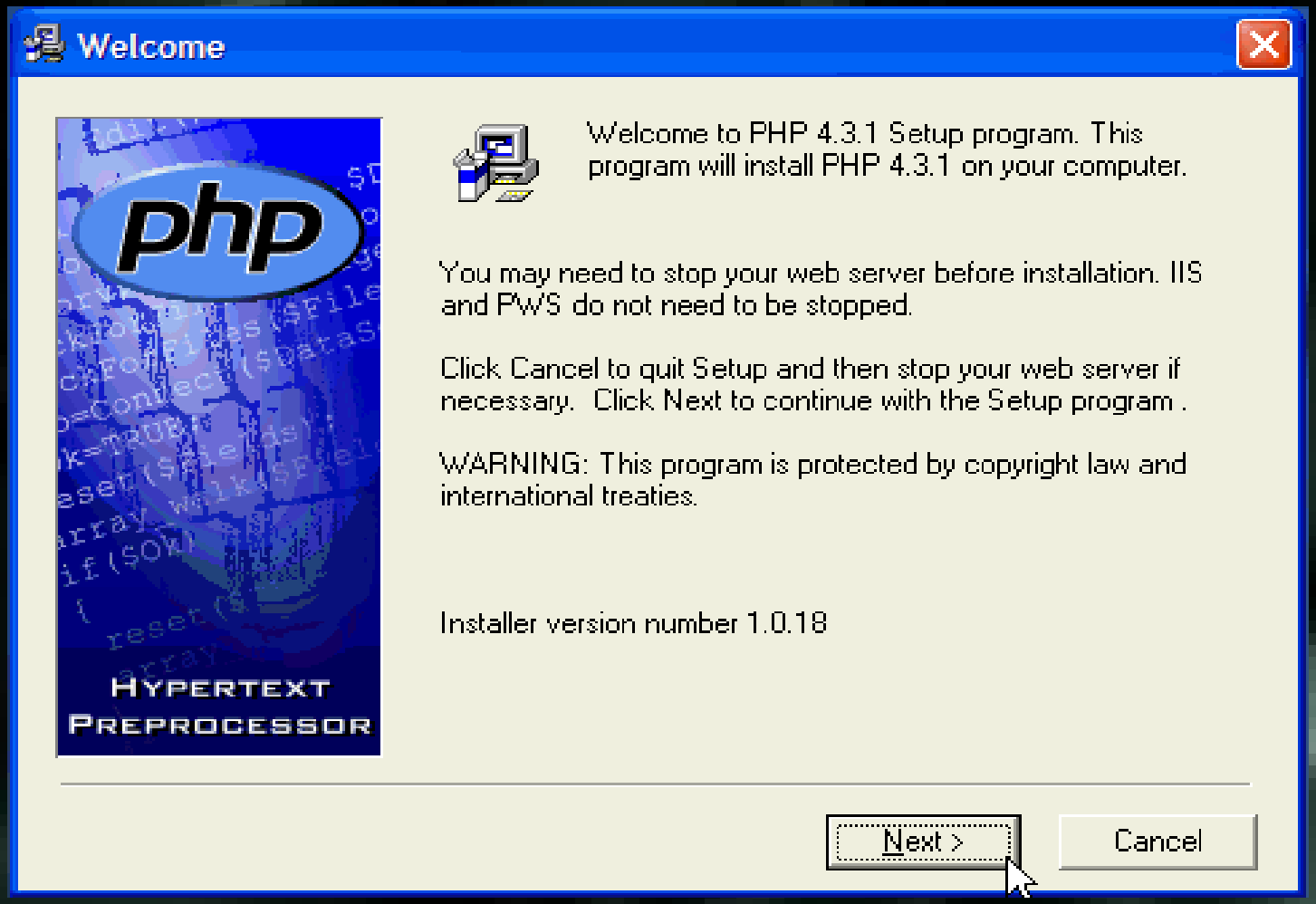
Example environment

- Windows XP Professional (SP 1)
- IIS 5.1
- PHP 4.3.1

Installing PHP on Windows

Windows InstallShield Installation (IIS)

Step 1: Download the most recent installer and execute



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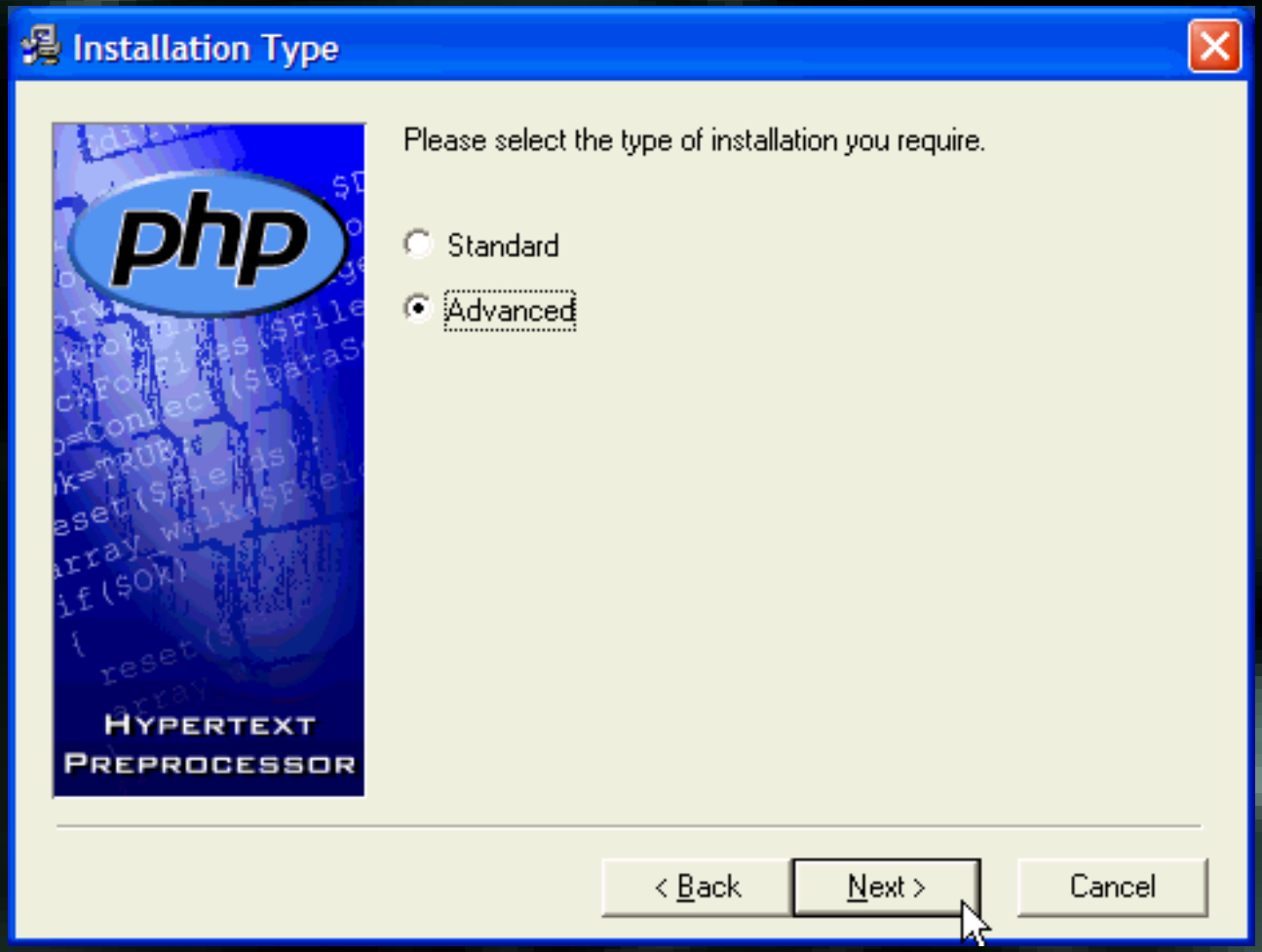
Windows InstallShield Installation (IIS)

Step 2: Choose Standard or Advanced Installation



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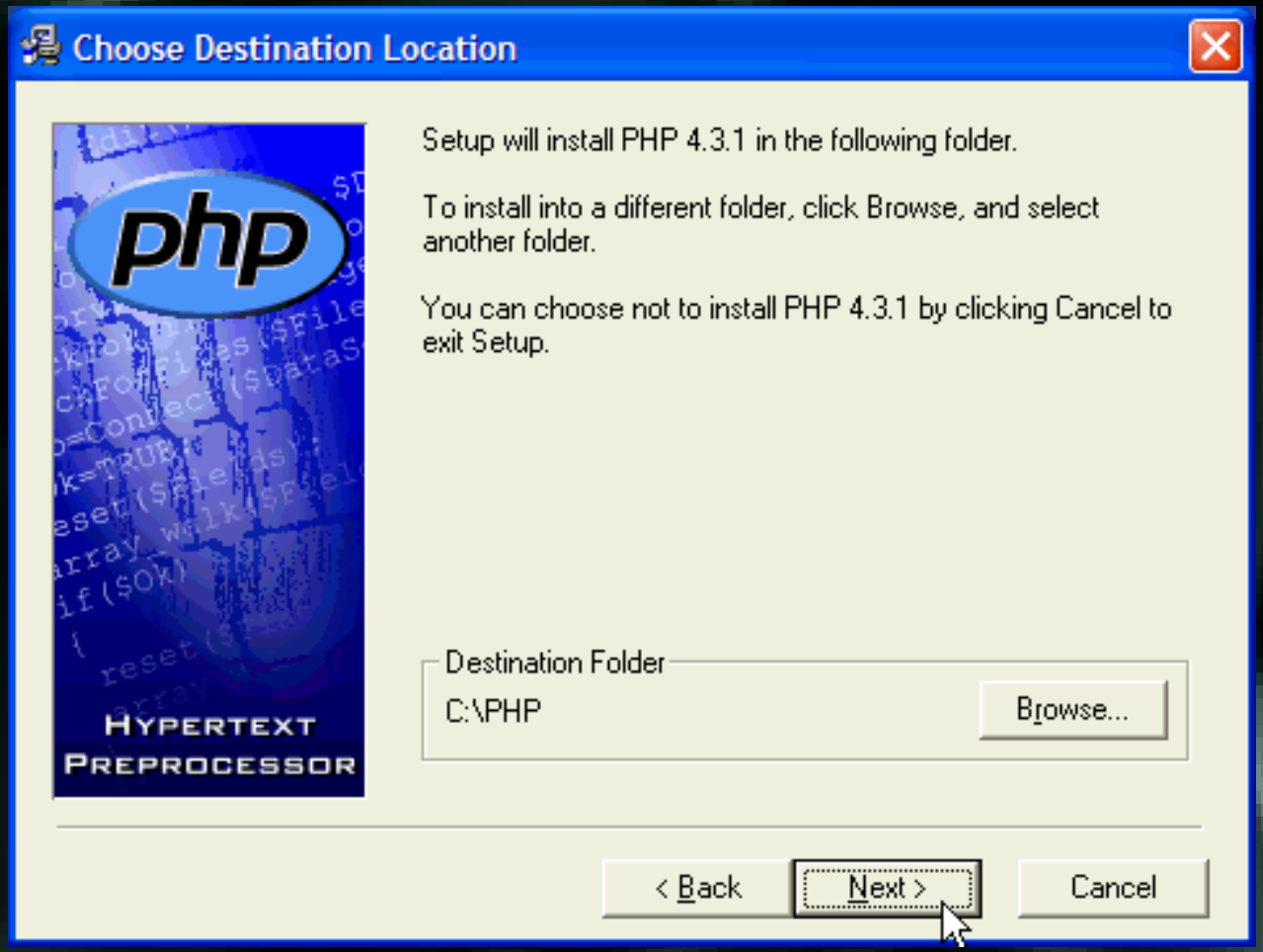
Windows InstallShield Installation (IIS)

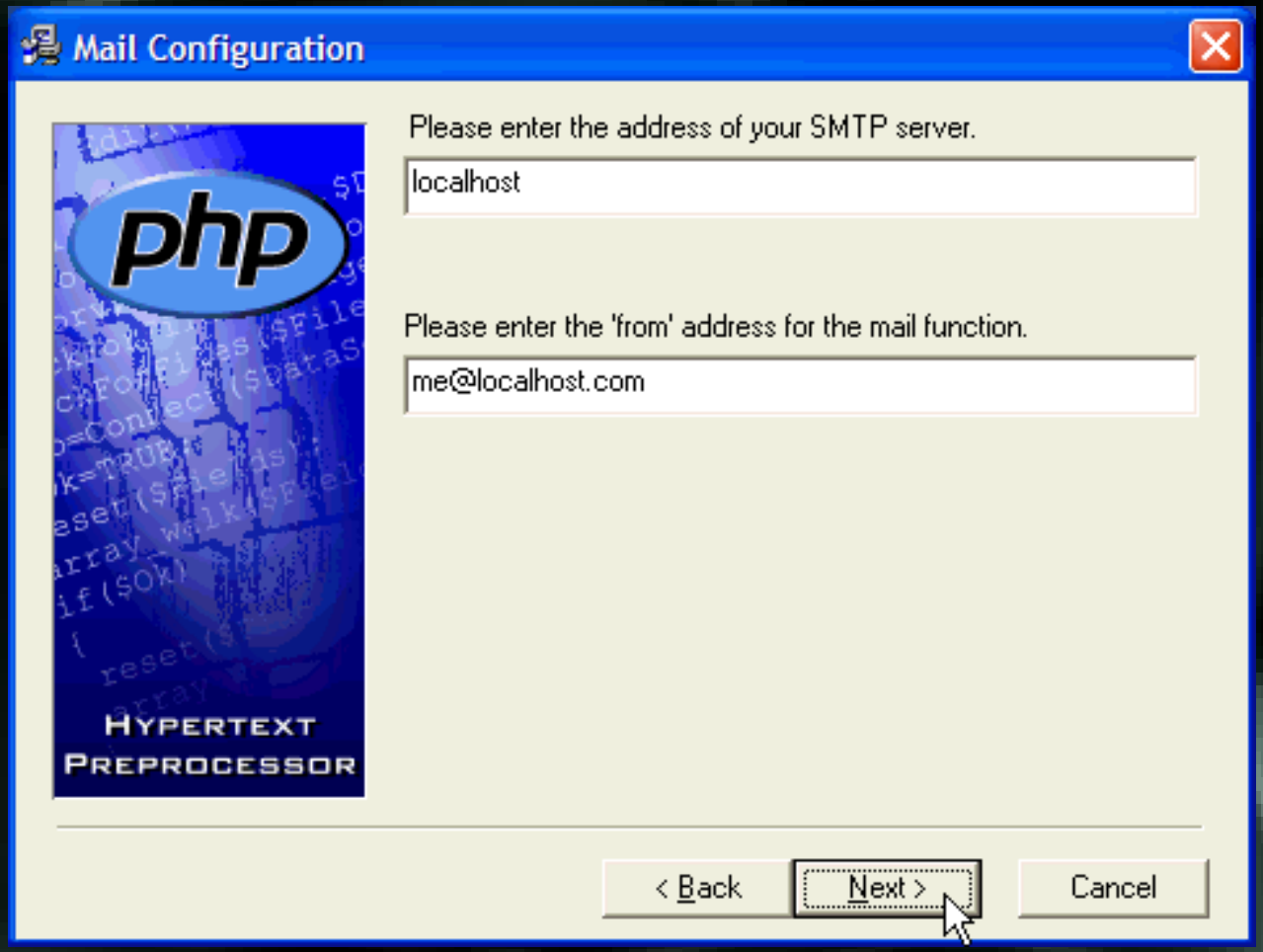
Step 3: Choose an installation directory (c:\php)



Installing PHP on Windows

Windows InstallShield Installation (IIS)

Step 4: SMTP settings



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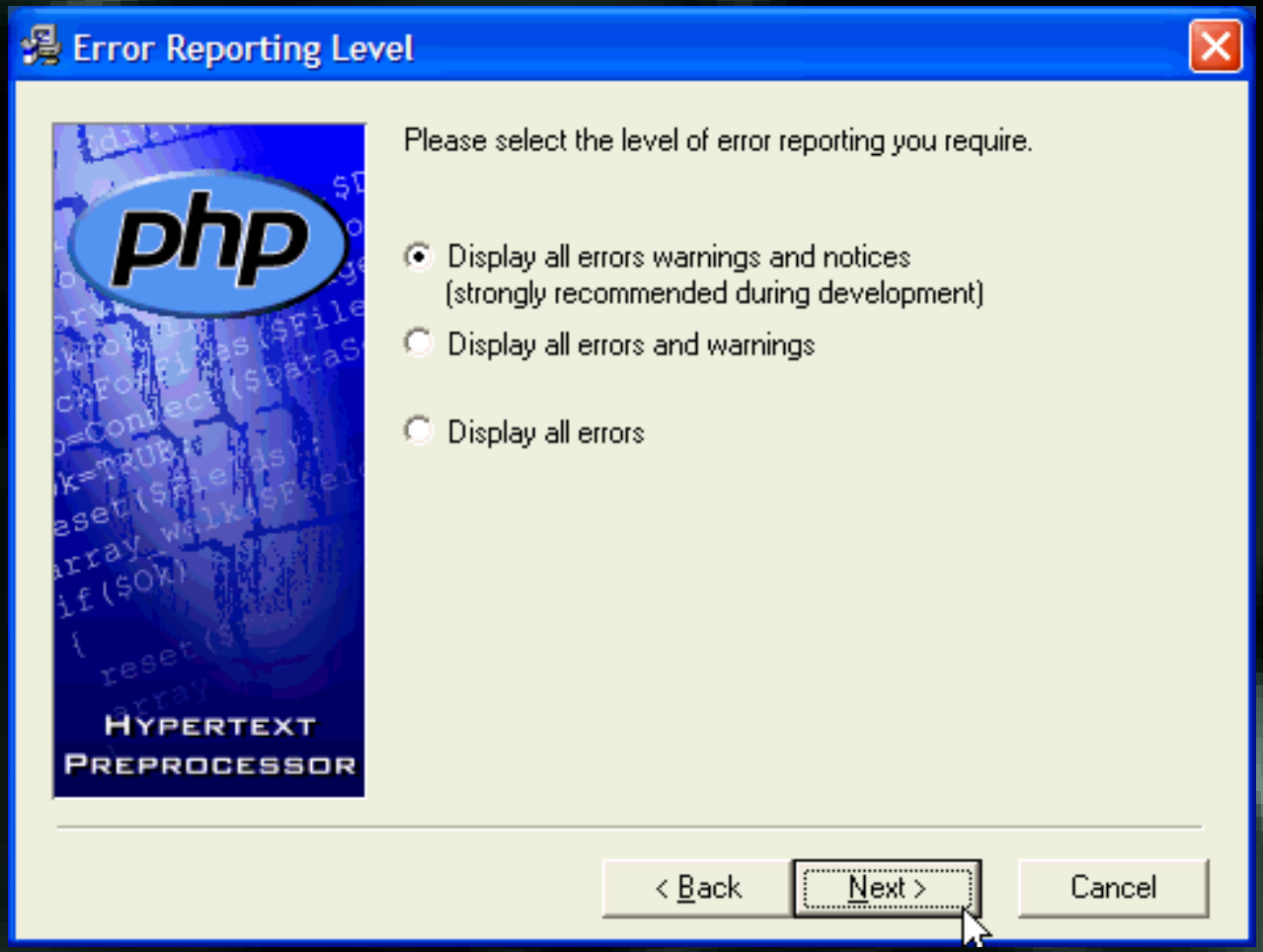
Windows InstallShield Installation (IIS)

Step 4: Error Settings (Display Everything)



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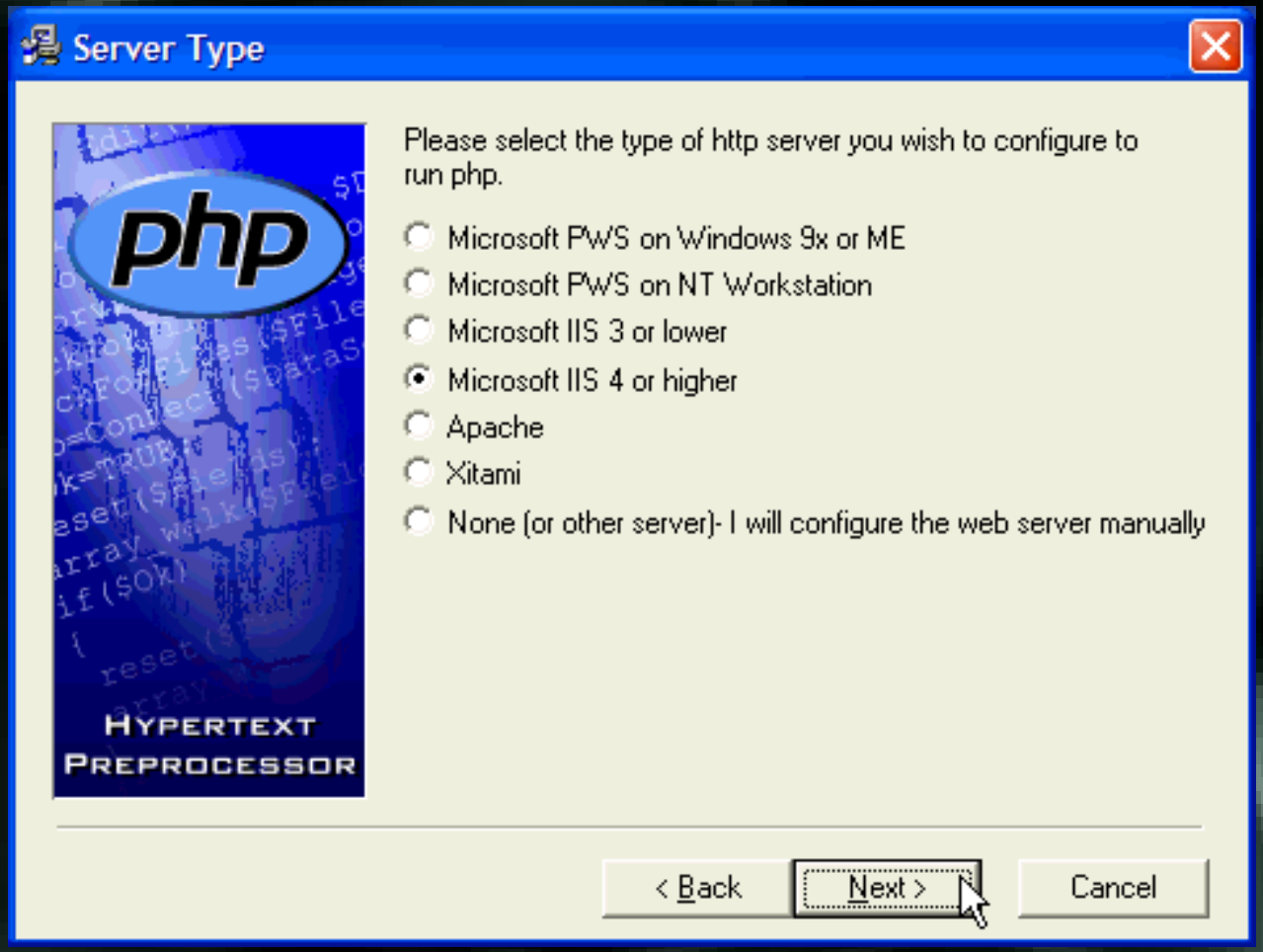
Windows InstallShield Installation (IIS)

Step 5: Select your web server



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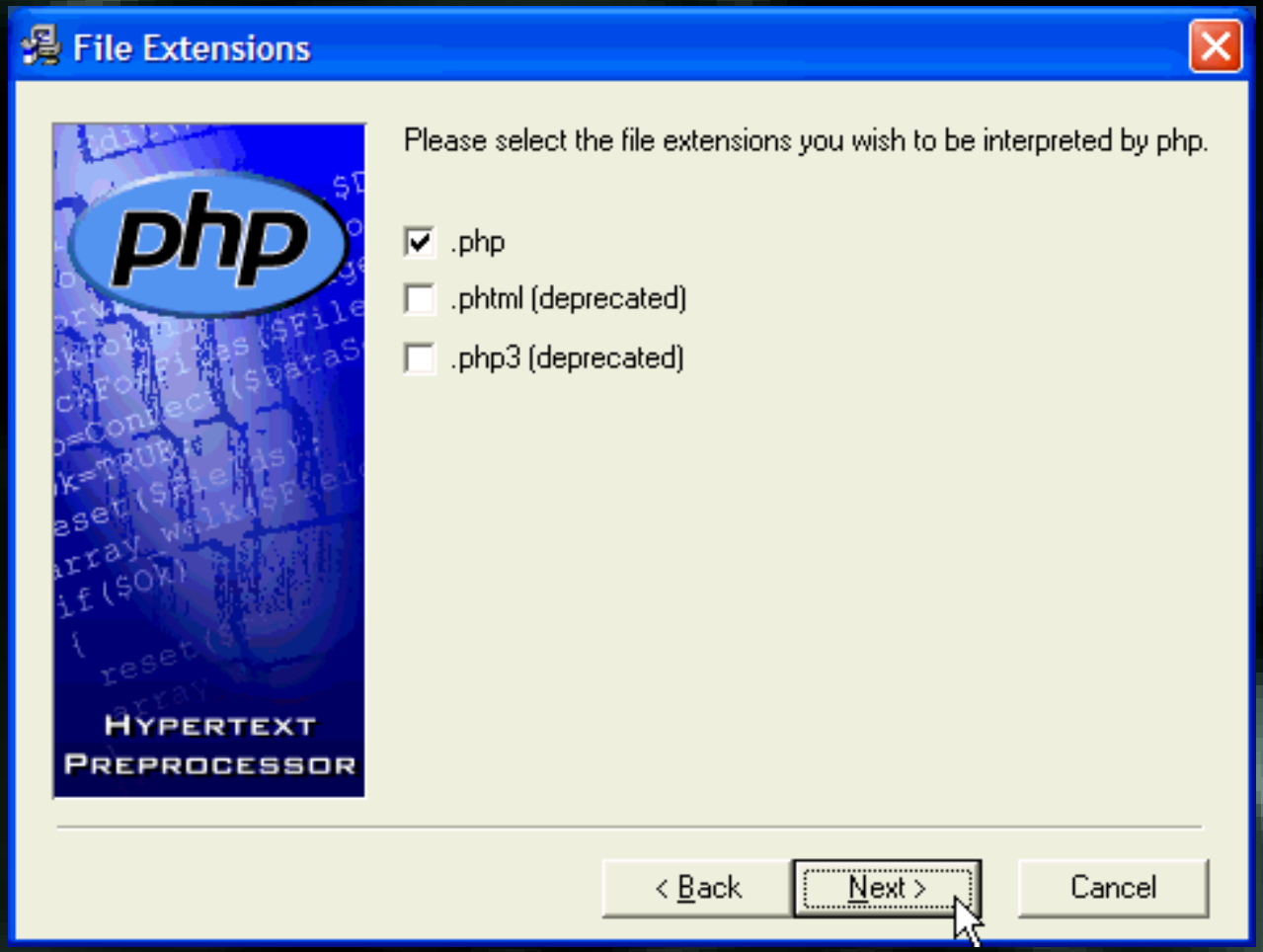
Windows InstallShield Installation (IIS)

Step 6: Register file extensions (.php)



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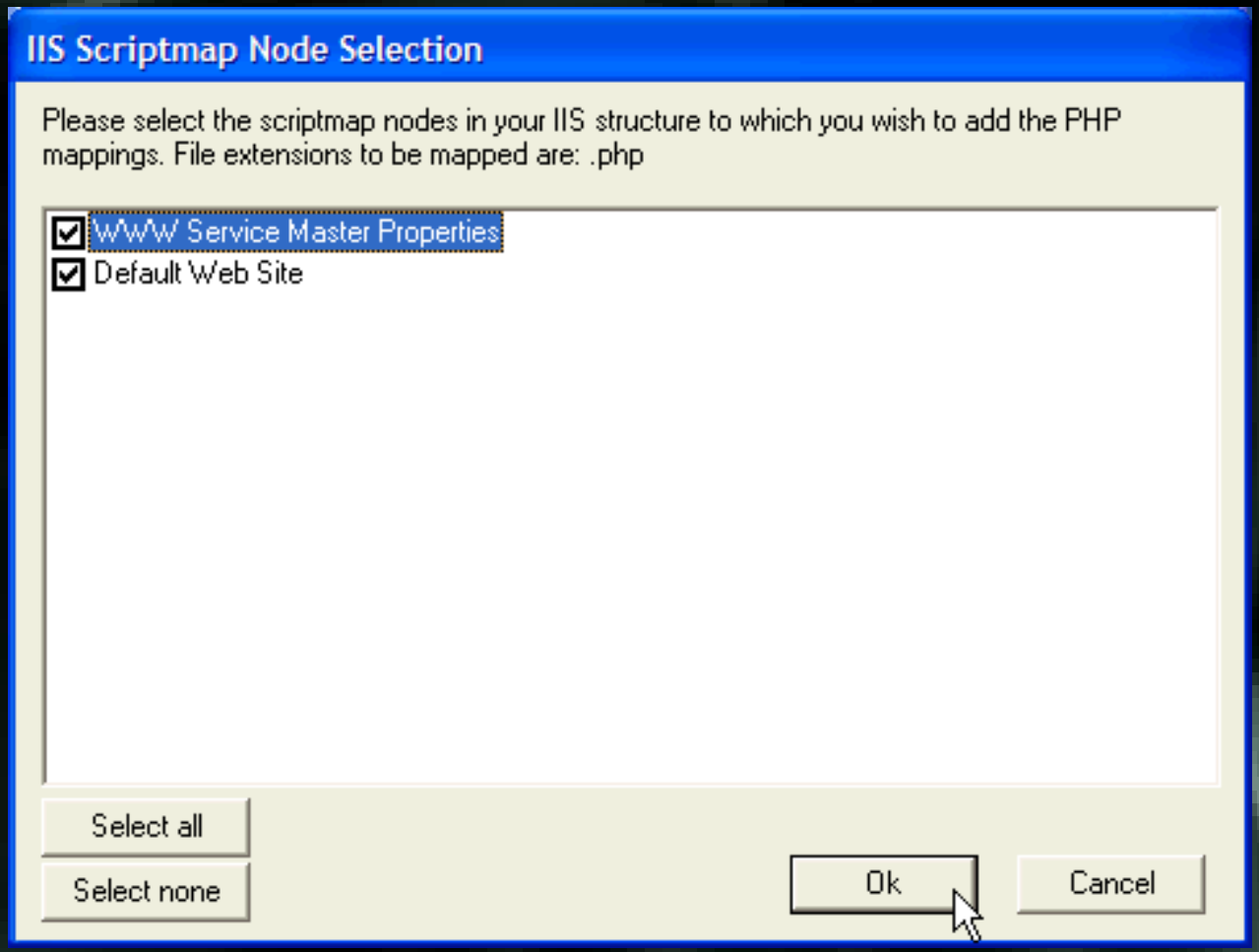
Windows InstallShield Installation (IIS)

Step 7: Web Server Configuration



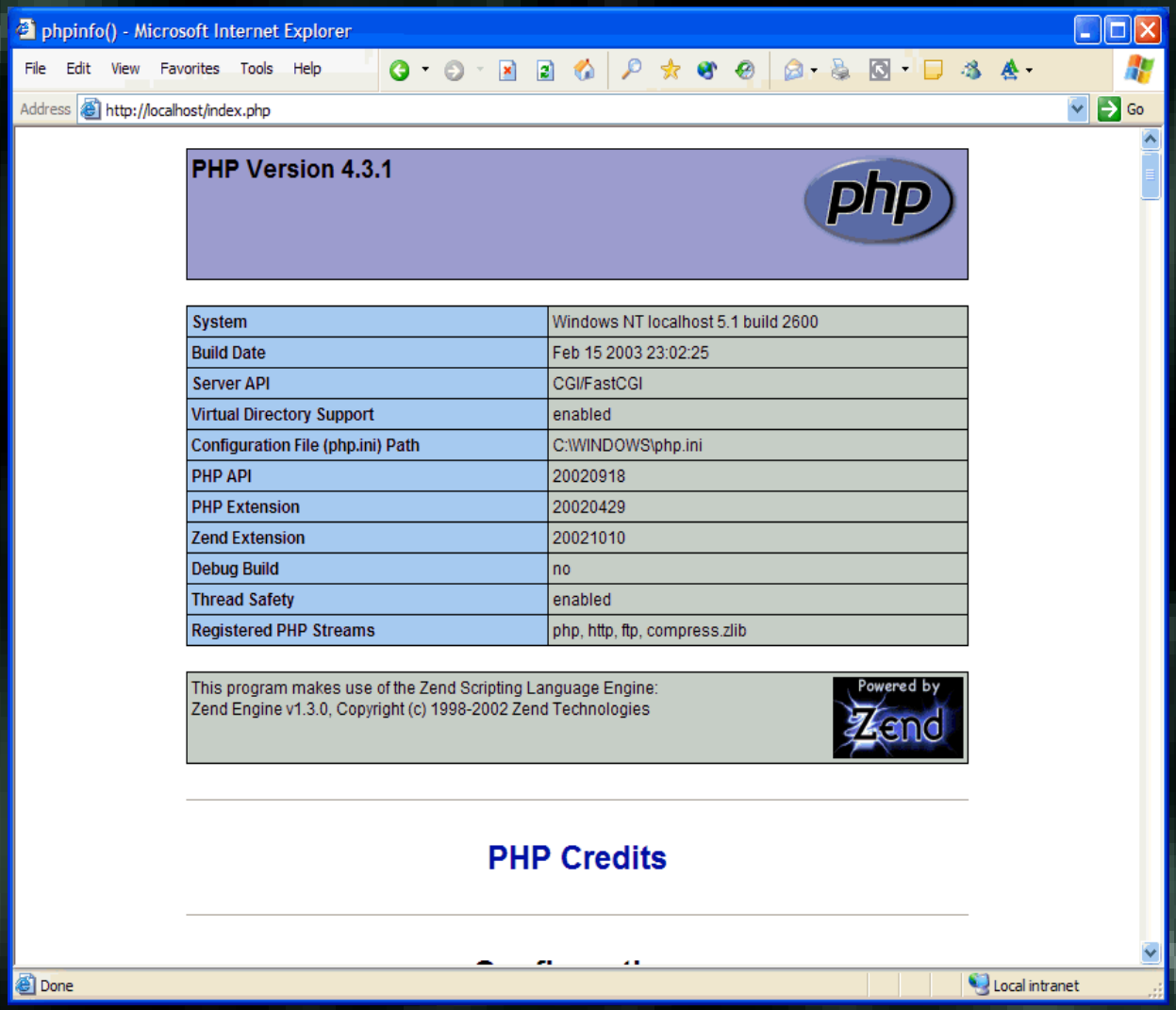
Installing PHP on Windows

Windows InstallShield Installation (IIS)

Step 8: Testing

index.php

```
<?php
    phpinfo();
?>
```



Installing PHP on Windows

Windows Manual Installation (IIS)

Example environment

- Windows 2000 Server (SP 3)
- IIS 5.0
- PHP 4.3.1

For brevity, the following conventions will be Used:

%SROOT% - The Systems Windows directory, often referred to as "System Root". Depending on version of Windows, this may be c:\windows or c:\winnt

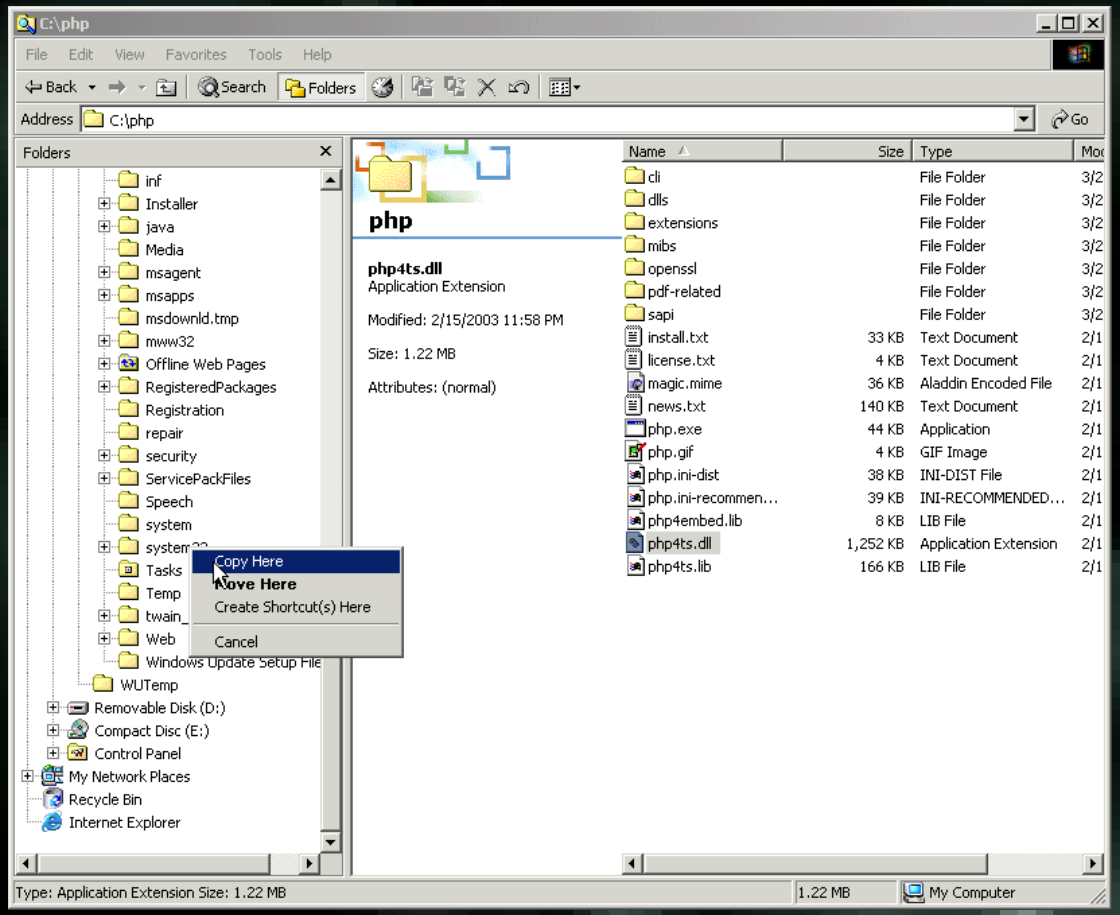
System Folder – The folder where your Windows installation keeps important system files. Usually %SROOT%\System32

Installing PHP on Windows

Windows Manual Installation (IIS)

Step 1: Download most recent distribution and unzip to Installation directory (c:\php)

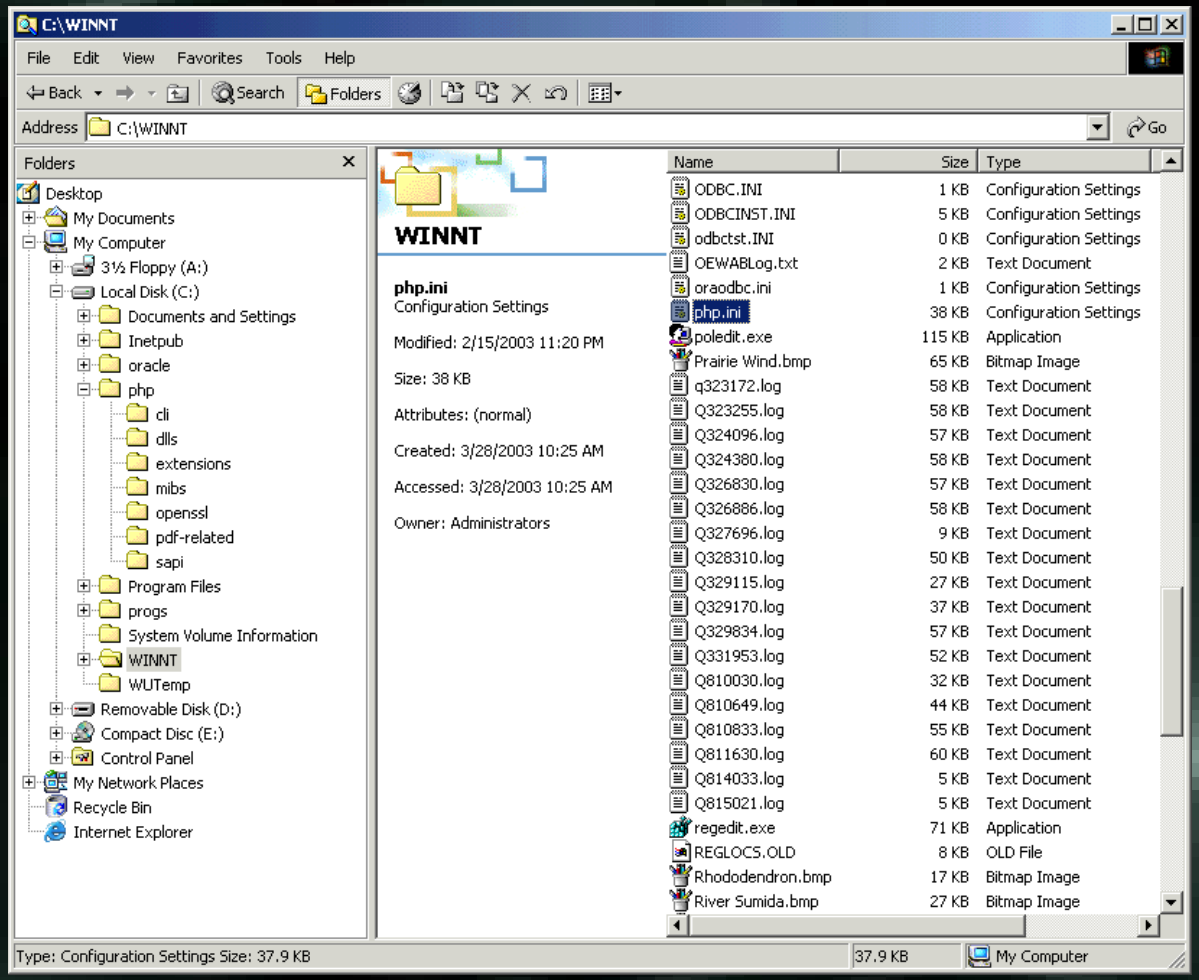
Step 2: Copy php4ts.dll and contents of /dlls to the System Folder



Installing PHP on Windows

Windows Manual Installation (IIS)

Step 3: Copy php.ini-dist to %SROOT% and rename php.ini



Installing PHP on Windows

Windows Manual Installation (IIS)

Step 4: Edit php.ini

Extensions directory. By default, extensions are kept in the "extensions" folder of the installation directory.

```
extension_dir = c:\php\extensions\
```

Document Root. This is the local folder that your web server uses as the web publishing root directory.

```
doc_root = c:\Inetpub\wwwroot
```

For IIS installations you MUST turn off cgi.force_redirect

```
cgi.force_redirect = 0
```

Installing PHP on Windows

Windows Manual Installation (IIS)

Step 5: Set file permissions

The following files and folders must have “read” and “execute” permissions enabled for the system’s web user (I_USR_*hostname*)

%SROOT%\php.ini
C:\php\

Installing PHP on Windows

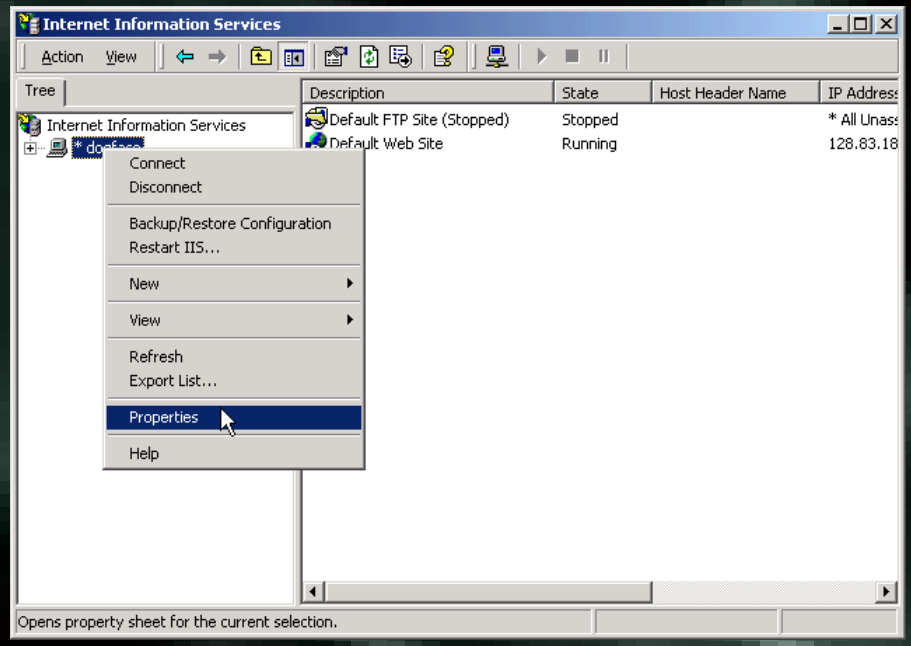
Windows Manual Installation (IIS)

Step 6: Configure your web server

Modify IIS configuration settings using the **Internet Services Manager** or **Internet Information services** tool in

Control Panel
→ Administrative Tools

Right-click on the **server name** (IIS 5.0) or **Web Sites** (IIS 5.1) and select **Properties**.



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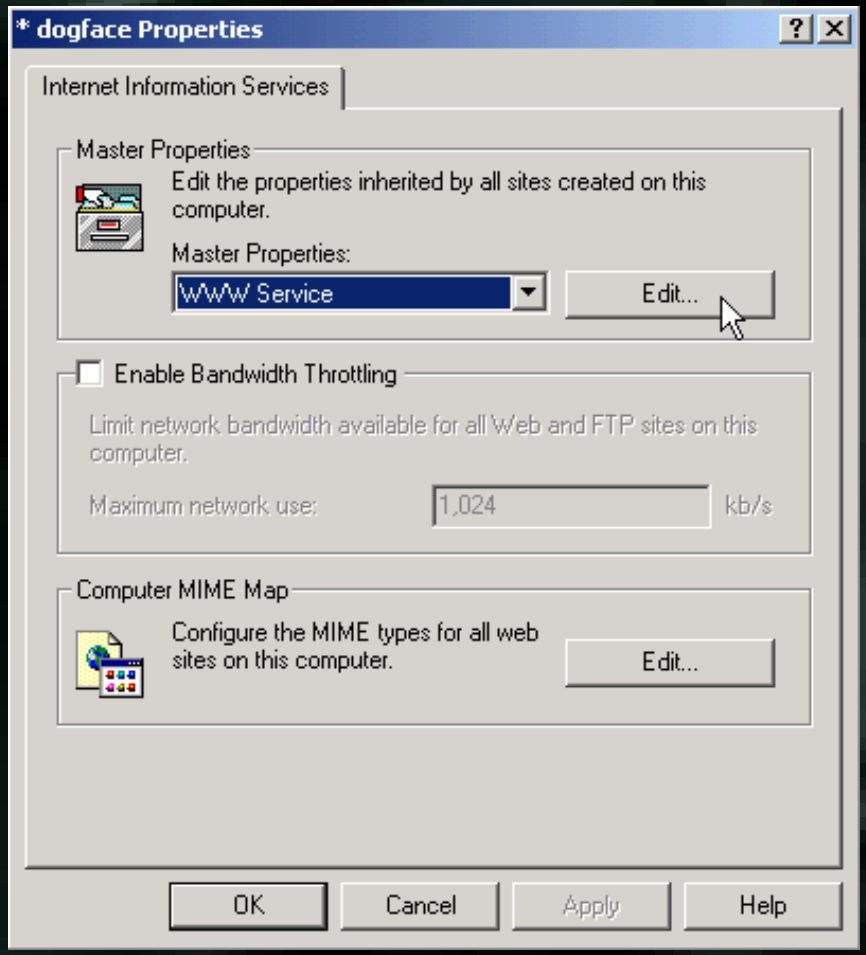
Windows Manual Installation (IIS)

Step 6a: Edit Master Properties



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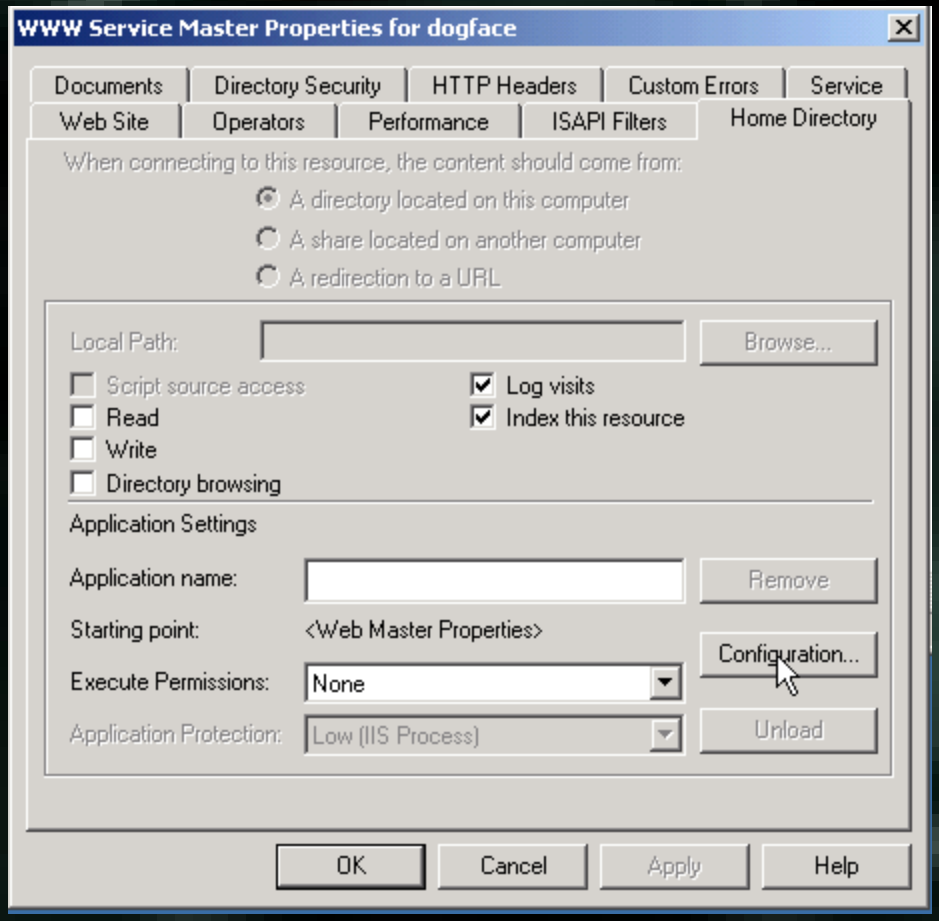
Windows Manual Installation (IIS)

Step 6b: Select **Configuration** under **Home Directory**



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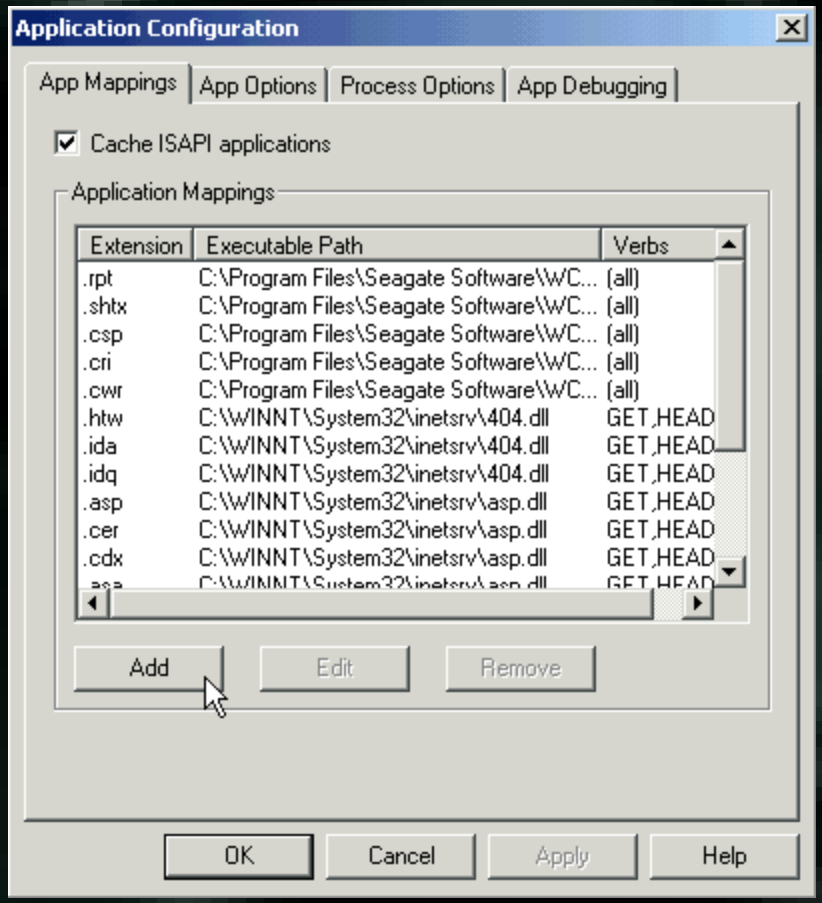
Windows Manual Installation (IIS)

Step 6c: **Add** an Application Mapping

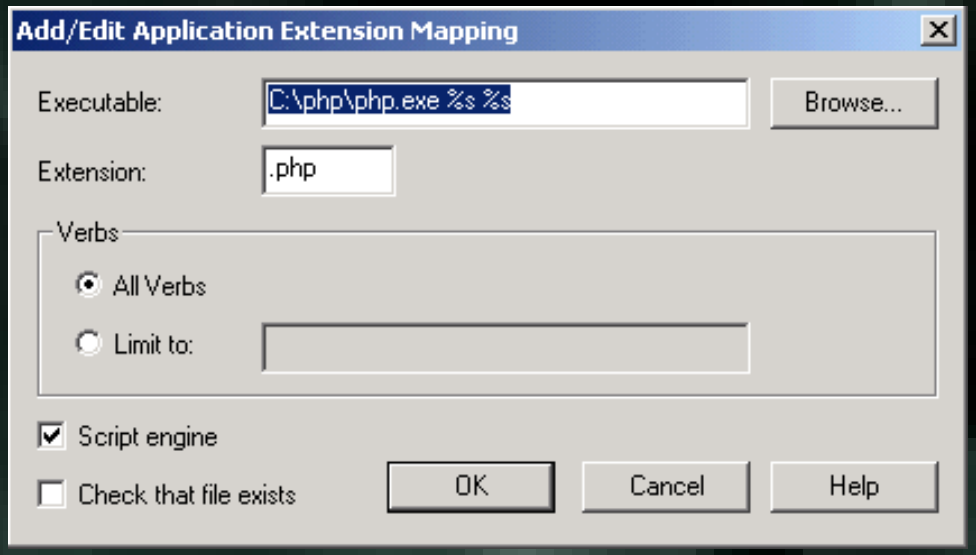


Installing PHP on Windows

Windows Manual Installation (IIS)

Step 6d: Enter the name and path of the PHP executable. Enter ".php" for the extension. Check "All Verbs" and "Script Engine".

Repeat this process for all extensions you would like your web server to parse as PHP.

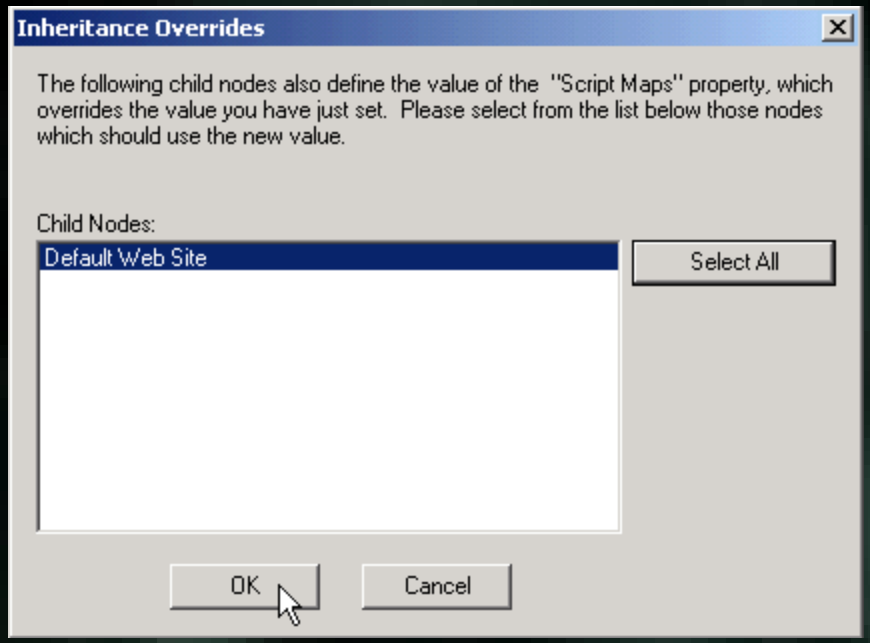


Note: Depending on your specific configuration, you may have to enter " %s %S" after the executable name. This may not be necessary on all configurations.

Installing PHP on Windows

Windows Manual Installation (IIS)

Step 6e: Click “Select All” to apply settings to all web sites Under Inheritance Overrides.



Click OK all the way back to the beginning.

Installing PHP on Windows

Windows Manual Installation (IIS)

Step 7: RESTART all web services. It doesn't hurt to reboot Windows.

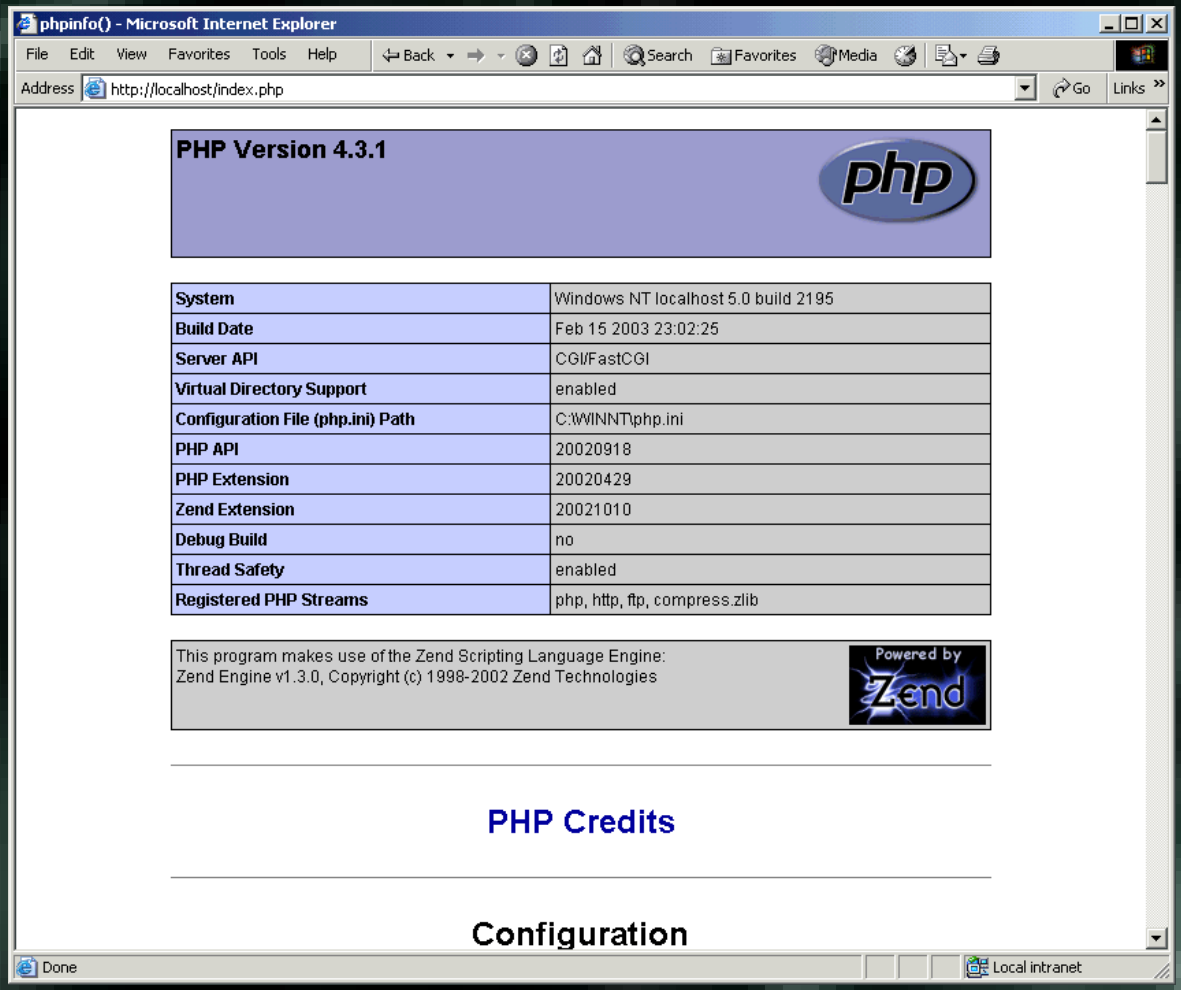
Installing PHP on Windows

Windows Manual Installation (IIS)

Step 8: Testing

index.php

```
<?php
    phpinfo();
?>
```



EXAMPLES

Examples

PHP is a great way to implement templates on your website.

How to implement a simple page counter

Examples

Step 1: Universal header and footer in a single file

Create a file called header.php. This file will have all of the header HTML code. You can use FrontPage/Dreamweaver to create the header, but remember to remove the closing </BODY> and </HTML> tags.

```
<html><head>
<title>UCR Webmaster Support Group</title>
<link rel="stylesheet" type="text/css" href="mycssfile.css">
</head>
<body>
<table width=80% height=30>
<tr><td>
      <div align=center> Page Title </div>
</td></tr></table>
```

Examples

Step 2: Universal header and footer in a single file

Next, create a file called footer.php. This file will have all of the footer HTML code.

```
<table width=80% height=30>
<tr><td>
      <div align=center> UC Riverside Department<BR>
                <a
href=mailto:someuser@ucr.edu>someuser@ucr.edu</a>
 </div>
</td></tr></table>
</body>
</html>
```

Examples

Step 3: Universal header and footer in a single file

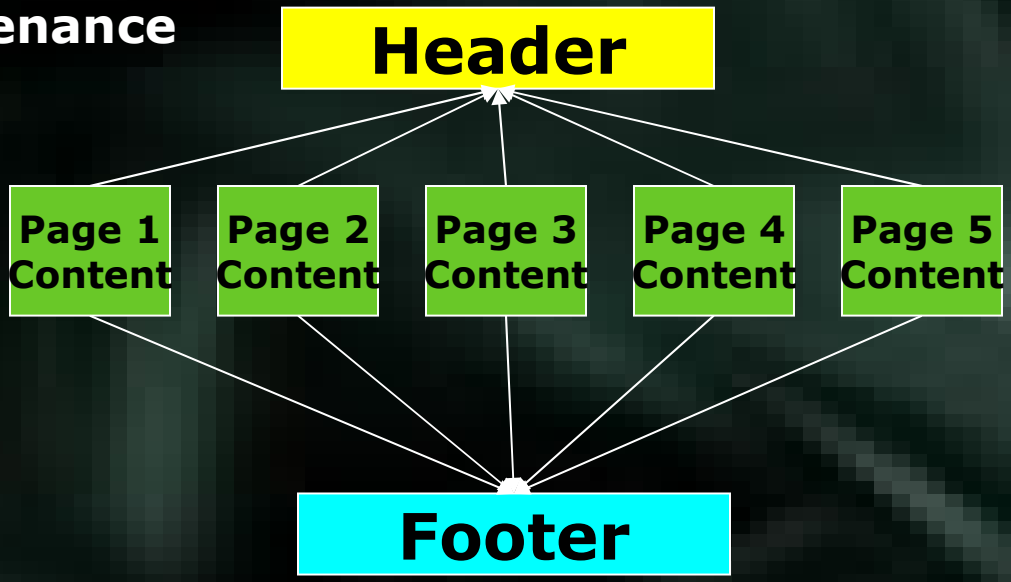
This is the basic template that you will use on all of the pages. Make sure you name the files with a .php extension so that the server will process the PHP code. In this example, we assume the header and footer files are located in the same directory.

```
<?php
    // header
    include("header.php");
?>

Insert content here!

<?php
    // footer
    include("footer.php");
?>
```

Examples

Benefits:

- **Any changes to header or footer only require editing of a single file. This reduces the amount of work necessary for site maintenance and redesign.**
- **Helps separate the content and design for easier maintenance**



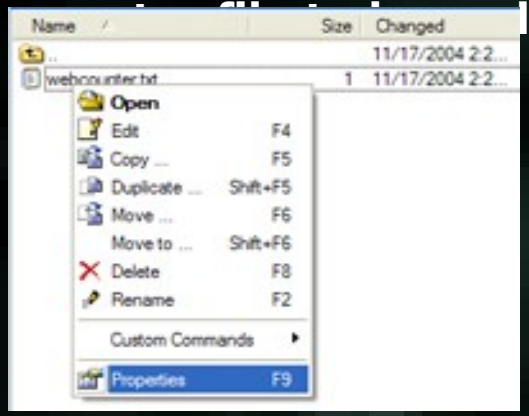
Examples

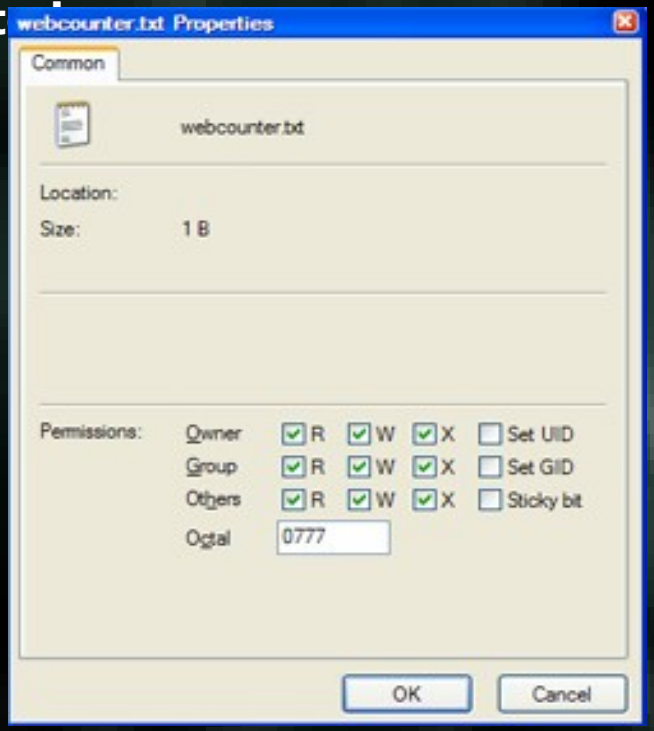
Step 1: Simple Page Counter

Download the counter file webcounter.txt onto your machine

Upload the webcounter.txt file onto your web server (via FTP, WinSCP, etc)

Change the file permissions of the webcounter.txt file to 777 to allow the





Examples

Step 2: Simple Page Counter

Copy this code into a page where you want a counter.

```
<?php
$COUNTER_FILE = "webcounter.txt";
if (file_exists($COUNTER_FILE)) {
        $fp = fopen("$COUNTER_FILE", "r+");
        flock($fp, 1);
        $hits = fgets($fp, 4096);
        $hits += 1;
        fseek($fp,0);
        fputs($fp, $hits);
        flock($fp, 3);
        fclose($fp);
}
?>
```

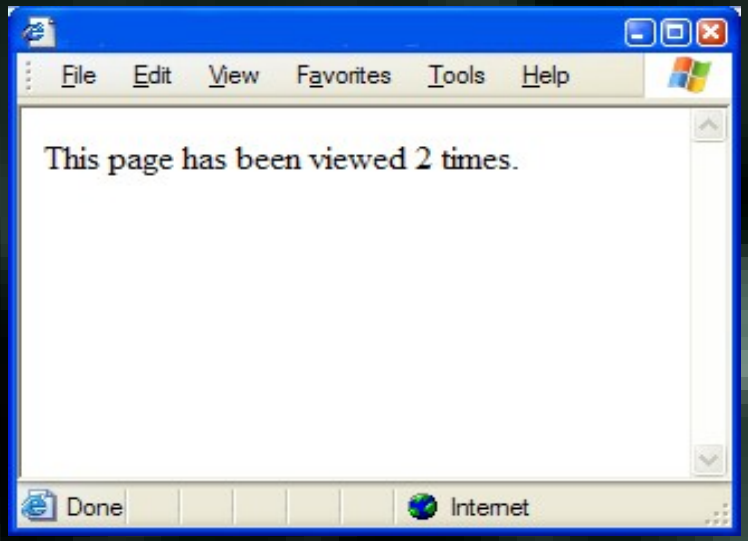
Examples

Step 3: Simple Page Counter

Next, output the counter value using PHP.
Copy this line after the main block of code.

```
This page has been viewed <?php echo"$hits"; ?> times.
```

That's it! The result should look something similar to:



Examples

Step 3: Simple Page Counter

You can change the text around the
<?php echo"$hits"; ?> tags to your liking.

<?php echo"$hits"; ?> visitors.

This example shows
How to escape from HTML and enter PHP mode
How to output variables onto the screen using PHP

Examples

1. How to output variables using PHP

   Echo is the common method in outputting data. Since it is a language construct, echo doesn't require parenthesis like print().

   Output Text Usage:
   <?php echo "Hello World"; ?> // prints out Hello World

   Output the value of a PHP variable:
   <?php echo "$hits"; ?> // prints out the number of hits

   Echo has a shortcut syntax, but it only works with the "short
   open tag" configuration enabled on the server. <?= $hits ?>

Examples

1. Other uses with echo()

Automatically generate the year on your pages. This will
print out ©2004 UC Riverside.
©<?php echo date("Y"); ?> UC Riverside

You will need to escape any quotation marks with a backslash.
<?php echo "I said \"She sells sea shells\" "; ?>

THANK YOU