

dEWDrop

A development environment for EWD and VISTA

About

The dEWDrop virtual machine appliance is a preconfigured development environment, perfect for developers who want to write EWD applications for VISTA. VISTA (Veterans Health Information Systems and Technology Architecture) is the VA's excellent Electronic Health Record (EHR) software, and EWD (Enterprise Web Developer), from M/Gateway Developments, is the premier web development framework for systems written in MUMPS (Massachusetts General Hospital Utility Multi-programming System), such as VISTA.

The dEWDrop appliance is a VMware Virtual Machine Disk (VMDK) image, which starts its life as a raw Xen image. You should be able to run it easily in the latest VMware Player, VMware Workstation client, or even a VirtualBox Manager client. VirtualBox should recognize and run a VMDK image just as easily as its native Virtual Disk Image (VDI) file.

Installing

These instructions are for an Ubuntu Linux host system, running a VMware Player client, which can be downloaded from <http://my.vmware.com/web/vmware/downloads>, or a VirtualBox Manager client, installed from the official Ubuntu universe repository, using the command:

```
$ sudo apt-get install virtualbox
```

If installing in VirtualBox, the package manager will take care of everything, and you will find VirtualBox ready to run in Applications->Accessories->VirtualBox, or by typing Alt-F2 and typing in 'VirtualBox', without the quotes. If you are installing in VMware, you will need to run the self-extracting installation bundle that you downloaded and install it with the command:

```
$ sudo bash VMware-Player-5.0.1-894247.i386.bundle
```

The name of the bundle will vary depending on its version and the architecture of the host system. Once finished, you will find VMware ready to run in Applications->System Tools->VMware Player, or by typing Alt-F2 and typing in 'vmware', without the quotes.

After you have settled on a virtual machine technology to run dEWDrop in, you

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will then need to download the dEWDrop 7zip archive for the latest version of dEWDrop (currently release 5), from the Fourth Watch Software website, <http://www.fourthwatchsoftware.com>.

Then you need to extract the contents of the archive with the command:

```
$ 7z x dEWDrop.7z
```

If you don't have the 7z command, you can install it with:

```
$ sudo apt-get install p7zip-full
```

This will create a directory called dEWDrop, and extract the VMDK file and a few other files that make up a VMware machine image. Open up the VMware Player client, and choose the option 'Open a Virtual Machine', and navigate to, and open, the file dEWDrop/dEWDrop.vmx, which is dEWDrop's primary configuration file. If you are using VirtualBox, open up the VirtualBox Manager client, and choose the option 'New', then click 'Next', and type dEWDrop in the box labeled 'Name'. For 'Operating Type', choose Linux, and for 'Version', choose Ubuntu. Next choose how much base RAM you want, 512 MB should be sufficient, then click 'Next'. Next choose the radio option 'Use existing hard disk' and navigate to, and open, dEWDrop/dEWDrop.vmdk.

dEWDrop is configured to use bridged networking by default. This is required if you want to be able to log in to dEWDrop via ssh from a machine other than the host of the virtual machine. Some people have reported issues with bridged networking not working for them. This usually happens with publicly shared networks. The bridged connection tries to acquire an address through DHCP, and some networks will block that. If networking is working, you should see an IP address in the output of the ifconfig command, when run in the dEWDrop machine. E.g.

```
$ ifconfig eth0
```

There are a couple of options that you can try if bridged networking isn't working for you. First, check to make sure that the vmnet module is currently loaded in the Linux kernel, with the command:

```
$ lsmod | grep vmnet
```

If vmnet is currently loaded, you will see output from that command. If it isn't, then load the module with the command:

```
$ sudo modprobe vmnet
```

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Then, make sure that VMware's networking services have been started with the command:

```
$ sudo vmware-networks --start
```

If bridged networking still doesn't work, you can change the configuration to use NAT (Network Address Translation) networking. Unlike bridged networking, which allows dEWDrop to receive its own address, separate from its host; NAT networking uses the host machine's network adapter, acting as a gateway to the network, and thus only has a private IP address. In order to switch to NAT networking, open up VMware Player and choose 'Edit virtual machine settings', and click 'Network Adapter', and toggle the radio button to 'NAT', instead of 'Bridged'.

Features