

Virtual Machine Instructions for the Zend Framework 2: Fundamentals class

Welcome to the Course!

If you have any difficulty in completing these tasks, you will have an opportunity to work with your instructor either before or after the class. You can also contact us at itraining@zend.com.

Thank you!

Zend Training Virtual Machine Setup and Use

- (1) Zend online training provides virtual machines (VM's) to registered students to facilitate their learning experience. A VM consists of an operating system (Linux in this case), a trial copy of Zend Studio (Zend's integrated development environment (IDE)), and a community edition of Zend Server (Zend's application server). Also installed is a web server (Apache) and a database engine (MySQL). The result is a complete development environment setup and ready for use during the course.
- (2) In order to use the provided VM you will first need to have a **viewer application** on the computer you will be using for the class. Windows and Linux operating systems use a viewer application provided by VMware, called the VMware Player. Apple Mac operating system uses a viewer application provided by Oracle, called Oracle VM VirtualBox.
 - a. If you do not already have the VMWare player already installed on the computer you will use to attend the class you will need to install one of the options below:
 - i. Windows & Linux: Go to <http://www.vmware.com/products/player/>
 - ii. Mac: Go to <http://www.vmware.com/products/fusion/> or as an alternative you can download the free Virtualbox at <https://www.virtualbox.org/>
 - b. Download and install the VMWare player for your system
 - c. The link to the VM's download is provided below. The VM is a large file and can take anywhere from a number of minutes to an hour or more to download depending on internet speed. Please allow plenty of time for the download to complete.
 - i. <http://globalservices.zend.com/downloads/edut-zf2-vmware.zip>
 - d. Once the download finishes, extract all the VM files from the zip/archive file.
 - e. To start the VM please continue to follow the instructions listed for your operating system.

Windows/Linux

- 1 Start the VMware Player and accept the license requirements.
- 2 Click “Open a Virtual Machine” and navigate to the extracted VM folder.
- 3 Open the VM folder, select “ZendTraining.vmx”, click open. The Zend Training VM is added to the left column list.
- 4 Select the Zend Training addition.
- 5 Click “Play virtual machine”. The VM will boot the Linux operating system.
- 6 Click “Zend Technologies” and enter the password “password”.
- 7 Click “log In”.

Note: The VM will attempt to “capture” the mouse pointer for use inside the VM player. Ctrl>Alt will free the mouse for use in the host OS.

Set the VM Keyboard language Preferences

- 1 Click the keyboard icon on the top launch bar.
- 2 Click the “layouts” tab.
- 3 Move the desired keyboard setting to the top of the window list. Remove all others if desired.
- 4 Click “Close”.

Set the Screen Size Preferences

- 1 Click the monitor icon on the top launch bar.
- 2 Select a desired resolution, click **Apply**, then, **Close**.

Install VMware Tools

In order to fully take advantage of a common clipboard between both the host OS (your main system OS) and the guest OS (the training VM), we recommend installing a tools application called VMware Tools.

- 1 Click into the VM.
- 2 At the top launch bar, click the terminal icon.
- 3 At the terminal prompt enter: `cd Downloads/vmware-tools-distrib`
- 4 At the terminal prompt enter: `sudo -s ./vmware-install.pl`
- 5 Accept all defaults as prompted with [<default>].
- 6 When the install finishes, close the terminal window.
- 7 At the top launch bar, click the power icon, select “restart”.
- 8 Size the VM window as desired.

Apple Mac

- 1 Start the Oracle VM VirtualBox Manager.
- 2 Click **New**.
- 3 Type “ZF2F” in the “Name” field.
- 4 Select “Linux” from the “Type” dropdown.
- 5 Select “Debian” from the “Version” dropdown, click **Next**.
- 6 Select a minimum of 512 mb of memory, click **Next**.
- 7 Select “Use an existing virtual hard drive file”.
 - a Click the folder icon and navigate to the extracted folder.
 - b Select the file “ZendTraining.vmdk”, click **Open**.
 - c Click **Create**.
- 8 Select the new “ZF2F” in the VirtualBox Manager left panel, click **Start**.
- 9 Take note of any popup dialogs, click **OK**.
- 10 The VM will boot the Linux operating system, click **Zend Technologies** and enter the password “password”.
- 11 Click “log In”.

Note: The VM will attempt to “capture” the mouse pointer for use inside the VM player. Right Ctrl will free the mouse for use in the host OS.

Set the VM Keyboard language Preferences

- 1 Click the keyboard icon on the top launch bar.
- 2 Click the “layouts” tab.
- 3 Move the desired keyboard setting to the top of the window list. Remove all others if desired.
- 4 Click “Close”.

Install Guest Additions

In order to fully take advantage of higher screen resolutions, and the ability to share a common clipboard between both the host OS (your main system OS) and the guest OS (the training VM), we recommend installing a tools application called “Guest Additions”.

- 1 Click **Devices>Install Guest Additions...**

- 2 In the “VBOXADDITIONS...” dialog, click **Cancel**.
- 3 At the top launch bar, click the terminal icon.
- 4 Terminal prompt enter: **cd /media/cdrom**↵
- 5 Terminal prompt enter: **sudo sh ./VboxLinuxAdditions.run**↵
- 6 When install finishes, close the terminal window.
- 7 At the top launch bar, click the power icon, select “restart”.
- 8 Click **Devices>Shared Clipboard>bidirectional**.
- 9 Size the VM window as desired.