



Best Practices for installing ArcGIS Desktop on a Mac (Apple)

Background:

With a growing number of schools moving to Macs, there is a need to be able to support schools who still want to use ArcGIS software. Officially Esri does not support ArcGIS software installed on a Mac. However, once a non-virtualized or virtualized environment is set up, we can support it. Based on testing we know that the following setup / configuration can work for schools that wish to follow it.

ArcGIS System Requirements:

Before getting started, it is strongly recommended that you refer to the **ArcGIS 10 System Requirements** - <http://resources.arcgis.com/content/arcgisdesktop/10.0/arcgis-desktop-system-requirements>

Requirements:

- Licensed copy of Windows OS (e.g., XP or 7)
- Licensed copy of ArcGIS software (e.g., Desktop, Server, etc.)

Installing ArcGIS within a non-virtual environment:

Users who are interested in installing ArcGIS in a non-virtualized environment on a Mac, should consider *Boot Camp* - <http://www.apple.com/support/bootcamp/> (included with Mac OS X 10.6 and newer). This is a viable option where ArcGIS can capitalize on the full hardware capacity of the Mac and the user can experience optimum performance of ArcGIS products.

Installing ArcGIS within a virtual environment:

Below is a recommended configuration for setting up a virtualized environment like that available though Parallels - <http://www.parallels.com/ca/products/desktop/> or *VMware Fusion* - <http://www.vmware.com/products/fusion/overview.html> products.

Hardware example based on MacBook Pro 13***

- 4 Gig RAM
- 320+ Hard Drives @ 5400 RPM
- OS X 10.6 (32 Bit)

** Virtual performance will always work better with more resources allocated to it. Newer Macs may have more CPUs (e.g., quad-core), more RAM and hard drive space. If using the Windows side only for GIS and Mac side for everything else, set the PC with max possible RAM, but only run it when needed.

Recommended configuration for a virtual environment:

- Set **virtual memory** to 2 GB or higher depending on hardware configuration
- Set the number of **CPUs** to 2
- For the **Battery life**, set **Power Consumption** to “**Better Performance**”
- Disable sharing of applications
 - Uncheck “**Share MAC OSX apps with Windows**”
 - Uncheck “**Share Windows apps with MAC OSX**”
- Uncheck “**Shared Profiles**”
- Disable “**Windows Themes**”
 - Set to **Windows Classic**
- Set **Windows Update** to “**Download, but let me choose when to install the updates**”
- Virus protection software should be installed, but monitored as newer versions of Windows OS will have built in security (e.g., Windows Defender)
- Web browsing should be done from the Mac side only – disable Internet Explorer in the firewall
- Disable sharing with pictures, music, movies, downloads



For a comparison of Parallels and VMware Fusion in terms of speed, refer to the following articles:

“Head-to-Head: Parallels Desktop for Mac vs. VMware Fusion” from MacTech

<http://www.mactech.com/articles/mactech/Vol.25/25.04/VMBenchmarks/index-001.html>

“VMWare Fusion 2 vs. Parallels Desktop 4: Let’s Dance” from the Apple Blog

<http://theappleblog.com/2008/11/11/vmware-fusion-2-vs-parallels-desktop-4-lets-dance/>

References:

- Esri Education Community - Apple Macintosh and iOS Support: Esri GIS Options -
<http://edcommunity.esri.com/software/mac/>
- University of Illinois (Chicago) - Urban Data Visualization Lab -
<http://www.uic.edu/cuppa/udv/GIS/ArcGISonMac200911.pdf>