CNT 4714: Enterprise Computing Fall 2009

Integrating Apache And PHP

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Apache Server Set-up

- Once you get the Apache Server downloaded and running on your machine…you should see the screen as shown on page 12, 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 2.2.14 server and PHP 5.3.1 begin on page 8.

Apache Server Set-up (cont.)

4. Install PHP as an Apache module by doing the following:

   a) Edit the Apache `httpd` 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 beginning writing PHP code.

Apache Server Set-up (cont.)

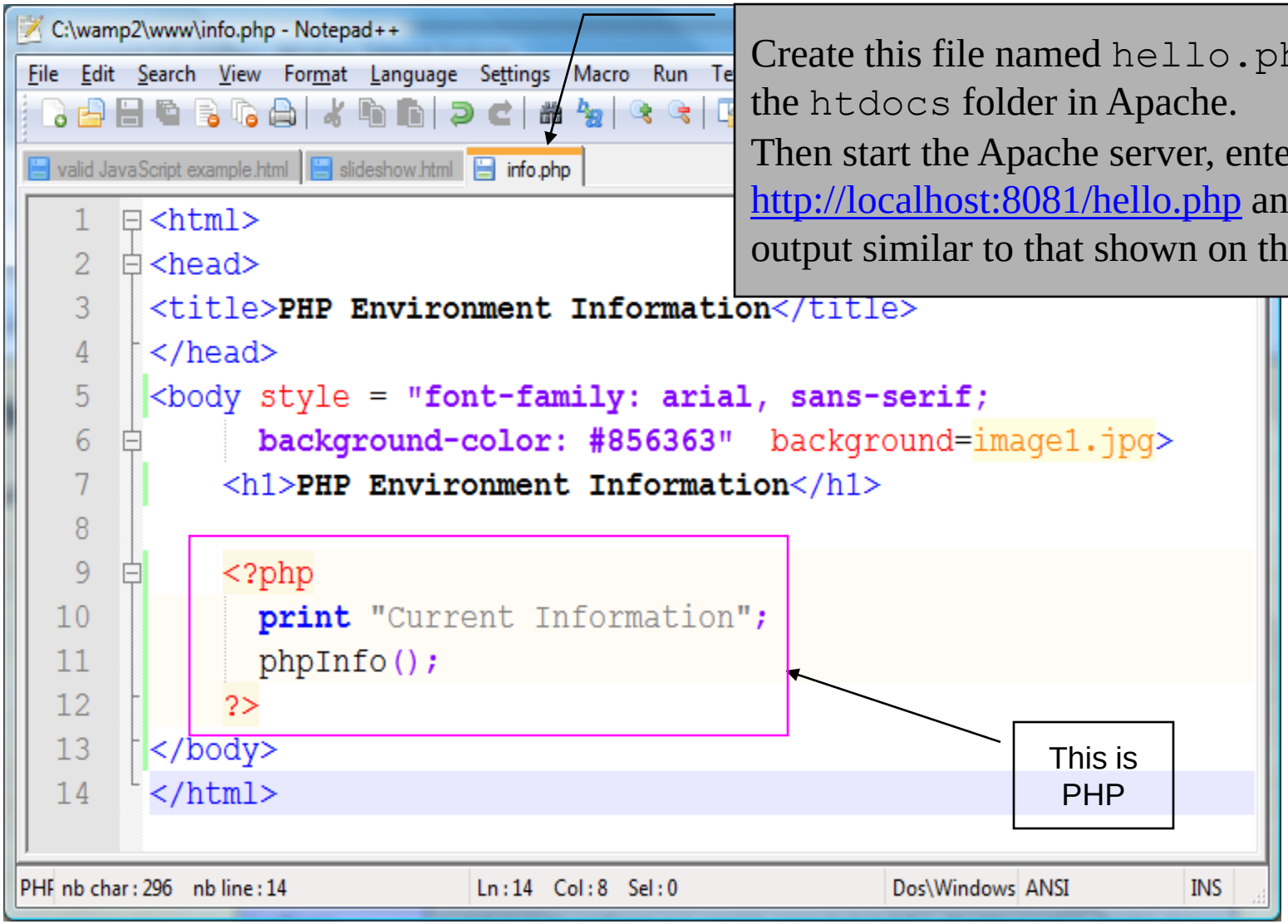
httpd - Notepad

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"
```

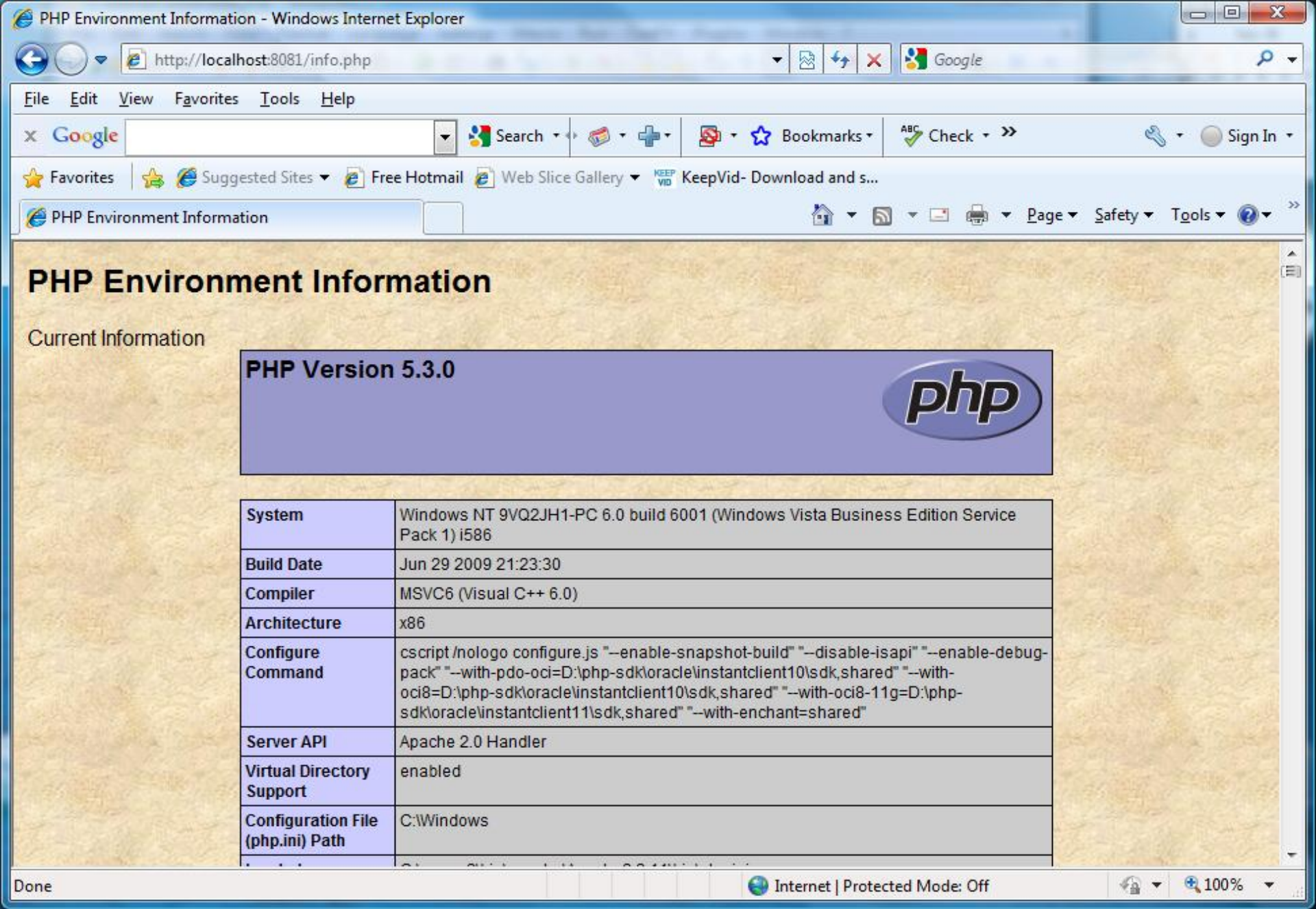
Addition to the `httpd` file

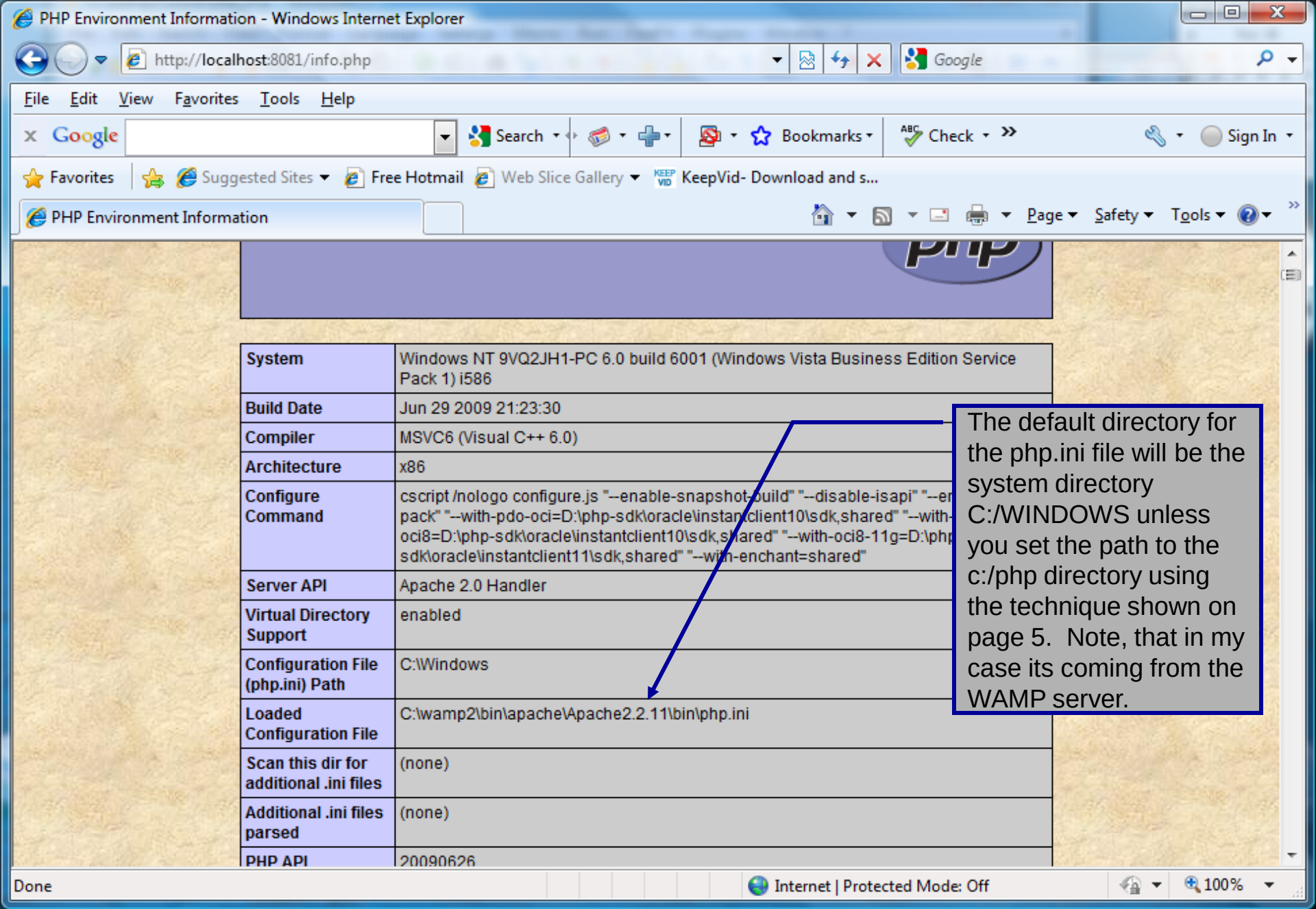
A PHP Test Example



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.

This is PHP

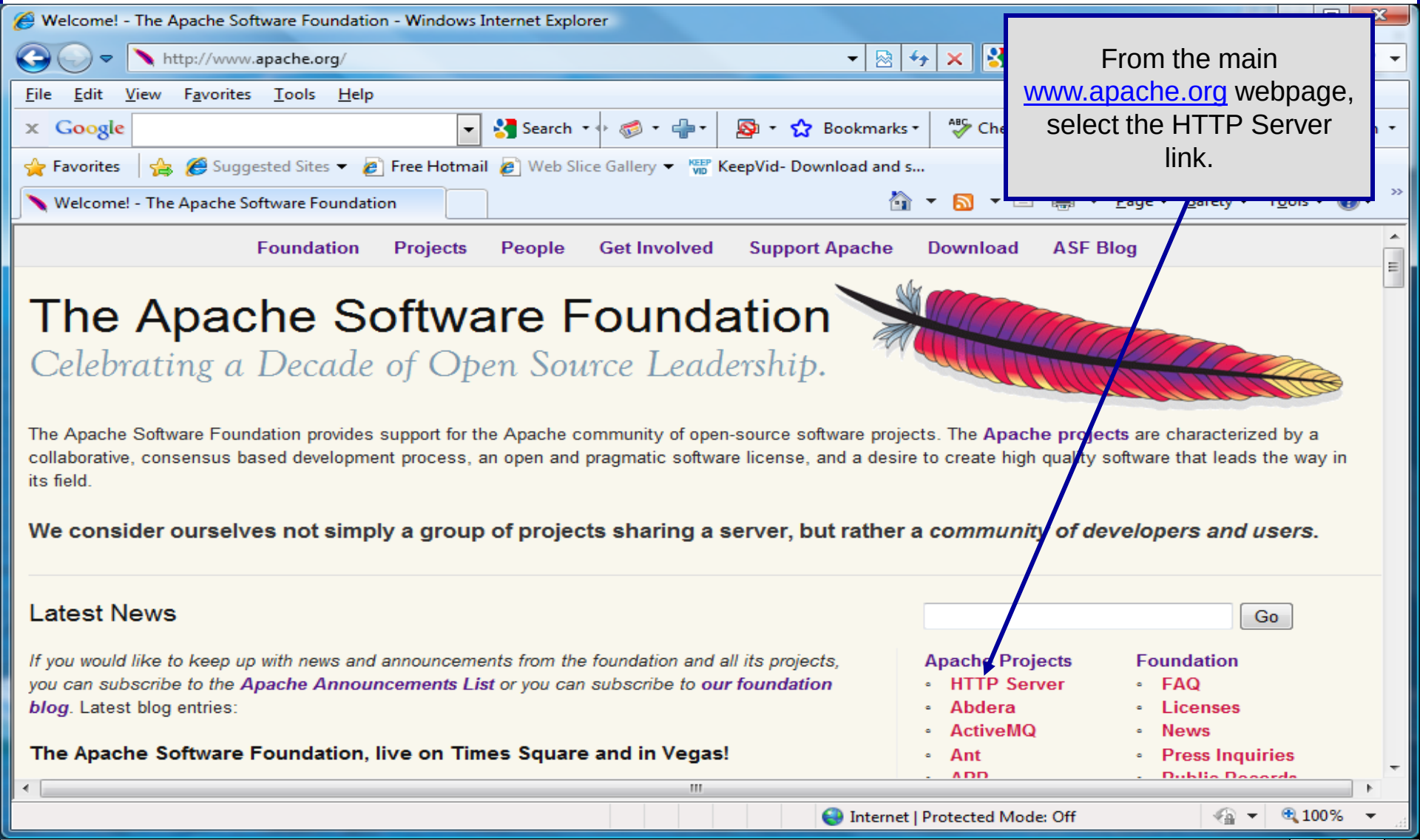

PHP Environment Information - Windows Internet Explorer
http://localhost:8081/info.php
File Edit View Favorites Tools Help
Favorites
Suggested Sites
Free Hotmail
Web Slice Gallery
KeepVid- Download and s...
PHP Environment Information
Page
Safety
Tools
PHP Environment Information
Current Information
PHP Version 5.3.0
php
System
Windows NT 9VQ2JH1-PC 6.0 build 6001 (Windows Vista Business Edition Service Pack 1) i586
Build Date
Jun 29 2009 21:23:30
Compiler
MSVC6 (Visual C++ 6.0)
Architecture
x86
Configure Command
cscript /nologo configure.js "--enable-snapshot-build" "--disable-isapi" "--enable-debug-pack" "--with-pdo-oci=D:\php-sdk\oracle\instantclient10\sdk,shared" "--with-oci8=D:\php-sdk\oracle\instantclient10\sdk,shared" "--with-oci8-11g=D:\php-sdk\oracle\instantclient11\sdk,shared" "--with-enchant=shared"
Server API
Apache 2.0 Handler
Virtual Directory Support
enabled
Configuration File (php.ini) Path
C:\Windows
Done
Internet | Protected Mode: Off
100%


PHP Environment Information - Windows Internet Explorer
http://localhost:8081/info.php
File Edit View Favorites Tools Help
Favorites
PHP Environment Information
System
Windows NT 9VQ2JH1-PC 6.0 build 6001 (Windows Vista Business Edition Service Pack 1) i586
Build Date
Jun 29 2009 21:23:30
Compiler
MSVC6 (Visual C++ 6.0)
Architecture
x86
Configure Command
Server API
Apache 2.0 Handler
Virtual Directory Support
enabled
Configuration File (php.ini) Path
C:\Windows
Loaded Configuration File
C:\wamp2\bin\apache\Apache2.2.11\bin\php.ini
Scan this dir for additional .ini files
(none)
Additional .ini files parsed
(none)
PHP API
20090626
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 5. Note, that in my case its coming from the WAMP server.
Done
Internet | Protected Mode: Off
100%

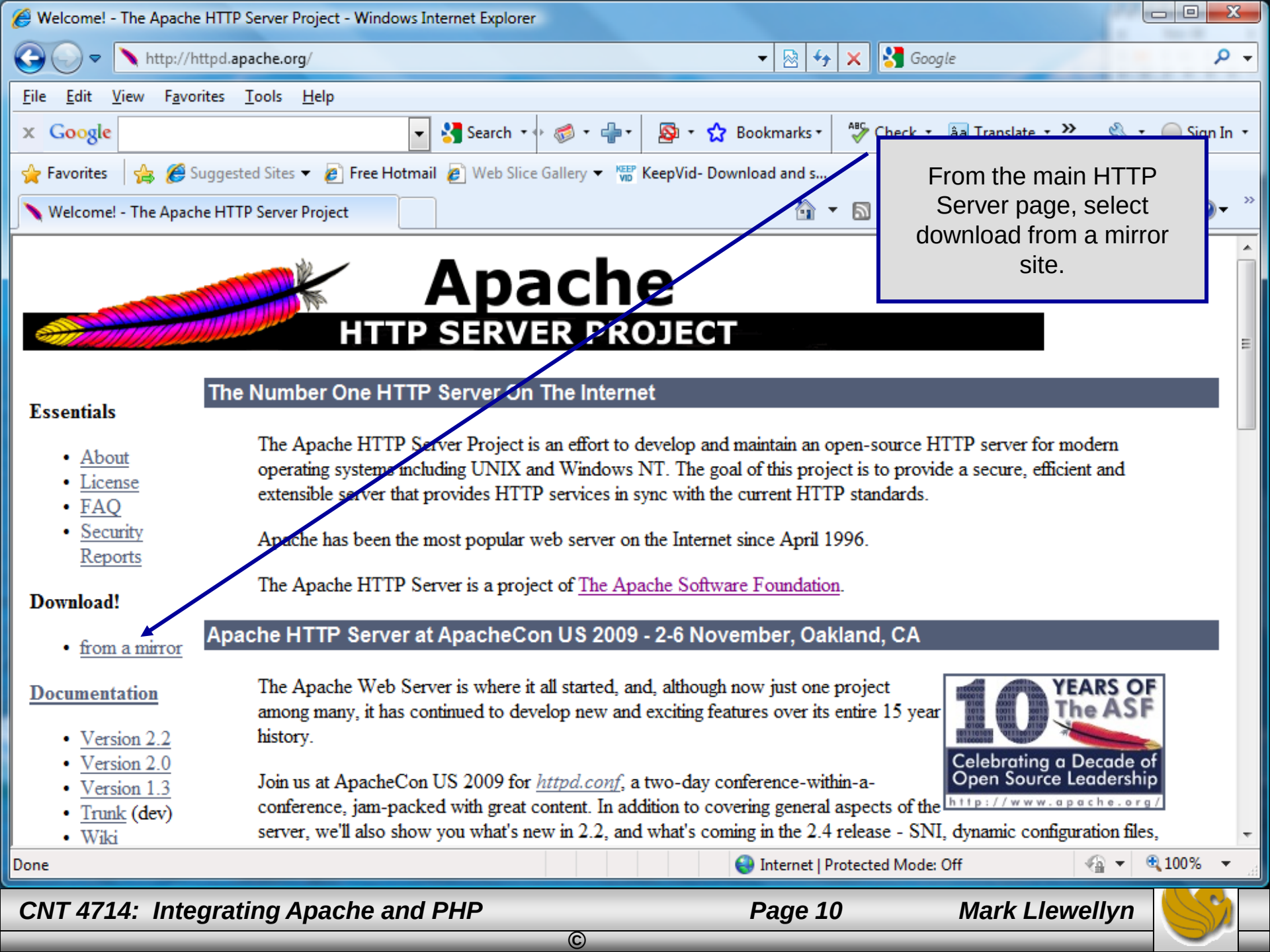
Apache Server Set-up

- The following couple of pages illustrate how to get the Apache HTTP Server.
- The current best version is 2.2.14, which went live on October 10, 2009.

Getting The Apache HTTP Server



From the main www.apache.org webpage, select the HTTP Server link.


Welcome! - The Apache HTTP Server Project - Windows Internet Explorer
http://httpd.apache.org/
File Edit View Favorites Tools Help
Favorites
Welcome! - The Apache HTTP Server Project
From the main HTTP Server page, select download from a mirror site.
Apache
HTTP SERVER PROJECT
Essentials
About
License
FAQ
Security Reports
Download!
from a mirror
Documentation
Version 2.2
Version 2.0
Version 1.3
Trunk (dev)
Wiki
The Number One HTTP Server On The Internet
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.
Apache has been the most popular web server on the Internet since April 1996.
The Apache HTTP Server is a project of The Apache Software Foundation.
Apache HTTP Server at ApacheCon US 2009 - 2-6 November, Oakland, CA
The Apache Web Server is where it all started, and, although now just one project among many, it has continued to develop new and exciting features over its entire 15 year history.
10 YEARS OF The ASF
Celebrating a Decade of Open Source Leadership
http://www.apache.org/
Join us at ApacheCon US 2009 for httpd.conf, a two-day conference-within-a-conference, jam-packed with great content. In addition to covering general aspects of the server, we'll also show you what's new in 2.2, and what's coming in the 2.4 release - SNI, dynamic configuration files,
Done
Internet | Protected Mode: Off
100%

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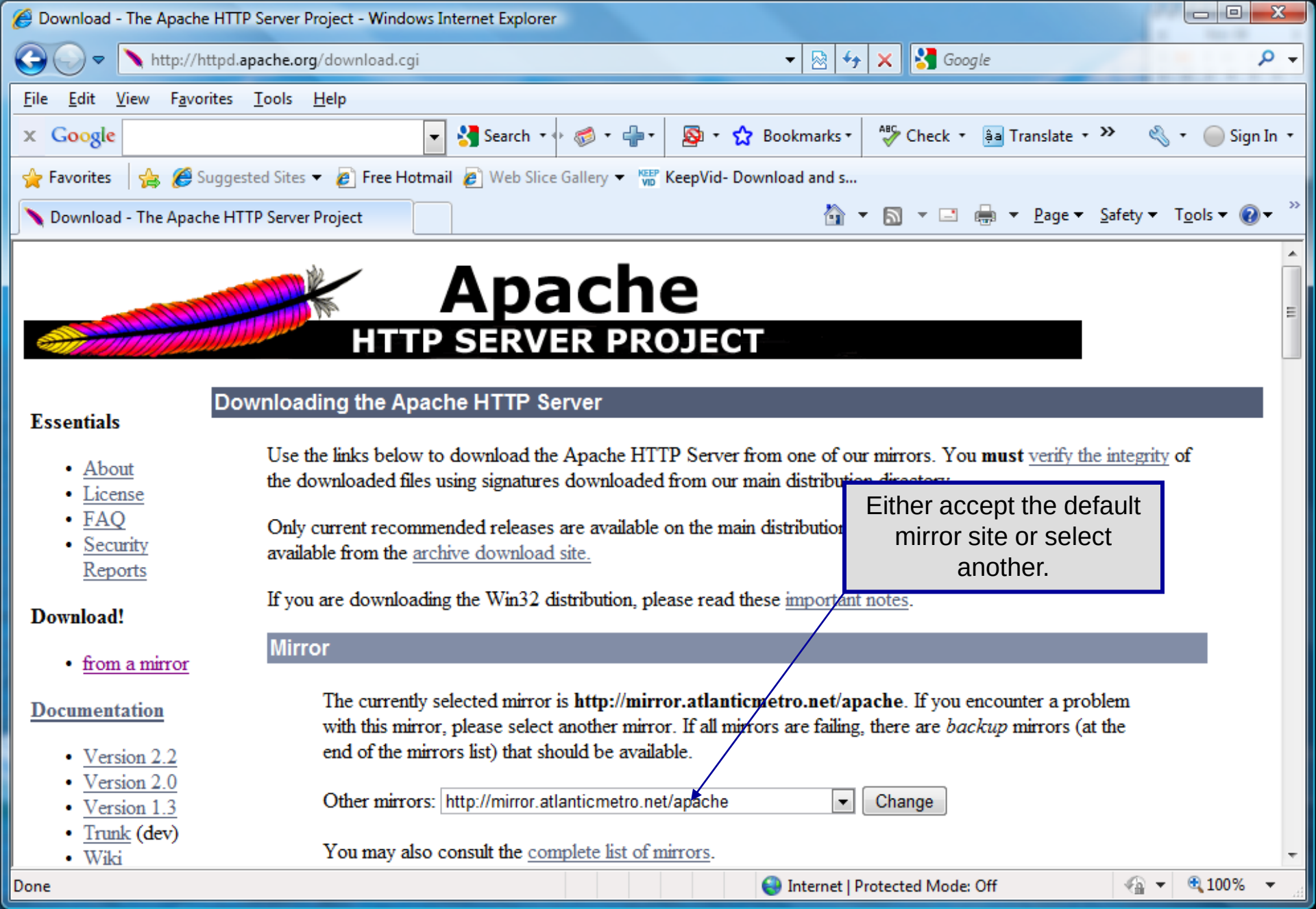
Download - The Apache HTTP Server Project - Windows Internet Explorer
http://httpd.apache.org/download.cgi
File Edit View Favorites Tools Help
Favorites
Download - The Apache HTTP Server Project
Apache
HTTP SERVER PROJECT
Essentials
About
License
FAQ
Security Reports
Download!
from a mirror
Documentation
Version 2.2
Version 2.0
Version 1.3
Trunk (dev)
Wiki
Downloading the Apache HTTP Server
Use the links below to download the Apache HTTP Server from one of our mirrors. You must verify the integrity of the downloaded files using signatures downloaded from our main distribution directory.
Only current recommended releases are available on the main distribution
available from the archive download site.
If you are downloading the Win32 distribution, please read these important notes.
Mirror
The currently selected mirror is http://mirror.atlanticmetro.net/apache. 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: http://mirror.atlanticmetro.net/apache
Change
You may also consult the complete list of mirrors.
Either accept the default mirror site or select another.
Done
Internet | Protected Mode: Off
100%

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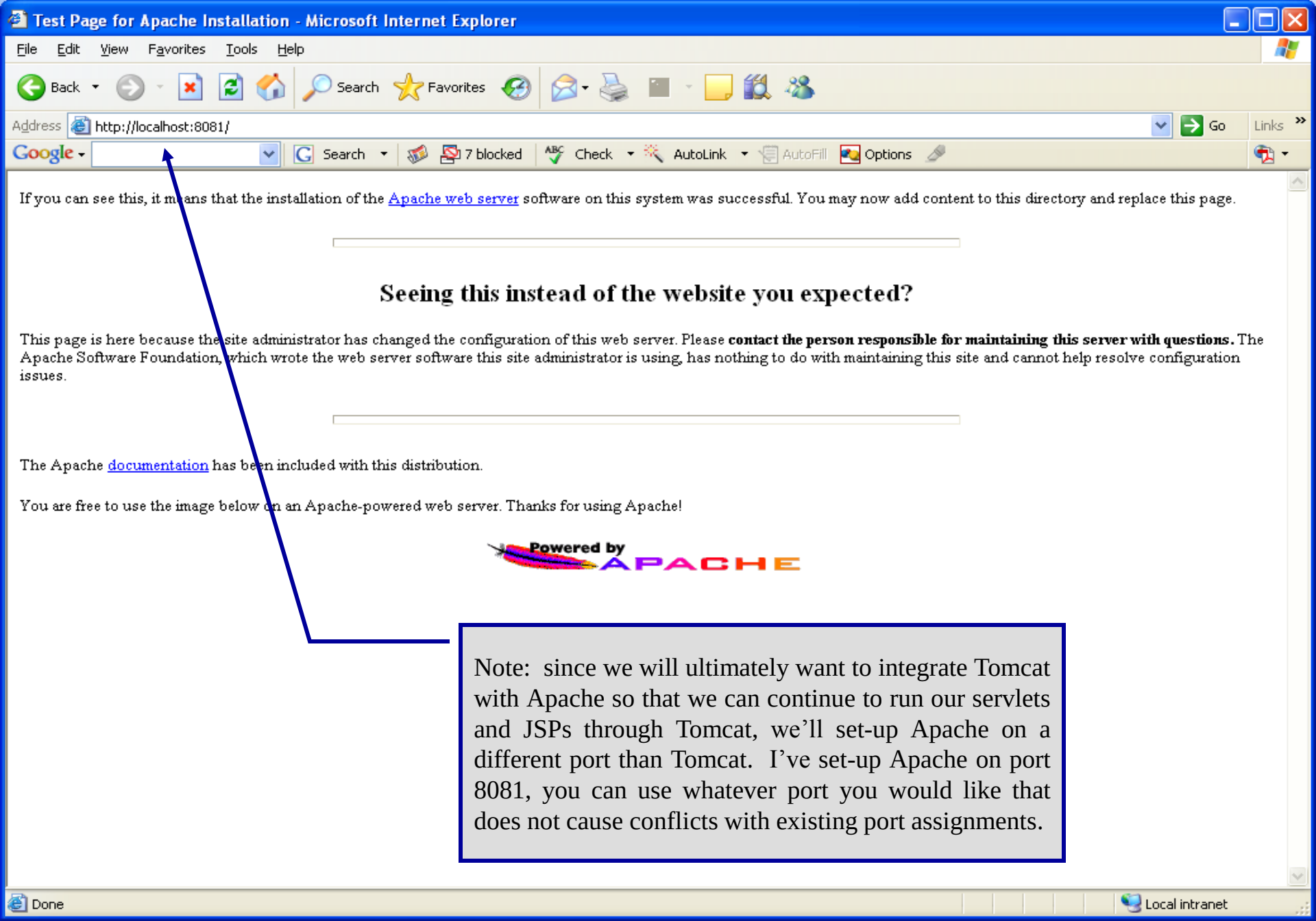

Note: since we will ultimately want to integrate Tomcat with Apache so that we can continue to run our servlets and JSPs through Tomcat, we'll set-up Apache on a different port than Tomcat. I've set-up Apache on port 8081, you can use whatever port you would like that does not cause conflicts with existing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

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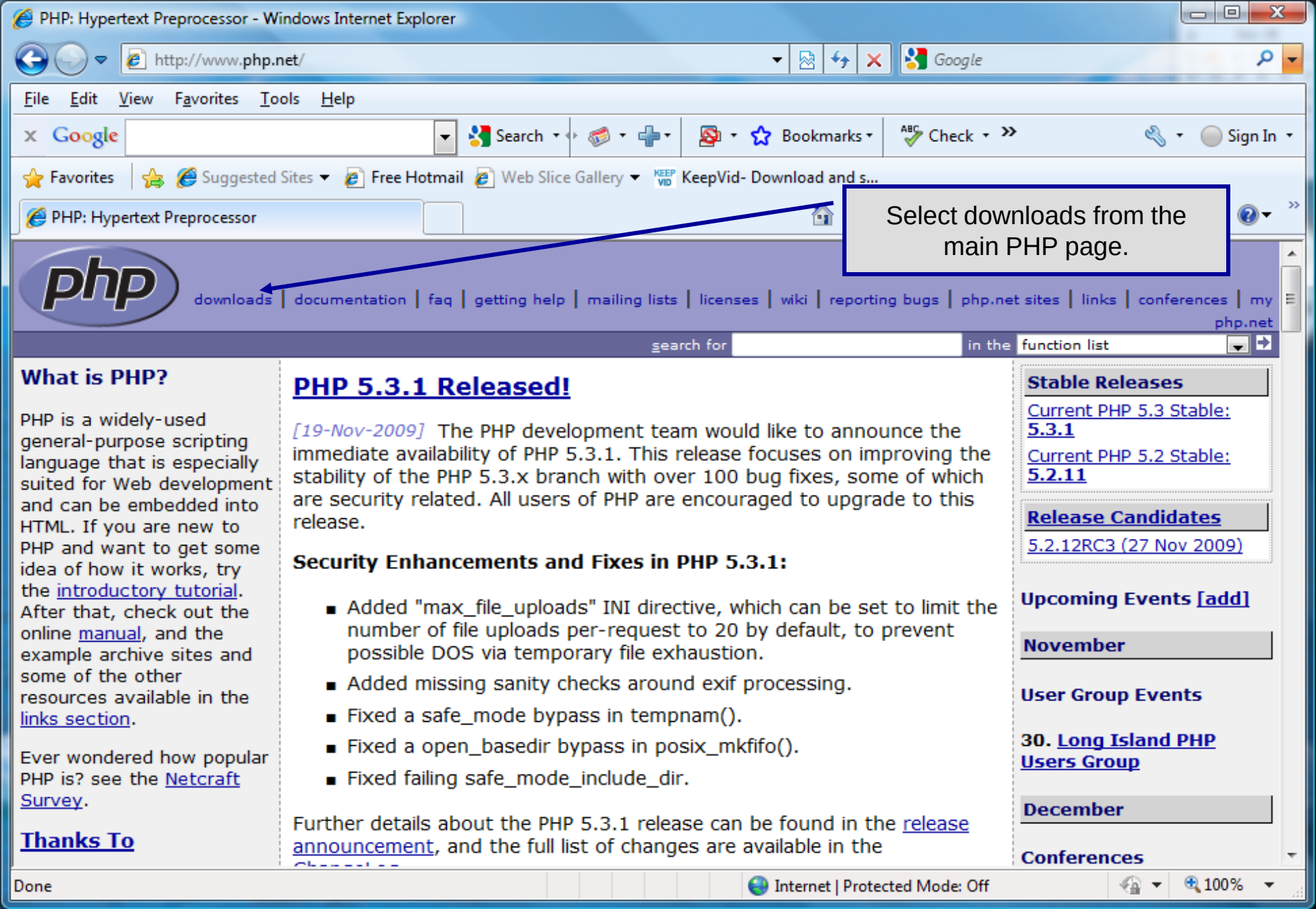
PHP: Hypertext Preprocessor - Windows Internet Explorer
http://www.php.net/
Google
File Edit View Favorites Tools Help
Search Bookmarks Check Sign In
Favorites Suggested Sites Free Hotmail Web Slice Gallery KeepVid- Download and s...
PHP: Hypertext Preprocessor
Select downloads from the main PHP page.
php
downloads | documentation | faq | getting help | mailing lists | licenses | wiki | reporting bugs | php.net sites | links | conferences | my php.net
search for in the function list
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 some idea of how it works, try the introductory tutorial. After that, check out the online manual, and the example archive sites and some of the other resources available in the links section.
Ever wondered how popular PHP is? see the Netcraft Survey.
Thanks To
PHP 5.3.1 Released!
[19-Nov-2009] The PHP development team would like to announce the immediate availability of PHP 5.3.1. This release focuses on improving the stability of the PHP 5.3.x branch with over 100 bug fixes, some of which are security related. All users of PHP are encouraged to upgrade to this release.
Security Enhancements and Fixes in PHP 5.3.1:
Added "max_file_uploads" INI directive, which can be set to limit the number of file uploads per-request to 20 by default, to prevent possible DOS via temporary file exhaustion.
Added missing sanity checks around exif processing.
Fixed a safe_mode bypass in tempnam().
Fixed a open_basedir bypass in posix_mkfifo().
Fixed failing safe_mode_include_dir.
Further details about the PHP 5.3.1 release can be found in the release announcement, and the full list of changes are available in the
Stable Releases
Current PHP 5.3 Stable: 5.3.1
Current PHP 5.2 Stable: 5.2.11
Release Candidates
5.2.12RC3 (27 Nov 2009)
Upcoming Events [add]
November
User Group Events
30. Long Island PHP Users Group
December
Conferences
Done
Internet | Protected Mode: Off
100%

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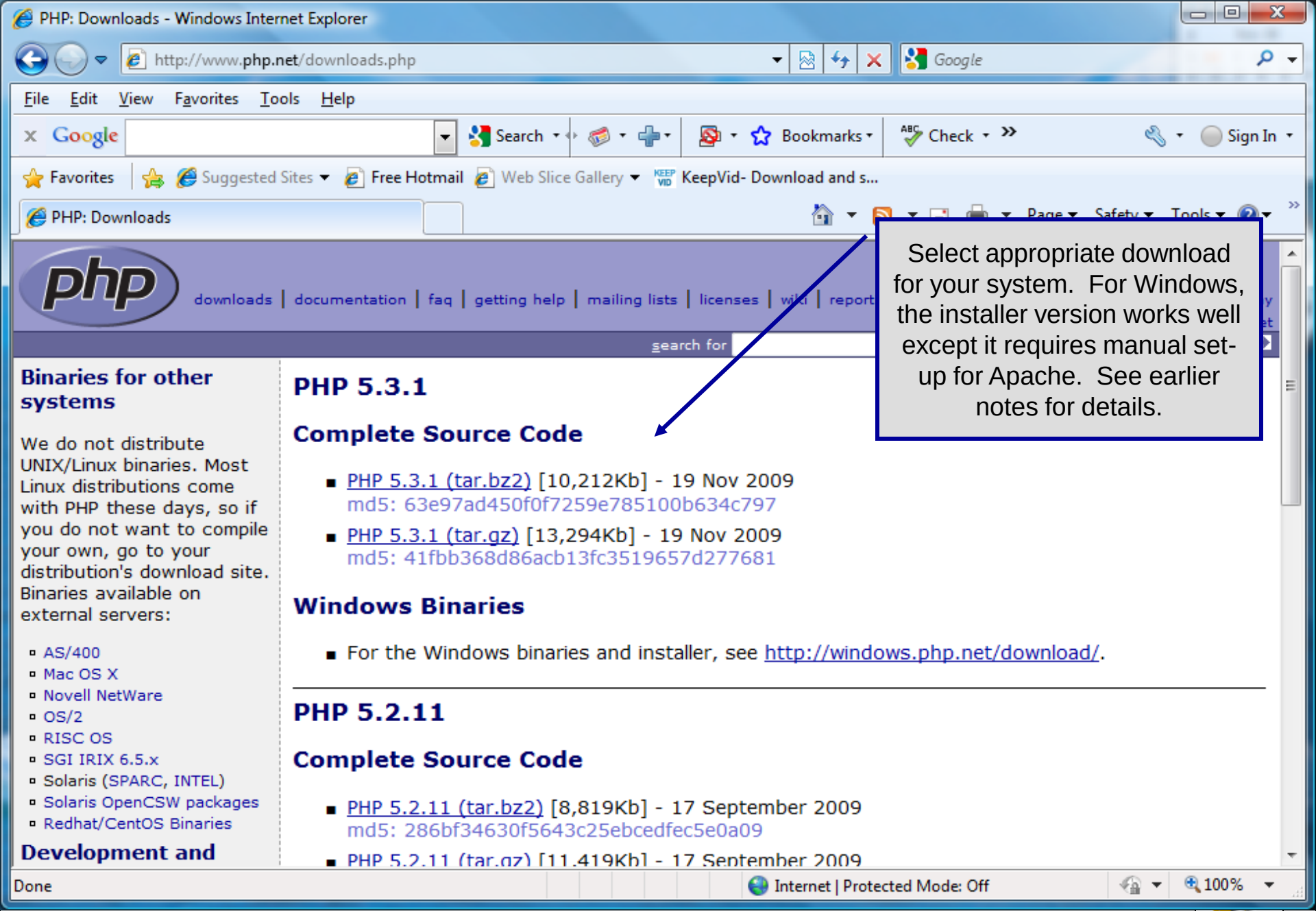

Select appropriate download for your system. For Windows, the installer version works well except it requires manual set-up for Apache. See earlier notes for details.

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