

# Using VirtualBox to run Web Developer Windows VMs

Microsoft have made available a number of pre-built virtual machines to enable web developers to test web sites on a number of different versions of Internet Explorer and the new Edge browser running on a range of Windows operating systems. VirtualBox images are provided for Linux, OS X and Windows.

These notes are illustrated using Ubuntu 14.04LTS but the process will be the same on most Linux systems.

The VMs are available as a free download from

<https://developer.microsoft.com/en-us/microsoft-edge/tools/vms/linux/>

No registration is required, but the VMs require activation and are time limited to 90 days use, after which you can delete the VM and install a fresh copy. Currently, VMs are available for a range of Microsoft browsers on Windows 7, Windows 8.1 and Windows 10.

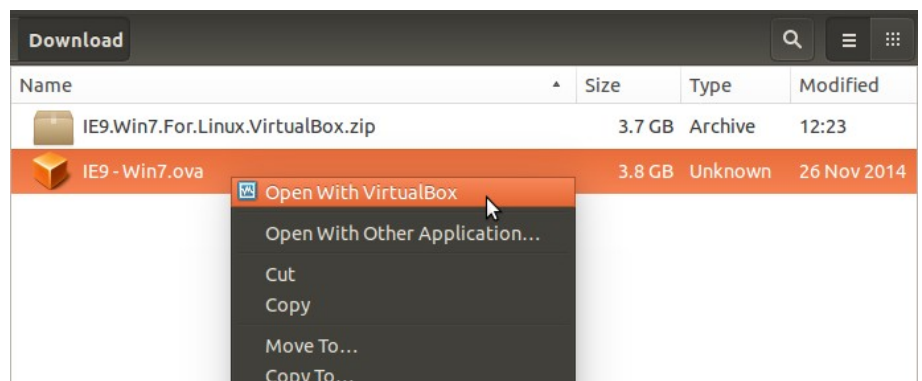
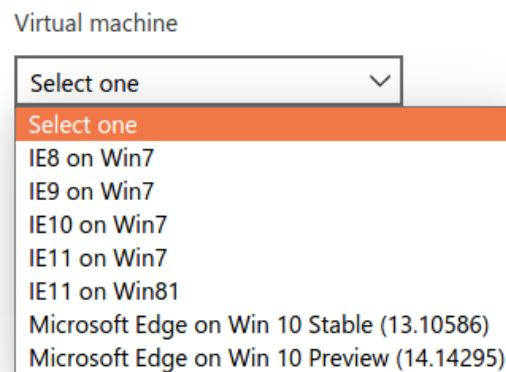
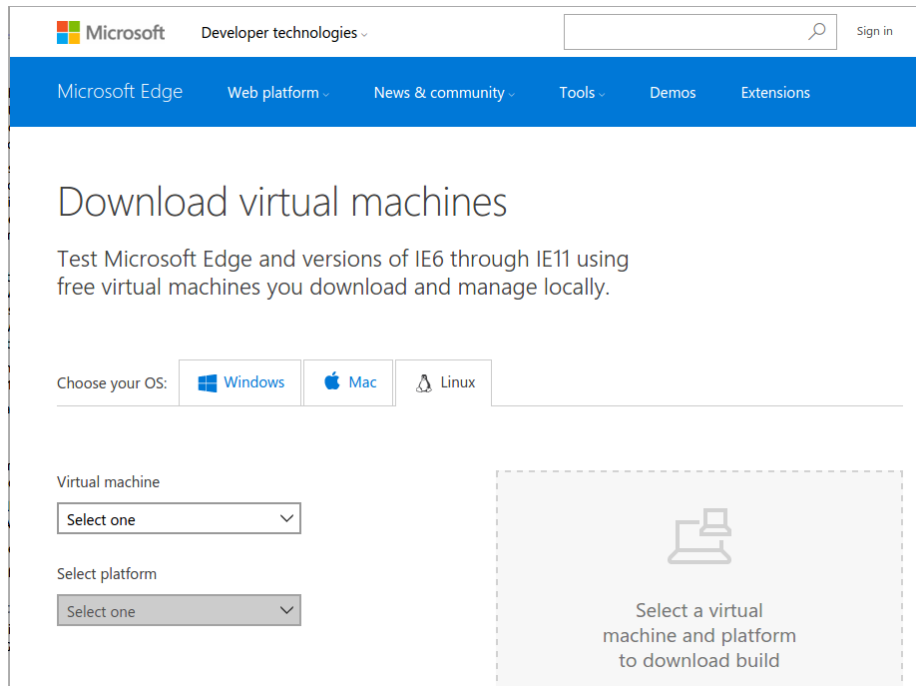
Download the required VM from the web site. It comes as a zip file containing a .ova file, which is an open standard for distributing a VM.

Once downloaded, unzip the downloaded file and save the .ova file in a suitable location. The .zip file is no longer required.

## Installing the Virtual Machine

If you don't yet have VirtualBox installed, check if version 5 of VirtualBox is available in your distribution's repository. If not, download the latest package for your distribution from the official VirtualBox web site - [https://www.virtualbox.org/wiki/Linux\\_Downloads](https://www.virtualbox.org/wiki/Linux_Downloads)

With VirtualBox installed, you should be able to open the .ova virtual machine file with VirtualBox.



VirtualBox will show its appliance import dialog. Check the settings before clicking on the **Import** button.

Once the VM has been imported, you no longer need the .ova file. However it is a good idea to keep a copy for re-installation at a later date.

After the import process has finished, the new VM will appear in your list of installed VMs. You may want to tweak some of the settings.

Microsoft recommend giving the VM at least 1GB System memory for Windows 7 or later and 2GB or more would be better if your host system has plenty of memory.

You may also want to increase the Video memory to at least 64MB

## Windows Activation

After first starting the new VM, Windows will start as normal and (depending on version) may prompt you for network settings which you should complete as required.

The newly installed Windows VM requires activation, which may happen automatically. Check the instructions on the desktop background to activate the VM manually if needed.

You now have a full version of Windows running as a VM.

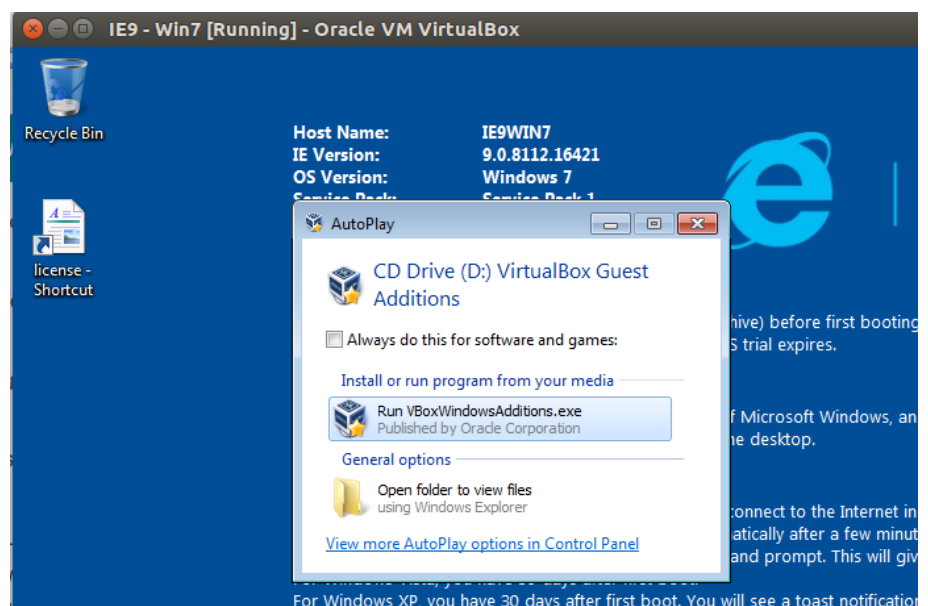
## Install Guest Additions

It is also a good idea to install the VirtualBox Guest Additions for the VM.

On the VM **Devices** menu, choose '**Insert Guest Additions CD..**' and once Windows has detected the virtual CD, run the installer.

Restart the VM once the installer has completed.

Guest Additions provides better video support (resizeable window), mouse and clipboard integration, shared folders with the host and generally better performance.



## Windows Configuration

After initial installation remember that you are running Windows and therefore some anti-virus software is a sensible first step.

The default user of the VM is an Administrator with the username IEUser and password Passw0rd!

You may want to create your own account (with Administrator privilege). To prevent the IEUser automatically being logged in on startup, run the `netplwiz` program and tick "Users must enter a username and password to use this computer".

You can configure the desktop etc to your liking, but to prevent the desktop reverting to the trial information display you can:

### Windows 7

Run the program `gpedit.msc` and remove the Logon script from User Configuration -> Windows Settings -> Scripts (Login/Logoff).

### Windows 8,10

In Task Manager, disable BGInfo on the Startup tab.

## Windows Updates

The Windows VMs will install updates in the same manner as a conventional installation.

## Installing Windows Applications

You can install other applications to help set up an effective test environment. I'd typically install something like WinSCP, a programmer's editor and Firefox and Chrome browsers.

## Additional VirtualBox settings

As long as you install the VirtualBox Guest Additions to the Windows VM some other nice features become available. In particular, you can enable a Shared Clipboard and Drag'n'Drop between the guest OS and your native OS.

The shared clipboard works very well. It's very convenient to be able to copy and paste text between applications running under Windows on the VM and applications running under your native system.

Drag'n'Drop also works surprisingly well. It works for images, text, files and most things that would work in a pure native setup.

With Guest Additions installed on the VM you can also set up shared folders.

