Migration & Maintenance

Note: This Installation Guide is for Installing WordPress on Microsoft IIS. This is according to GOIC's request. In general, WordPress is usually installed on Apache and using a WAMP server. If you want to do so, follow the steps outlined in Tutorial (4) instead of Steps 1 - 6.

A step-by-step guide to migrating the WordPress site and hosting it on Microsoft IIS:

- 1. Install MySQL:
 - Install the MySQL Community Server(x86, 32bit). Ensure that you install the entire MSI package, and not just the installer: https://dev.mysql.com/downloads/mysql/.
 - → Follow the tutorial (1) linked below for installation steps.
- 2. Create the WordPress Database, give it appropriate privileges, and create your admin user. Follow the tutorial (1) linked below.
- 3. Install PHP:
 - → Install the VC15 & VS16 x64 version found on: https://aka.ms/vs/16/release/VC_redist.x64.exe
 - → Install the VS16 x64 Non-Thread Safe Zip File found on: https://windows.php.net/downloads/releases/php-8.3.6-nts-Win32-vs16-x64.zip
 - Follow the tutorial (1) linked below for installation steps.
 - → Create PATH based on tutorial (1) steps.
 - → Edit files based on tutorial (1) steps.
- 4. Installing Microsoft IIS:
 - Go to Server Manager -> Manage -> Add Roles and Features. Then install IIS with the **features included in the tutorial (1)**.
 - For installation, follow the steps included in the tutorial (1). They are difficult to transcribe, so ensure that you follow the steps as the author goes through them.
- 5. Install Microsoft IIS Rewrite:

→ Install Microsoft IIS Rewrite English x64 installer found on: https://download.microsoft.com/download/1/2/8/128E2E22-C1B9-44A4-BE2A-5 859ED1D4592/rewrite amd64 en-US.msi

6. Configure IIS to use FastCGI:

Follow the steps outlined in the tutorial (1). This step heavily depends on including the correct features from Step 4. So any issues faced would be from then.

7. Installing WordPress:

- → Install WordPress for Windows (Version 6.4.2) found on: https://wordpress.org/wordpress-6.4.2.zip
- ⇒ Extract to C:/inetpub/wwwroot as 'wordpress'.
- Set database details in the wp-config.php file according to business requirements. Follow the tutorial (1) steps for further guidance.
- Go to localhost/wordpress/wp-admin/install.php and set up your WordPress environment. Follow the tutorial (1) steps for further guidance.
- 8. Migrate the finished website using the All-In-One Migration Plugin:
 - → Download the All-In-One Migration Plugin (100GB) found on: ferdykorp.com/migrate
 - Go to your WordPress dashboard. Go to Plugins -> Import New PlugIn -> Choose File. Then choose the ZIP File you just downloaded.
 - Note that if you install a WordPress version past 6.4.2, you will have to move your WordPress back to an older version to allow for the plugin to work. To do so, follow tutorial (3) linked below.
 - Go to the All-in-One plugin -> Import -> File, then import the WPRESS file shared with you. Ensure complete installation. For further details, follow tutorial (2) linked below.
 - Delete the All-In-One-Migration (100 GB) Plugin, and install the official one if need be from the Plugins page.
- 9. Ensure installation is complete, check out the different pages, and customize your plugins and pages.

Key points to ensure that the migration maintains all functionalities:

For migrating a WordPress site to the GOIC server using the All-In-One Migration plugin, it is necessary to have WordPress pre-installed on the GOIC server. The All-In-One Migration plugin will effectively clone our existing WordPress site, including its database, themes, plugins, and content, and then we'll deploy this clone on the GOIC server.

Here are several key points to ensure that the migration maintains all functionalities:

1. Server Requirements and Configuration

Ensure that the GOIC server meets the minimum requirements for running WordPress, including the correct versions of PHP, MySQL/MariaDB, and IIS, Apache or Nginx. The server's configuration should also support the .htaccess file for Apache or appropriate configuration files for Nginx, as these are crucial for permalink settings and other WordPress functionalities.

2. PHP Extensions and Modules

Some WordPress plugins and themes may require specific PHP extensions or modules. Check that these are enabled on the GOIC server. Common requirements include 'gd' (for image manipulation), 'curl' (for fetching data from other sites), 'mbstring' (for multibyte string processing), and others.

3. File and Folder Permissions

Correct file and folder permissions are essential for WordPress to run smoothly. Incorrect permissions can lead to issues with media uploads, plugin and theme updates, and could even impact the site's security. Typically, folders should be set to `755` and files to `644`, but this can depend on the server environment.

4. Database Compatibility

Ensure that the database version on the GOIC server is compatible with the version used by your WordPress site. WordPress requires MySQL 5.6 or higher or MariaDB 10.1 or higher. Incompatibilities here can lead to issues with database performance or functionality.

5. URLs and Domain Names

If the domain name of your site is changing as part of the migration, you will need to update WordPress settings and possibly make changes to the database to reflect the new domain. Tools like All-In-One Migration typically handle these changes, but you should verify them post-migration.

6. Testing After Migration

After migrating, thoroughly test the site on the GOIC server for functionality, speed, and responsiveness. Check all pages, forms, plugins, and admin functionalities to ensure everything works as expected. This testing phase is crucial to identify and fix any issues that may have arisen during the migration. In our testing, the translation plugin was the only one that faced difficulties in migration, and the translations had to be manually reinstated again (~ 10 minutes).

7. Performance and Optimization

Finally, the performance might differ due to changes in server hardware, software, and configuration. You may need to implement caching, content delivery networks (CDN), or other optimization techniques to achieve or exceed the performance levels you had previously.

Potential Costs:

As for fees, WordPress itself is a free and open-source software, so there is no cost to download, install, or use WordPress. However, there are potential costs associated with running a WordPress site that you should be aware of:

The All-In-One Migration plugin itself offers both free and premium versions. The free version that we have linked is often sufficient for a full site migration, but the premium version provides additional features that might be beneficial for larger or more complex sites, or for sites that require frequent migrations or backups. Note that the version we linked is a slightly altered version that allows for effective one-time migration, but a paid version has to be from the Plugin page of WordPress itself.

1. Hosting Fees

If GOIC is hosting the site on their own server, they're already bearing the costs of running and maintaining that server. If they're using a third-party hosting service, the cost would depend on the hosting provider's pricing plans.

2. Domain Registration

If you're setting up the site on a new domain, or if you need to renew the domain registration, there will be a fee associated with that. Domain registration costs vary based on the registrar and the domain's top-level domain (e.g., .com, .org, .net).

3. Premium Themes and Plugins

While there are thousands of free themes and plugins available for WordPress, some features or designs might require purchasing premium themes or plugins. The plugin used for most of the design, Elementor, is the only one we would recommend purchasing at the time of the delivery of this project.

4. Maintenance and Support Services

Depending on the complexity of the site and the technical expertise available within GOIC, there might be costs associated with ongoing site maintenance, security, and support.

Video Tutorials (IMPORTANT):

- 1. Installing WordPress manually on Microsoft IIS. This is a very long tutorial so keep that in mind: https://www.youtube.com/watch?v=puNkk4WSfYE
- 2. Migrating the website using the All-in-One Migration (100GB) Plugin.

 How To Migrate Your Wordpress Website Quickly & For Free!
- 3. Reverting to an older WP version (if needed). This is only if you install WordPress past 6.4.2: How to downgrade your WordPress Version in 2 minutes
- 4. Installing WordPress on WAMP Server. This is not a video, but works effectively. We recommend using WAMP if flexibility is an option, if not, then IIS will suffice: https://medium.com/@tiboprea/how-to-install-wordpress-with-wamp-dfldafc47c7