

InstantWP User Guide

InstantWP Version 5



InstantWP

<http://www.instantwp.com>

email: support@instantwp.com

Copyright, Legal Notice and Disclaimer

This publication is protected under the Irish Copyright and Related Rights Act of 2000 and all other applicable international, state and local laws, and all rights are reserved, including resale rights.

The author or publisher of this ebook may have a marketing connection to any brand, topic or product mentioned in this ebook. Through the use of affiliate links contained in this ebook the author or publisher may collect fees from purchases made.

Any trademarks, service marks, product names or named features are assumed to be the property of their respective owners, and are used only for reference. There is no implied endorsement if we use one of these terms.

Nothing in this ebook is intended to replace common sense, legal, medical or other professional advice, and is meant to inform and entertain the reader.

Copyright © 2017 Corvideon Ltd.

Table of Contents

1. Introducing InstantWP	6
1.1. Overview.....	6
1.2. Technical Overview	6
1.3. Installing and Uninstalling InstantWP	7
1.3.1. Installation on Windows	8
1.3.2. Installation on macOS.....	8
1.3.3. Uninstalling on Windows and macOS.....	9
1.4. Requirements	9
1.5. WordPress File Access	10
1.5.1. WordPress File Access on macOS	10
1.5.2. WordPress File Access on Windows	10
2. InstantWP Control Panel	12
2.1. Control Panel Tab	12
2.2. Themes and Plugins Folder Management	14
2.3. Manually Installing Themes and Plugins.....	14
2.4. Upgrading WordPress	16
2.5. Advanced Panel Tab.....	17
2.5.1. Using the SFTP Client.....	19
3. IWPServer - The InstantWP Virtual Machine	20
3.1. Alpine Linux	20
3.2. Managing Software on IWPServer.....	20
3.3. Default User Accounts	21
3.4. Useful Command Line Tools.....	21
3.5. Virtual Machine Configuration Files	22
3.6. Network Ports.....	22
3.6.1. Port Offset	23
4. InstantWP Configuration File.....	24
5. InstantWP Command Line	25
6. Further Information	26
6.1. GitHub Project	26
6.2. Included Software.....	26
6.3. FAQ - Frequently Asked Questions	26
6.4. Open Source License and Warranty.....	27

Figures

Figure 1: InstantWP Technical Overview	6
Figure 2: Control Panel Tab on Windows	13
Figure 3: Control Panel Tab on macOS	13
Figure 4: Advanced Tab Panel on Windows.....	18
Figure 5: Advanced Tab Panel on macOS	18

A Word From The Author

I originally created Instant WordPress for a class on blogging that I was teaching way back in 2007.



It became an immediate hit with my students and allowed them to unleash their creativity in their work with WordPress without getting bogged down in technical details.

I hope that InstantWP brings you the same freedom and creativity in your work with WordPress.

Regards

Seamus Brady

Founder, Corvideon Ltd.

1. Introducing InstantWP

1.1. Overview

Instant WordPress is a complete standalone, portable WordPress development environment. It turns any Windows or macOS machine into a WordPress development server. It will even run from a USB key.

InstantWP has been under development since 2008 and was first developed as a WordPress teaching tool.

The software has been downloaded over a million times and is trusted worldwide in universities, schools and businesses for teaching, developing and working with WordPress.

1.2. Technical Overview

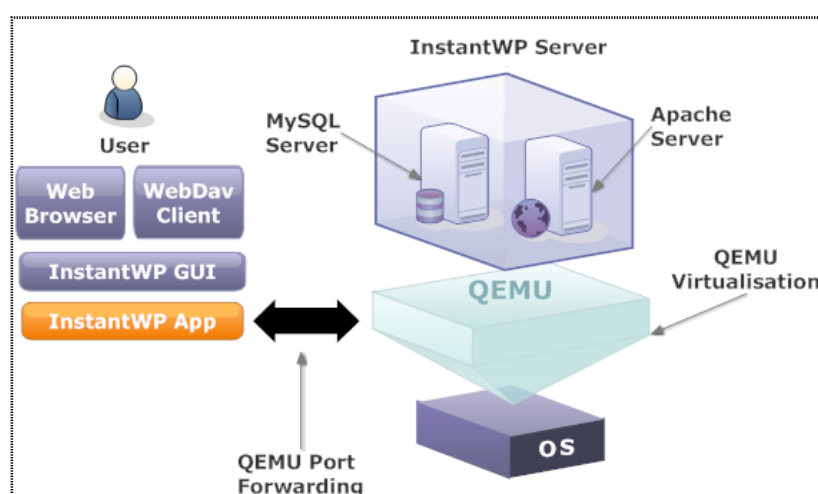


Figure 1: InstantWP Technical Overview

InstantWP contains a virtual webserver wrapped in a simple user interface that should up in under a minute. The default URL of WordPress is launched from <http://127.0.0.1:10080/wordpress>

The virtual webserver, called **IWPServer**¹, runs Alpine Linux inside an open source virtualisation layer called QEMU.

The user interface, or the **InstantWP Control Panel**² as we call it, communicates with QEMU via the main InstantWP app.

For more details, see the IWPServer section.

1.3. Installing and Uninstalling InstantWP

InstantWP is completely portable and the installation on both Windows and macOS is extremely straightforward.

In both cases, you should download the InstantWP zip from the main InstantWP website at <http://www.instantwp.com>.

1. See Section 3 on IWPServer.

2. See Section 2 on the InstantWP Control Panel.

InstantWP can be installed as many times as you wish, but only one instance can be run at a time unless you edit the Port Offset number. See the Network Ports section³ for more details.

1.3.1. Installation on Windows

- Copy the downloaded InstantWP zip into the desired folder. It is best to not have any spaces in the folder path to InstantWP as this can cause issues.
- Unzip the InstantWP zip file using any standard zip utility.
- Open up the unzipped folder.
- Double click on the *Start-InstantWP.bat* file to start InstantWP.
- The InstantWP Control Panel should start up after the progress bar completes.

1.3.2. Installation on macOS

- Copy the downloaded InstantWP zip into the desired folder.
- Unzip the InstantWP zip file using the standard macOS archive utility.
- Open up the unzipped folder.
- Double click on the *Start-InstantWP* file to start InstantWP.

3. See Section 3.6 on Network Ports.

- The InstantWP Control Panel should start up after the progress bar completes.

1.3.3. Uninstalling on Windows and macOS

There is nothing installed when InstantWP runs, apart from what is in the unzipped InstantWP folder. Shutting down InstantWP and then deleting the unzipped folder is all that is required to remove InstantWP.

1.4. Requirements

InstantWP should run on the most recent versions of macOS, Windows 10 and Windows 7.

It is suggested that you have at least 4GB of RAM to run InstantWP but the amount of RAM that is needed can be adjusted if you wish. See the Configuration Section⁴ for more details.

InstantWP also needs at least 300MB of disk space.

4. See Section 4 on the InstantWP Configuration File.

1.5. WordPress File Access

The Themes and Plugins folder are handled slightly differently depending on the operating system you are using.

- On Windows, the Themes and Plugins folders are local folders that are kept synchronised with the embedded Virtual Linux server. This means that there may be a tiny time lag between making local changes and the changes appearing in WordPress.
- On macOS, a shared web directory (using a WebDav⁵ folder on the Linux Virtual Server) is mounted using the Finder and can be accessed as a local folder.

1.5.1. WordPress File Access on macOS

When the macOS version of InstantWP starts up, the Linux Virtual Machine is mounted as a native folder into the macOS Finder. See Section 2.2 and 2.3 for more information for file access alternatives if this is not desirable..

1.5.2. WordPress File Access on Windows

The Themes and Plugins WordPress files are not directly accessed in the Windows version of InstantWP due to technical limitations in Windows.

5. See <https://en.wikipedia.org/wiki/WebDAV>

The default file syncing behaviour in InstantWP will "mirror" all files in the WordPress Themes and Plugins folders on the Virtual Machine with the local Windows folders. This will work well for beginners as nothing is ever deleted and nothing further needs to be done.

However, for more advanced users, this behaviour may not be desirable. For this reason, more advanced users can override this behavior by editing the sync.ini file in the folder <InstantWP Folder>\platform\win\sync.

There are four choices available here:

- Syncing two ways with no delete (default behaviour with no change).
- Syncing with delete from local folder to Virtual Machine, so the local folder is master. Change the SyncScript setting to sync-local-master.script.
- Syncing with delete from VM to local, so the Virtual Machine folder is master. Change the SyncScript setting to sync-remote-master.script.
- Turn off the syncing by changing the setting UseSync to no.

Of course, once the file syncing is turned off, you should use the included Web File Manager or SFTP client for file access on the Virtual Machine. See Section 2.5.1 for more details.

2. InstantWP Control Panel

The InstantWP Control Panel is the main user interface for InstantWP and will start up after the progress bar runs. There are two tabs available on the Control Panel.

2.1. Control Panel Tab

This tab gives access to the local WordPress installation. See Figure 2 and Figure 3 for a screenshot.

Button	Description
WordPress Frontpage	This opens the WordPress homepage.
WordPress Admin	This opens the WordPress Dashboard. The default login is the user "admin" and the password is "password".
Themes Folder	This opens up the WordPress Themes folders on your local machine. Please see the note below about how these folders are managed.
Plugins Folder	This opens up the WordPress Plugin folders on your local machine. Please see the note below about how these folders are managed.
MySQL Admin	The default MySQL user is "root" and the password is left blank.
Help	This opens up the local InstantWP documentation.
About	This opens up information about the InstantWP software.
Quit	Exits InstantWP and shuts down the IWPServer.

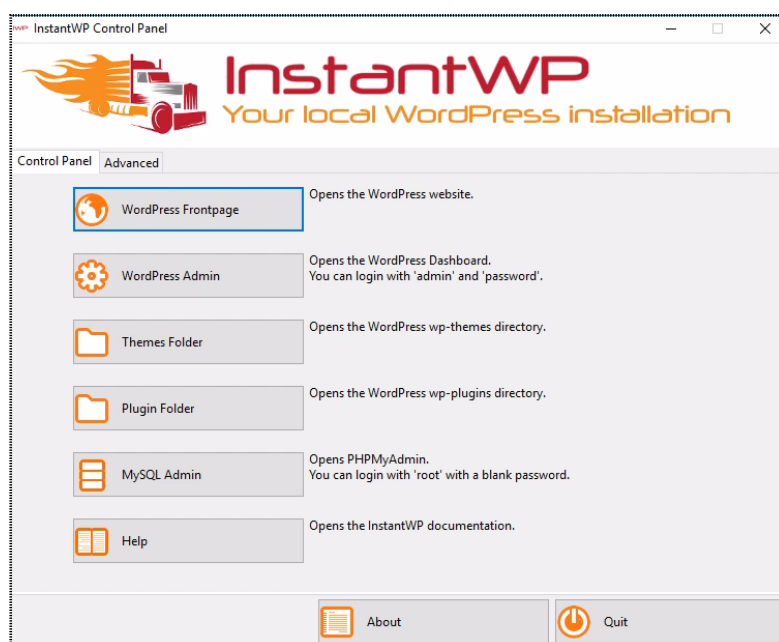


Figure 2: Control Panel Tab on Windows



Figure 3: Control Panel Tab on macOS

2.2. Themes and Plugins Folder Management

The Themes and Plugins folder are handled slightly differently depending on the operating system - see Section 1.5 for more information.

In either case, if the default Themes and Folders access is not sufficient, then there are plenty of options available. For more information on these alternatives, please see the Advanced Tab section⁶ for information on the Web File Manager or using the SFTP⁷ client that is bundled with InstantWP (SFTP is a standard way of communicating securely with web servers).

2.3. Manually Installing Themes and Plugins

To install plugins and themes, simply download and unzip the theme or plugin folder to your computer.

On the InstantWP Control Panel click on the Plugins Folder button or the Themes Folder button as appropriate. This will open the plugin or theme folder for your local WordPress installation.

6. See Section 2.5 on the Advanced Tab.

7. See https://en.wikipedia.org/wiki/SSH_File_Transfer_Protocol

Copy and paste the theme or plugin folder into the local WordPress plugin or theme folder that was opened above.

Click on the WordPress Admin button on the InstantWP Control Panel and log in. The plugin or theme should now be listed. Enable the plugin or theme. Please note that this may take moment or two to appear if you are using the Windows operating system.

Click on the WordPress Frontpage button on the Instant WordPress Control Panel to see how the plugin or theme is working in your local WordPress installation.

Of course, you can also install themes and plugins in the usual way from within the WordPress Administration Panel.

2.4. Upgrading WordPress

The version of WordPress within InstantWP can be upgraded automatically using the standard WordPress update mechanism.

Simply open the WordPress Dashboard⁸ using the WordPress Admin button on the InstantWP Control Panel and follow the links that appear with the WordPress Dashboard.

Please note that sometimes the WordPress version in InstantWP will be a little behind the currently released WordPress version. This is to allow testing of upgrade scenarios.

8. See https://codex.wordpress.org/Dashboard_Screen

2.5. Advanced Panel Tab

The buttons on the Advanced Panel tab open up more advanced functionality. See Figure 4 and Figure 5 for a screenshot.

Button	Description
SSH Terminal	This button will open an SSH ⁹ session to the Virtual Machine ¹⁰ . You will be logged in automatically as user "iwp" with password "iwp". Please see the Section 3.4 for some useful commands you can run via the SSH Terminal for starting and stopping services.
SFTP Client	This will open the SFTP client - Fugu SFTP on OSX and WinSCP on Windows. Please see the SFTP client section below.
QEMU Monitor	This will open access to the QEMU monitor console for interacting with Virtual Machine. See the QEMU Monitor documentation for more information. You can control various aspects of the virtual machine.
Web File Manager	This will open the InstantWP config file in your default text editor. You can login with user "iwp" and password "iwp".
Edit Config File	This will open the InstantWP config file in your default text editor. Please see Section 4 on the Configuration File for more information.
PHP Info	This will open the PHP Info page which outputs information about PHP's configuration. Please see the PHP manual page .

9. See https://en.wikipedia.org/wiki/Secure_Shell

10. See https://en.wikipedia.org/wiki/Virtual_machine

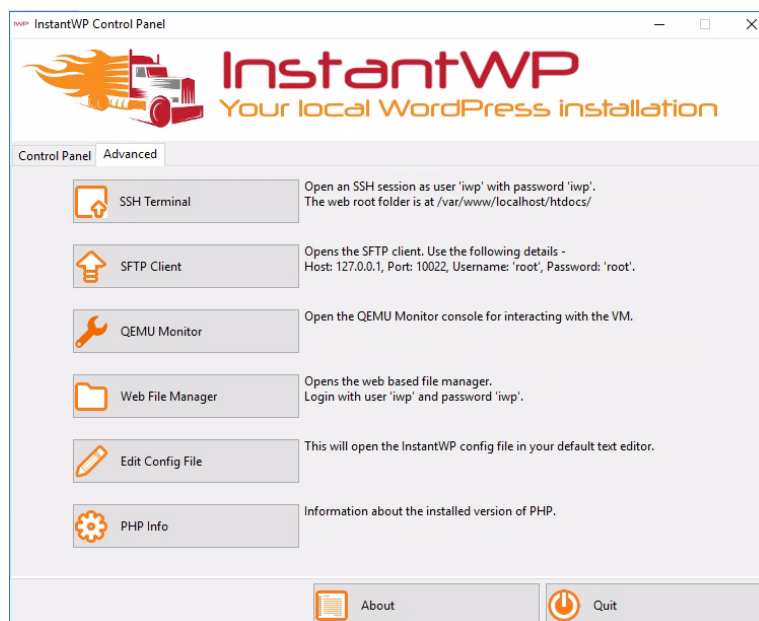


Figure 4: Advanced Tab Panel on Windows



Figure 5: Advanced Tab Panel on macOS

2.5.1. Using the SFTP Client

You can use the following details to login to IWPServer, the InstantWP Virtual Machine:

- The server to connect to: 127.0.0.1
- The username: root
- The network port: 10022
- The password: root
- The web root directory is at `/var/www/localhost/htdocs/`

For more information and help on the included macOS SFTP client, please see the [Fugu homepage](#).

For more information and help on the included Windows SFTP client, please see the [WinSCP homepage](#).

3. IWPServer - The InstantWP Virtual Machine

IWPServer is the embedded Linux Virtual Machine that runs WordPress. The Virtual Machine is stored in a qcow2 file in the vm folder where you unzipped InstantWP.

The standard way to access the Virtual Machine is using the SSH Terminal¹¹.

3.1. Alpine Linux

The Virtual Machine runs Alpine Linux. Alpine Linux is a security-oriented, lightweight Linux distribution. You can find out more information about Alpine Linux at the [distribution homepage](#).

3.2. Managing Software on IWPServer

You can manage installed software on the Virtual Machine using the *apk* tool which is included with Alpine Linux. You can add, upgrade and install any software as you wish on the Virtual Machine including PHP and MySQL. For more information see the [Alpine Linux package management documentation](#).

11. See Section 2.5 on the Advanced Tab Panel for more information.

3.3. Default User Accounts

- The default user account is "iwp" with the password "iwp".
- The default admin account is "root" with the password "root".

Of course, you can add, edit and remove user accounts using the standard Linux command line tools.

3.4. Useful Command Line Tools

You can use the following commands from the SSH Terminal to start and stop various IWPServer services:

Description	Command
Stop Apache Web Server	<code>sudo rc-service apache2 stop</code>
Start Apache Web Server	<code>sudo rc-service apache2 start</code>
Restart Apache Web Server	<code>sudo rc-service apache2 restart</code>
Stop MySQL Database Server	<code>sudo rc-service mariadb stop</code>
Start MySQL Database Server	<code>sudo rc-service mariadb start</code>
Restart MySQL Database Server	<code>sudo rc-service mariadb restart</code>
Reset WordPress Permissions	<code>/home/iwp/scripts/reset-wp-permissions</code>

3.5. Virtual Machine Configuration Files

You can edit the files below using the SFTP client and your operating systems text editor.

You can also use the Nano text editor from the SSH Terminal using the command "sudo nano <FILEPATH>". For more information on the Nano text editor, please see the [Nano documentation](#).

File Type	File Description	File Path
PHP Initialisation File	PHP settings and defaults	/etc/php7/php.ini
Apache Web Server Config	Web server settings	/etc/apache2/httpd.conf
MySQL Config File	Database settings	/etc/mysql/my.cnf

3.6. Network Ports

You can connect to the network ports using localhost or 127.0.0.1 as the host name.

Port Name	Port Number	Description
HTTP	10080	Apache web server port.
SSH	10022	Secure Shell port.
QEMU Monitor	10099	Virtualisation shell access.

3.6.1. Port Offset

Each InstantWP installation has a Port Offset number. This allows you to customise which specific network ports on your local computer get mapped to which specific network ports on the Virtual Machine.

If you wish to run more than one instance of InstantWP at a time, you need to edit the Port Offset setting in the Configuration file so that each instance has a unique number. For instance, leave one install at a Port Offset of 10000 and set the next install to 11000.

The default Port Offset of the standard Virtual Machine is 10000.

4. InstantWP Configuration File

The main config file for InstantWP is in the config folder wherever you unzipped InstantWP. You can also open the configuration file using the Edit Config Button on the Advanced Tab Panel. InstantWP needs to be restarted for changes to take effect.

There are multiple settings available but the settings below may be the most useful:

Setting Name	Setting Description	Default Value
VMFile	qcow2 virtual file in the vm directory	iwpserver-2.0.1.qcow2
RAM	RAM Amount in MB. You can increase this setting to 512 or 1024 if you wish IWPServer to run faster.	256
ShowQEMUWindow	Show the QEMU window on start up. Can be yes or no. This can be useful for diagnosing issues: Start-IWP-Show-QEMU.bat	no
PortOffset	The Port Offset number. See Section 3.6.	10000

5. InstantWP Command Line

InstantWP comes with a command-line tool called `iwpcli` / `iwpcli.exe`.

The following commands are available:

Command Description	Command
Check if IWP is running and print out a status message	<code>iwpcli status</code>
Start InstantWP	<code>iwpcli start</code>
Quit InstantWP	<code>iwpcli quit</code>
Open WordPress frontpage	<code>iwpcli wpfrontpage</code>
Open WordPress Dashboard	<code>iwpcli wpadmin</code>
Open the plugins folder	<code>iwpcli plugins</code>
Open the themes folder	<code>iwpcli themes</code>
Open PHPMysqlAdmin	<code>iwpcli mysql</code>
Open IWP documentation	<code>iwpcli docs</code>
Open IWP about page	<code>iwpcli about</code>
Open up an SSH session on the IWP VM	<code>iwpcli ssh</code>
Open up the QEMU VM Monitor shell	<code>iwpcli monitor</code>

6. Further Information

6.1. GitHub Project

The code for InstantWP is available at the GitHub project below:

<https://github.com/corvideon/InstantWP/>

6.2. Included Software

You can also find further technical information about what versions of PHP and MySQL and other included software is used as part of InstantWP by visiting the GitHub project.

The About page also lists some of this information from within InstantWP. The About button at the base of the InstantWP Control Panel will open this page.

6.3. FAQ - Frequently Asked Questions

For troubleshooting and further technical tips please see the InstantWP FAQ:

<http://www.instantwp.com/go/FAQ/>

6.4. Open Source License and Warranty

InstantWP is released under the GPL v3. See the included LICENSE file.

You can use InstantWP for any purposes for an unlimited period of time.

InstantWP is provided free of charge.

InstantWP may be installed and used on any number of systems.

THIS SOFTWARE IS PROVIDED "AS IS" BY CORVIDEON LTD. AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

All trademarks and images are copyright of their respective owners.

Software licenses are provided in the respective software directories or links are included in the documentation below.

InstantWP is not associated with Automattic or WordPress.com.

Copyright © 2017 Corvideon Ltd.