ImageNow on a Macintosh

Here's what you need:

1. Any Intel-based Macintosh: MacBook, MacBook Pro, Mac mini, iMac or Mac Pro. (Older iMacs and Mac minis use PowerPC processors. If you're uncertain about a Mac's processor, click the blue apple in the menu bar and select "About This Mac". The processor type and speed is specified near the middle of the information window.)

2. Parallels Desktop software (http://www.parallels.com/) or VMWare Fusion software (http://www.vmware.com/products/fusion/). Other virtualization products may work, including the free VirtualBox (http://www.virtualbox.org/), and programs that claim to run Windows applications without an installed Windows OS, but we can't vouch for those.

3. A licensed copy of Windows 2000, Windows XP or Windows Vista.

4. Other Windows software, probably including Microsoft Office or another office suite, and an email client (Outlook, Thunderbird, etc).

The Macintosh will need enough free disk space to accommodate storage for a virtual Windows computer. Unless major file storage on the Windows system is required, 10 GB should suffice. Under Parallels, this can take the form of a virtual hard drive, or a partition for Boot Camp, Apple's dualboot proprietary solution. The Mac also will need enough memory to run its own processes while dedicating a significant amount of RAM to the virtual Windows system. We suggest that any Mac running a virtual Windows system be equipped with at least 2 GB of RAM, and 4 GB is preferred.

Parallels and Fusion vary in their installation and setup procedures, but in general you will install the virtualization program, set its basic parameters and then install a copy of Windows on the virtual machine. See each program's documentation for details.

We strongly recommend that before starting the virtual machine, you interpose a router or other properly configured firewall device between your Mac and the world at large. The new virtual Windows computer is vulnerable to viruses, worms, spyware and other forms of computer mischief, and the uninfected life of an unshielded Windows system can be measured in minutes or seconds. Be sure your Windows VM is fully protected before bringing it directly onto a production network.

(**Networking note**: A bridged Ethernet setting in Parallels or VMWare will cause your computer to occupy two IP addresses for each enabled adapter: one for the Mac, one for the Windows system. Most Macs have both wired and wireless connectivity, so each computer with a VM potentially could occupy four addresses on your network. Consider your networking needs and options when setting up virtual machines.)

After installing Windows, you'll need to install the assortment of updates and patches and service packs to bring it to the current revision level, and antivirus and other protective software of your choice. Then install your Windows programs (including ImageNow) in the conventional manner, using installers from CDs or DVDs, or from mapped network drives.

Parallels and VMWare may suggest that you install additional tools, included with the program, that can tweak some settings on the VM for improved compatibility or better performance.

When one virtual machine has been installed and configured, it can be cloned, and the clone transferred to another computer where your virtualization software is installed. This bypasses the tedious business of setting up Windows behind a firewall, and allows each new machine a new virtual Ethernet address for network connectivity. Be aware that some machine-specific settings (such as computer name) may need to be changed manually on the new VM.

> revised July 2009 John Norris, Trinity College, Duke University