Introduction to WordPress

What is CMS?

- A **content management system** (**CMS**) allows publishing, editing, and modifying content as well as site maintenance from a central page.
- It provides a collection of procedures used to manage work flow in a collaborative environment.
- These procedures can be manual or computer-based.

Features of CMS

- Allow for a large number of people to share and contribute to stored data
- Control access to data based on user role (i.e., define information users or user groups can view, edit, publish, etc.);
- Facilitate storage and retrieval of data
- Control data validity and compliance
- Reduce duplicate inputs
- Simplify report writing
- CMS makes content organization and publishing very simple.
 With CMS you can easily schedule when your content will be
 published online, set permissions for file in order to control
 access, and allow you edit web-pages using text editor even if you
 don't have any knowledge of HTML.

- Plugins and addons are another great feature of content management systems. These programs interact with the content management software to create another level of interactivity on a site.
- SEO Friendly URLs
- Modular and extensible
- Full template support, for unlimited looks without changing a line of content
- Easy wizard based install and upgrade procedures
- Admin panel with multiple language support
- Content hierarchy with unlimited depth and size
- Integrated audit log
- It defines as nearly anything documents, movies, texts, pictures, phone numbers etc.

WYSIWYG Concept

- A WYSIWYG editor or program is one that allows a developer to see what the end result will look like while the interface or document is being created.
- WYSIWYG is an acronym for "what you see is what you get".
- A WYSIWYG editor can be contrasted with more traditional editors that require the developer to enter descriptive codes (or markup) and do not permit an immediate way to see the results of the markup.
- An HTML WYSIWYG editor conceals the markup and allows the Web page developer to think entirely in terms of how the content should appear.
- One of the trade-offs, however, is that an HTML WYSIWYG editor sometimes inserts the markup code it thinks is needed all on its own.
- Then, the developer has to know enough about the markup language to go back into the source code and clean it up.
- No expertise is needed in HTML or CSS to use the Content Management Systems developed with which you will be able to Add, Delete or Modify contents on your website.

WordPress

- WordPress is a free and open source blogging tool and a content-management system based on PHP and MySQL, which runs on a web hosting service.
- WordPress is one of the most popular open source content management systems available, with global and vibrant user, developer, and support communities
- Features include a plug-in architecture and a template system. WordPress is used by more than 18.9% of the top 10 million websites.

- WordPress is the most popular blogging system in use on the Web at more than 60 million websites.
- WordPress is a popular open source webpage publishing tool that can also be used to for basic website creation.
- It comes in two forms a downloadable and hostable version from WordPress.org, and a hosted version from WordPress.com.

- WordPress is one of many PHP/MySQL content management systems that allow content editors to use a web interface to maintain their sites instead of editing and uploading HTML files to a server.
- WordPress began as a blogging tool, but early on the developers added pages as a separate content type.

 Win the Overall Best Open Source CMS Award at the 2009 Open Source CMS Awards.

History of WordPress

- b2/cafelog, more commonly known as simply b2 or cafelog, was the precursor to WordPress.
- WordPress first appeared in 2003 as a joint effort between Matt Mullenweg and Mike Little to create a fork of b2.
- By October 2009, the 2009 Open Source content management system Market Share Report reached the conclusion that WordPress enjoyed the greatest brand strength of any open-source content-management systems.

Features of the WordPress

- Simplicity & Flexibility:
 - With WordPress, any type of website can be created like a personal blog or website, a photoblog, a business website, a professional portfolio, a government website, a magazine or news website, an online community, even a network of websites.
 - Website can be made beautiful with themes, and can be extended with plugins.

• Publish with Ease:

- After developing the website/web application, the next step is to publish it. Publishing Tools of the WordPress makes it easy to publish.
- If offers the facility to create Posts and Pages, format them easily, insert media, Create drafts, schedule publication, and look at your post revisions, Make content public or private, and secure posts and pages with a password.

User Management

- There can be different users of the website and not everyone requires the same access to website.
- For example, **Administrators** manage the site, **editors** work with content, **authors** and **contributors** write that content, and subscribers have a profile that they can manage.
- WordPress offers a user management module to manage the users and their access privileges.

Media Management

- WordPress offers a quick and easy way to mange the media in website.
- Media can be drag and drop into the uploader to add it to website.
- It makes easy to add alt text, captions, and titles, and insert images and galleries into website content.

Full Standards Compliance

- Every piece of WordPress generated code is in full compliance with the standards set by the W₃C.
- This means that the website will work in today's browser, while maintaining forward compatibility with the next generation of browser. Your website is a beautiful thing, now and in the future.

Easy Theme System:

- WordPress comes with a theme directory with thousands of themes are available to create a beautiful website.
- It is also possible to upload own created theme with the click of a button

• Extend with Plugins:

- WordPress comes with a plugin directory with thousands of plugins.
- For example, it is possible to add complex galleries, social networking, forums, social media widgets, spam protection, calendars, fine-tune controls for search engine optimization, and forms.

• Built-in Comments:

- Blogging website generally requires a facility to post a comment from friends and followers to engage with your content.
- WordPress's comment tools provides a facility to be a forum for discussion and to moderate that discussion.

• Search Engine Optimized:

 WordPress offers fine-grained SEO control and SEO plugins to provide SEO for website.

• Multilingual:

• WordPress is available in more than 70 languages. So, if required, a website can be developed in language other than English.

Easy Installation and Upgrades:

- WordPress has always been easy to install and upgrade.
- It can be done via FTP or other WordPress installers

Open Source:

- WordPress is licensed under the GPL which was created to protect freedoms.
- One can free to use WordPress by: install it, use it, modify it, and distribute it.
- Software freedom is the foundation that WordPress is built on.

• Community:

- As the most popular open source CMS on the web, WordPress has a vibrant and supportive community.
- Ask a question on the support forums and get help from a volunteer, attend a WordCamp or Meetup to learn more about WordPress, read blogs posts and tutorials about WordPress.
- Community is at the heart of WordPress, making it what it is today.

Advantages of WordPress

• Easy to use:

- WordPress does not require PHP nor HTML knowledge unlinke Drupal, Joomla or Typo3.
- A preinstalled plugin and template function allows them to be installed very easily.
- All you need to do is to choose a plugin or a template and click on it to install. It's good choice for beginners.

Community:

• To have a useful support, there must be a large community of users, who will be a part of e.g. a discussion board.

Easy to Set Up

WordPress is famous for its five minutes installation

Easy to Extend

- WordPress offers a robust template system as well as an extensive API.
- Anyone with experience in PHP can change a site's appearance or even modify WordPress's behavior
- Advanced users can even extend the basic types of content in WordPress

• Plugins:

- The script has over dozen thousand of plugins available on its website.
- They are the reason WordPress is considered a CMS, not only a blogging script.
- Strong majority of the plugins is available for free.

• Templates:

- Thousands of graphics templates are available that can used to change website's look.
- Both, free and paid templates are available.

• Menu management:

 WordPress menu management has extended functionalities, that can be modified to include categories, pages, etc.

Non-standard fields:

- Fields can be easily added to forms by self or using plugins.
- It will allow a blog or subpages to have additional labels, categories or descriptions.

Disadvantages of WordPress

- Modification requires knowledge of PHP
 - Operations like removing a date field requires some understanding of PHP language.
 - It is the case for most of such modifications. Graphics modification requires knowledge of CSS and HTML.
 - Although there are plenty templates available on the homepage, most of them are very alike.
 - To create a unique look, one need to know CSS and HTML.

Plugins and efficiency:

- To compete with Joomla! or Drupal, WordPress needs plenty of plugins to be installed.
- Unfortunately these plugins influence the script's efficiency and not in a good way.
- Another problem arises when a need is raised to choose a plugin for a specific functionality.
- Among all the thousands of plugins, most of them have their clones.
- It means, that any given functionality can be added by several different plugins created by different authors.
- Sometimes choosing the right one may take quite some time.

PHP security

The script is not protected as well as other applications.
 It all depends on how sensitive is the additional content of your page.

Tables and graphics formatting

 Modifying tables or graphics format can be more complicated than in other applications like Joomla.

SQL queries

 Queries can be complex since all additional nonstandard fields that make WordPress a CMS, require additional syntax.

Sites built with WordPress

- Following are just a few examples of sites that can build through WordPress
 - Personal Blogs
 - Blog Networks
 - Social Networks
 - Colleges and Universities
 - Small Businesses

Installing WordPress

- WordPress is well-known for its ease of installation.
- Under most circumstances, installing WordPress is a very simple process and takes less than five minutes to complete.
- A number of web hosts offer one-click installation of WordPress via the control panel, usually using the Fantastico application installer.

System Requirements

- WordPress's requirements are modest. At minimum, your server should support:
- • PHP version 4.3 or greater
- • MySQL version 4.0 or greater
- For clean URLs, a URL rewriting module that understands .htaccess directives, such as mod_rewrite on Apache or URL Rewrite on IIS 7

Install WordPress Manually

- Step 1: Download and save the latest version of Wordpress from the following link
 - http://wordpress.org/download/.
- Step 2: Extract the contents of the ZIP file
 - Extract the contents of the ZIP file called "wordpress.zip", which was downloaded in step 1, to the htdocs folder within the XAMPP directory.
 - If ZIP file extracted properly there should be a new directory called "wordpress" within the \xampp\htdocs directory.
 - Before the process can move forward, please ensure that the web server environment is running properly.

- Step 3: Create the Database in MySQL
 - Go to the XAMPP main page by opening a web browser and entering the following URL
 - http://localhost/xampp/.
 - And then click on link "phpMyAdmin"
 - Create a database namely "wordpress" in MySQL using PHPMyAdmin

- Step 4:Editing wp-config.php
 - Using the Windows Explorer navigate to the xampp\htdocs\wordpress directory.
 - Rename wp-config-sample.php to wp-config.php
 - Open the file called "wp-config.php" within the wordpress directory for editing.
 - Edit the following field according to database setting
 - The name of your database
 - Your database user name
 - Your database password
 - The database host name

Sample wp-config.php file

```
// ** MySQL settings - You can get this info from your web host ** //
/** The name of the database for WordPress */
define('DB_NAME', 'my_wp_db');
/** MySQL database username */
define('DB_USER', 'my_wp_db_user');
/** MySQL database password */
define('DB_PASSWORD', 'my_wp_db_pass');
/** MySQL hostname */
define('DB_HOST', 'localhost');
/** Database Charset to use in creating database tables. */
define('DB_CHARSET', 'utf8');
/** The Database Collate type. Don't change this if in doubt. */
define('DB_COLLATE', ");
```

- Step 5: Run the Install Script
 - Go to the WordPress Installation page by opening a web browser and entering the following URL: http://localhost/wordpress/wp-admin/install.php.
 - Fill the appropriate details and then press the button labeled "Install WordPress".
 - If the information in the previous step was entered correctly there should be a new screen titled "Success!".
 - Press the button labeled "Log In".
 - Enter the username and password
 - Upon successful login, WordPress Dashboard appears.

Upgrading WordPress

- WordPress can upgrade itself automatically, or you can download the files and upload them to web server.
- Automatic upgradation
 - When a new version of WordPress is available, a banner message is displayed on every administration screen .
 - The banner announcement includes a link to upgrade automatically.
 - Follow it, and it will be taken to the core upgrade screen

Moving a WordPress Site

- Step 1:
 - Download the WordPress files from your server. Make sure you have a complete copy of your wp-config.php and .htaccess files and your wp-content directory.
- Step 2:
 - Export your database.
- Step 3:
 - Put your old site into maintenance mode so your visitors can't continue to submit comments and trackbacks to your old database.

• Step 4:

- Edit your wp-config.php file.
- Change the database connection settings to correspond with the values on your new server.

• Step 5:

• Upload your files, including the modified wpconfig.php, to your new web server.

• Step 6:

• Import the database backup you made in Step 2 to your database on your new server using your new web host's control panel tools.

• Step 7:

• Log in to your WordPress site at its new location (e.g. example.com/wp-admin).

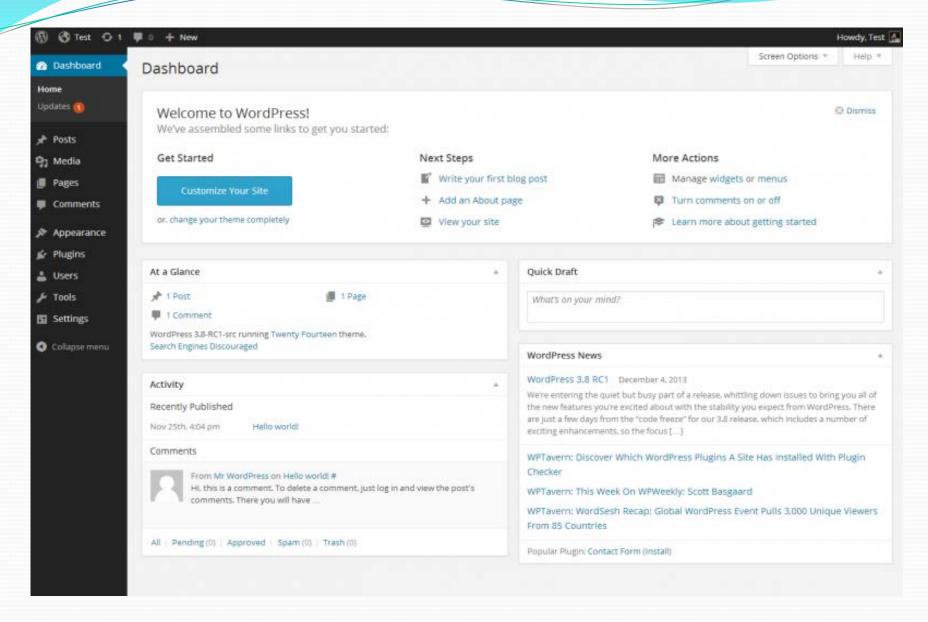
• Step 8:

- If you changed your site's URL, your posts and pages probably contain many hardcoded paths to your uploaded media files.
- Use the Search and Replace plugin to change these to your new URL.

Working with Dashboard

- In WordPress a Dashboard is the main administration screen for a site (a weblog), or for a network of sites.
- It summarizes information about the site or network, and also external information, in one or more widgets that the Dashboard user can enable, disable, and move around.
- To access the <u>WordPress</u> dashboard, it is needed to first <u>log in to WordPress site</u>.
- The WordPress Dashboard allows to control all of the behind-the-scene details of managing the site.

- The left-hand navigation menu provides links to all of the WordPress administration screens, with submenu items displayed on hover.
- One can minimize this menu to a narrow icon strip by clicking on the Collapse Menu arrow at the bottom.
- Links in the Toolbar at the top of the screen connect your dashboard and the front end of the site, and provide access to the profile and helpful WordPress information.



- The Dashboard Screen presents information in blocks called modules.
- By default, WordPress delivers five modules on this page:
 - At a Glance,
 - Activity,
 - Quick Draft,
 - WordPress News, and
 - Welcome.

Default Dashboard Widgets

- At a Glance
 - The At a <u>Glance</u> module provides a summary of the number of Posts, Pages, and Comments on site.
 - Each of these content types are displayed in the form of a link and, when clicked upon, direct to the specific area to manage that content.
 - A statement at the bottom of this module tells about what WordPress Version running on and the current theme activated on site.

Activity

- Shows the upcoming scheduled posts, recently published posts, and the most recent comments on your posts and allows you to moderate them.
- A list of the most Recent Comments on your <u>blog</u> is detailed in this module.
- Each comments that is listed has a link to the related post title and clicking that link allows to edit the post.
- Hovering the mouse over each comment activates a menu of choices to Approve (or Unappove) the comment, Edit the comment, Reply to the comment author, Spam--mark the commas spam, or Delete the comment.

QuickDraft

- The QuickDraft module allows to quickly and easily write a new draft.
- Enter a post title, upload/insert media, enter the post content, add tags, and click the Publish button or click the Save Draft button

WordPress News

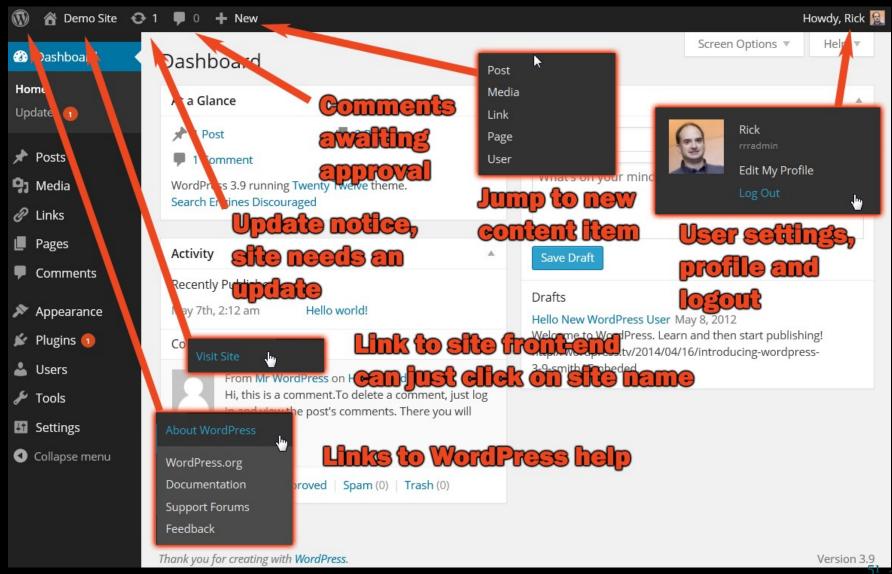
- This Dashboard module lists "the latest news from the official WordPress blog".
- It shows what the <u>WordPress developers</u> have been up to recently and keep up with the latest WordPress related news.
- In addition to software developments, such as version announcements and security notices, news about the WordPress community in general is periodically posted.

Welcome

• The <u>Welcome</u> module shows links for some of the most common tasks when setting up a new site.

The tool bar

The admin tool bar:

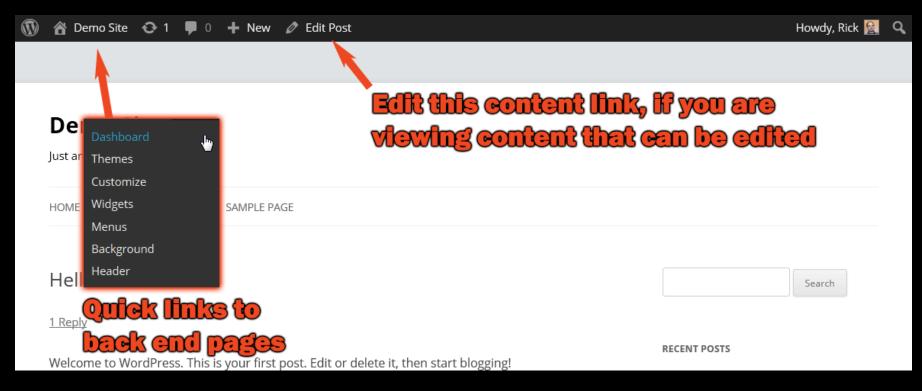


30

The tool bar

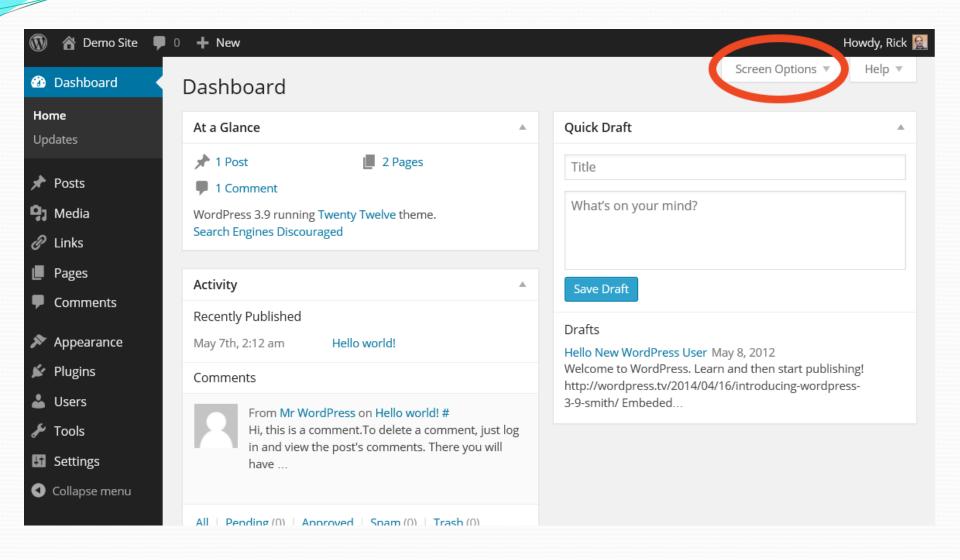
Front end tool bar

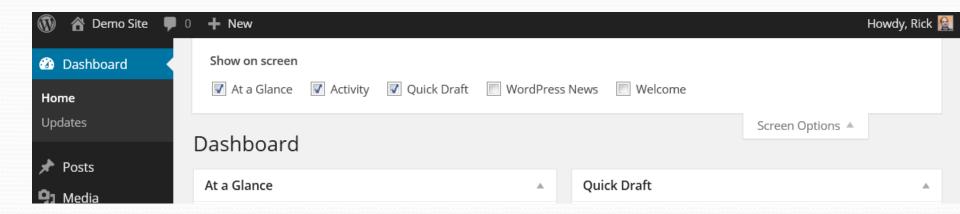
- Very similar to admin tool bar, most items are the same.
- Only shows if you are logged in.



Screen Options

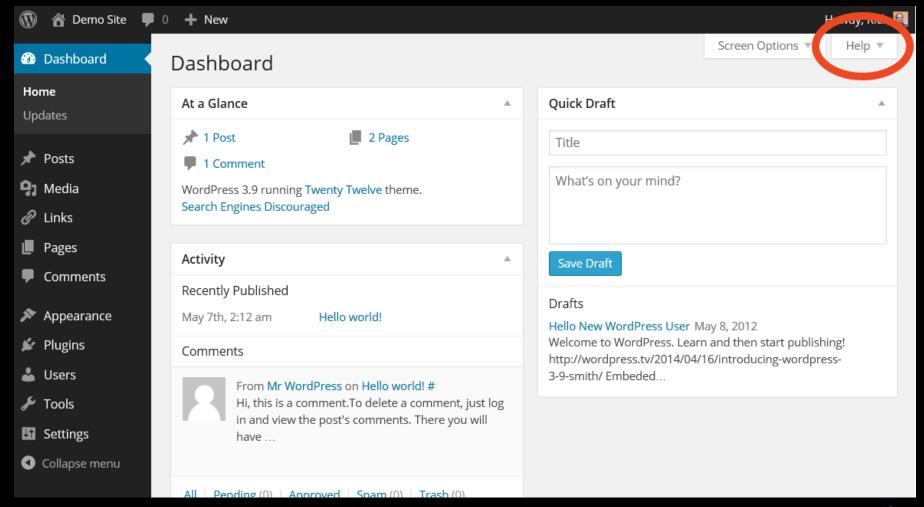
- The Screen Options allow to choose which modules are displayed or not displayed.
- Click the Screen Options tab again to close the Screen Options.





Help tab

Beside the screen options tab there is a "help" tab on every page - again it is context sensitive.



The help tab

The drop down help tab has:

- On the left side:
 - General WordPress help.
 - May have added help from plugins and/or themes.
- On the right side:
 - links to the official WordPress documentation and support areas.

