

Windows on Macs

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Emulators (Slooooooooooooooooooooo! 10%-40% of native speed)

SoftPC, 1986, Out of business

Virtual PC

Connectix, 1997, Microsoft 2003—PowerPC chip only!

Need to purchase Windows separately

Still available from MacMall for \$88.93

Apple Boot Camp (Intel Macs only)

Buy Windows separately

Only one OS can run at a time. Make decision at startup

WINE Project: Wine Is Not an Emulator (\$39.95, free 30-day trial)

Crossover Mac

<http://www.codeweavers.com/products/>

Does not require a separate purchase of Windows. Has two “bottles”: W98 and W2000

Nearly native speed claimed

In my experience, not many programs can run in Crossover, despite claims

Microsoft’s “Genuine Windows Advantage” traps Wine and won’t allow updates

Virtualization (Intel Macs only) (Nearly native speed)

Intel’s chips facilitate hardware virtualization

At least 2 GB RAM is needed to run Mac OS and a “Guest OS”

A virtual machine (VM) appears as just another Mac program, even though it’s more than that.

A Hypervisor or Virtual Machine Monitor makes this possible

Need to buy Windows or other guest OSes separately

VMs for free OSes like most flavors of Linux can be downloaded from VMware or Parallels

Sun Microsystems VirtualBox (Free!)

<http://www.virtualbox.org/>

Macworld review: http://www.macworld.com/article/137594/2008/12/sun_virtualbox.html

3.0 mice, limited graphics support, only one core/CPU utilized

VMware Fusion (MacMall: \$69.95, \$19.95 after mail-in rebate when purchased with a new Mac)

<http://www.vmware.com/products/fusion/>

Basic philosophy is to isolate the VM from the host OS

Recognizes two cores/CPU at the most

Macworld review:

http://www.macworld.com/article/137374/2008/12/vmwarefusion201.html?lsrc=rss_main

Conclusion: 4.5 mice; many improvements, expensive support

Parallels Desktop for Mac (MacMall: \$79.99, free after mail-in rebate when purchased with a new Mac)

<http://www.parallels.com/>

Basic philosophy is to integrate the VM with the host OS

Can recognize as many cores/CPU as you have

Macworld review: <http://www.macworld.com/article/137524/2008/12/parallels43540.html>

Conclusion: 3.5 mice; but latest revision may overcome some of their reported problems

Conclusions

Try Crossover first. If it’ll run what you need, great. However, that’s unlikely.

Since the other options require an installable copy of Windows, the next decision is whether you are willing to run only one OS at a time and reboot when switching.

If you don’t have heavy graphics needs and only need one core, look at Sun’s VirtualBox.

VMware and Fusion both offer time-limited demo versions. Try each and see which fits your needs better.

Comparison on Wikipedia:

http://en.wikipedia.org/wiki/Comparison_of_VMware_Fusion_and_Parallels_Desktop

Other Links

- ◆ General & Technical Concepts
 - Hardware-assisted Virtualization: http://en.wikipedia.org/wiki/Hardware-assisted_virtualization
 - Hypervisor: <http://en.wikipedia.org/wiki/Hypervisor>
 - Virtualization: <http://en.wikipedia.org/wiki/Virtualization>
 - Virtualization Timeline: http://en.wikipedia.org/wiki/Timeline_of_virtualization_development
 - Intel Virtualization Technology: <http://www.intel.com/technology/virtualization/>
- ◆ Virtual PC
 - Wikipedia: http://en.wikipedia.org/wiki/Microsoft_Virtual_PC
- ◆ Wine Project (Crossover)
 - About Wine on Wikipedia: [http://en.wikipedia.org/wiki/Wine_\(software\)](http://en.wikipedia.org/wiki/Wine_(software))
 - Wine Headquarters: <http://www.winehq.org/>
 - Comparison on Codeweavers Site: <http://www.codeweavers.com/products/differences/>
- ◆ Macworld Review of both Fusion and Parallels 2008-05-19
 - <http://www.macworld.com/article/133513/2008/05/bothworlds.html>
 - Covers then-current versions: Parallels 3 & Fusion 1
 - Has good section on choosing which version of Windows to choose
- ◆ Other Parallels Reviews & Links
 - MacNN: <http://www.macnn.com/articles/09/01/08/parallels.raises.the.bar/>
 - Macworld 2008-11-11: <http://www.macworld.com/article/136717/parallels.html>
 - Macworld 2008-12-17: <http://www.macworld.com/article/137524/2008/12/parallels43540.html>
 - Wikipedia: http://en.wikipedia.org/wiki/Parallels_Desktop_for_Mac
 - Home Page: <http://www.parallels.com/products/desktop/>
 - Comparison Featuring Parallels: http://www.parallels.com/parallels_fusion20/features/
- ◆ Other VMware Fusion Reviews & Links
 - Macworld VMware Fusion 2 08-09-16: <http://www.macworld.com/article/135559/2008/09/fusion.html>
 - Wikipedia: http://en.wikipedia.org/wiki/VMware_Fusion