#### **Installing and Configuring**

## What is Virtual PC for Mac?

Virtual PC (VPC) is emulation software that simulates an actual (though virtual) Windows computer running directly on a Mac while utilizing the actual hardware available and inherent in the native Mac machine. The Virtual PC runs like any regular Windows based computer once any recommended operating system (2000, XP) is installed. The most current version of Virtual PC recommended by *Artsystems* is Virtual PC 7.0.

**Note:** VPC can be purchased with or without a Windows operating system pre-installed. Once an operating system is installed and present on the VPC, any Windows application may be installed for use, including GalleryPro. Any windows application that is not normally shipped with the Operating System must be installed separately - including any Windows Microsoft Office productivity pack (Outlook, Excel, etc.)

Due to the high level of interoperability that exists between the Virtual PC and the Mac, please check to be sure the Mac machine meets the following suggested system requirements prior to installing the Virtual PC.

### System Requirements for Virtual PC for Mac Version 7

To use Microsoft Virtual PC for Mac Version 7, please meet the following:

System Requirements

- Hardware: A 700 MHz native\* PowerPC G3, G4 or G5 processor
- Operating system: Apple Mac OS X version 10.2.8 or later; Mac OS X version 10.3 is required for the Power Mac G5
- Free Hard Disk Space: 3 GB
- RAM: 512 MB
- Display: 1024 x 768 resolution monitor displaying thousands of colors
- Storage: CD-ROM drive (or connection to a local area network if installing a network)
- Peripherals: Mouse or compatible pointing device

For more detailed system requirements by machine and version, please consult <u>http://www.microsoft.com/mac/howtobuy.aspx?pid=sysreq - vpc7</u>.

## **Installing and Configuring Virtual PC 7.0**

Please refer to the Getting Started guide shipped with the particular version of Virtual PC purchased. Install according to manufacturer's directions. Once the Virtual PC is running on the Macintosh with a Windows Operating System installed, a virtual machine should be setup and configured.

**Note:** Administrative privileges may be needed at both the network and machine level when installing Virtual PC and configuring settings. Please contact the network or system administrator for details.

Some general suggested guidelines follow:

- Ensure that each virtual machine has a unique name and make it descriptive in order to identify it at a later stage i.e. Virtual Windows 2000.
- Ensure there are enough memory resources for both the host operating system (Mac) and guest operating system (Windows) to run. **Note:** Any additional virtual machine within the Virtual PC application further drains system resources.
- For best results with the Virtual PC, select the default <u>network settings</u>, unless your network technician has significant knowledge and reason for changing.
- Install the Operating system within the Virtual PC on a FAT32 (recommended) not NTFS drive, if not included in the Virtual PC purchase package. **Note:** This is generally an installation option when preparing to install Windows OS from a bootable disc.
- Remember to share your data between virtual machines and network or host through shared folders
- Each virtual machine needs any necessary patches and security updates any normal operating system would require. Operating system and application program licensing should be checked with any respective vendor agreements.
- Accessing shared folders on other machines or on the host can be achieved by mapping a folder to a drive from the virtual machine to the shared folder on the host machine. This is an efficient way to transfer files from guest system to host system or from guest to guest as well as enable drag and drop functionality.
- Update the Virtual machine as necessary by checking for Updates under Help in the Menu bar.

## **Creating a New Virtual Machine**

1. After installing the Virtual PC you will need to run the new virtual PC wizard. This will allow you to create a virtual drive or machine.



2. Assign each virtual machine a unique name that is descriptive and easy to understand. When you have chosen a name click next.

|  | Virtual Machine Wizard           Virtual Machine Name and Location           The name you specify will appear in the list of virtual machines in the Virtual PC Console.  |
|--|---|
| Enter a<br>unique name<br>for the<br>Virtual<br>Machine. | Type the name for the virtual machine file. Choose a name that will help you identify this virtual machine's hardware or software configuration or which operating system it will run. The file is automatically saved to the My Virtual Machines folder. To save it to a different location, use the Browse button. Name and location: DEMO Browse |
|  | < <u>B</u> ack Next > Cancel  |

3. Once you have selected the respective operating system click next.

| Operating System  | E   |
|---|---|
| Select the operating system you p   | lan to install on this virtual machine.   |
| Selecting an operating system here<br>settings for this virtual machine. If<br>select an operating system that re<br>Other.<br>Operating system:              | e allows the wizard to recommend appropriate<br>the desired guest operating system is not listed,<br>equires an equivalent amount of memory or select |
| out.  | 2000  |
| Other   | <b>_</b>  |
| Uther<br>Windows Millennium Edition<br>Windows NT Workstation<br>Windows 2000<br>Windows XP<br>OS/2   |   |
| Vindows Millennium Edition<br>Windows NT Workstation<br>Windows 2000<br>Windows XP<br>OS/2<br>Windows NT Server<br>Windows 2000 Server<br>Windows Server 2003 |   |

4. When this screen is presented specify how much RAM guest (VPC) operating system will use. Double the RAM from the recommendation displayed if resources allow otherwise select the default.

|  | New Virtual Machine Wizard Memory You can configure the RAM on this virtual machine.  |
|--|---|
| If possible<br>double the<br>recommended<br>RAM or select<br>the default,<br>click Next. | To improve the performance of this virtual machine and run more applications on its operating system, increase the amount of RAM allocated to it. To leave more RAM for other virtual machines on your system, use the recommended RAM allocation.<br>Recommended RAM: [128 MB]<br>Allocate RAM for this virtual machine by:<br>① <u>Using the recommended RAM</u><br>⑦ <u>A</u> djusting the RAM |
|  | < <u>B</u> ack Next> Cancel   |

5. This screen is simple yet important when assigning the virtual disk a name and location. It is important to turn on undo disks as this option saves you from reinstalling if you make an uncalculated mistake or change that compromises the virtual disk. When selections are complete, click Next.

|  | New Virtual Machine Wizard   |  |  |
|--|--|--|--|
|  | Virtual Hard Disk Location<br>You can select the virtual hard disk you want to use with this virtual machine.  |  |  |
|  | Virtual hard disk location:<br>demo Browse   |  |  |
| Enable undo disks.<br><b>Note:</b> This option<br>requires additional<br>physical disk drive<br>space. | Enable undo disks Undo disks store the changes made while a virtual machine is used. At the end of a session, before the virtual machine closes, you can choose to commit changes to the virtual hard disks, save the changes until the next session, or delete the changes. Enabling this option requires additional free space on the physical hard disk where the virtual machine configuration is located. |  |  |
|  | < <u>B</u> ack Next> Cancel  |  |  |

6. The next screen is simply a follow up screen that defines the name and location of the Virtual Disk. Click Next.

| Virtual Ha                     | rd Disk Location  |
|--------------------------------|---|
| This wiz                       | ard creates a dynamically expanding virtual hard disk with a default size.  |
| Type a<br>virtual f<br>machine | name for the new virtual hard disk. Unless you specify a different location, the<br>hard disk file will automatically be saved in the same location as the virtual<br>e configuration file. |
| Name a                         | nd location:  |
| kyM\M                          | y Documents\My Virtual Machines\DEMO\DEMO Hard Disk.vhdBrowse   |
| To learr<br>advanc             | n more about the different types of virtual hard disks, see Virtual PC Help. For<br>ed virtual hard disk options, use the Virtual Disk Wizard.  |
|                                |   |

7. This screen will summarize your settings click finish to create your virtual machine.



- 8. Once you click finish, the virtual machine is created and configured. Now a guest operating system will need to be installed on the virtual machine once it is started, unless the virtual machine shipped with an OS pre-installed. Treat the machine as a normal computer. You will be able to boot from CD to install the operating system within the virtual machine. Open the Virtual PC Console to begin.
- 9. This is the virtual PC console. It is very simple and has four options:
- The New button facilitates the creation of new virtual PCs. Once you have created new virtual PCs they are displayed on the left panel. From the file option you are able to initiate the disk wizard.
- The settings option, when clicked, reflects the settings of the selected virtual machine. These are fully applied to the machine once the virtual machine is restarted
- The remove button removes virtual PCs that have been created.
- The start button initiates the virtual machine.
- Note: By using the action menu, a virtual machine may be paused or resumed. This option is useful to quickly suspend an operating system so that you can shutdown the host operating system and resume the virtual PC when the host is restarted.

| 🗣 Virtual PC Console     | X              |
|--------------------------|----------------|
| <u>File Action H</u> elp |                |
| DEMO                     | <u>N</u> ew    |
| Saved                    | Settings       |
|                          | <u>R</u> emove |
|                          | Start          |
|                          |                |
|                          |                |

## Virtual PC Settings

Each Virtual machine has settings that can be adjusted for performance gains, keyboard preferences, file sharing and network options, etc. Additionally, the system preferences on both the host (Mac) and guest (Windows PC) can have a significant effect on user settings like display, and may need to be adjusted over time to find the best configuration for the system.

Below are some best practice recommendations found through Artsystems testing as well as the experience and advice of other Virtual PC users.

### Some Recommended Settings within the Virtual Machine

**Application Preferences Settings:** 

#### Monitor Settings:

Lower monitor resolution on the Mac allows for less screen re-draw time within the Virtual PC.

Full Screen Mode – Running the Virtual PC in full screen mode hides the Virtual PC menus and toolbars. To return to normal screen mode from full screen mode, press the COMMAND (#) key.

#### Keyboard Settings:

The Virtual PC uses Windows keyboard commands. Due to keyboard differences between Mac and Windows, it is useful to adjust keyboard settings to compensate for these variations.

#### Delete key -

The Delete key on a Windows keyboard is different from the 'Del' key on a Mac, which is actually a backspace key. Within VPC go to the menu bar select PC>PC Settings>keyboard settings Assign the forward delete key (Ctrl+Delete) or any other convenient keystroke combo.

**Note:** Some Mac keyboards and Power Books must assign keystrokes for use of the Delete key functionality when deleting line items in GalleryPro.

To get "ctrl-alt-del" functionality on a laptop or keyboard without a forward-delete key, use the combo: "shift-ctrl-alt-backspace"

#### Network Settings:

A *Shared Network* setting is best when the host (Mac) computer is not connected to a router. In the Shared Network mode, the Virtual PC will share the IP address and configurations of the host computer.

A *Virtual Switch* setting works well when the host computer is connected to a router. The virtual switch enables the router to assign a unique IP address to the virtual machine, thus making the virtual machine a separate entity computer on the network.

### Shared Folders:

To reduce resource overhead within the virtual machine, create shared drives or folders on the Mac or network and give access to these folders to the virtual machine.

**Note:** This is especially helpful when working with resource intensive graphic programs like *Adobe Photoshop*. Simply create images on the Mac and share the image folder with the virtual machine. GalleryPro needs only to know the path to the images (i.e – Mac \user\name\galpro image folder.

Additionally, it is good practice to copy and connect to the GalleryPro database within a shared folder on the Mac or network. This protects the database should any non-recovery failure (crash) occur within the virtual machine itself.

## Using Outlook with Entourage

*Microsoft Outlook* must be installed within the virtual machine in order to take advantage of the e-mail capabilities built in to GalleryPro. This may pose some conflict with the traditional e-mail program used on the Mac when the same e-mail account is used for both programs.

Some consideration should be given to configuring both Outlook and Entourage to leave copies of downloaded e-mails on the mail server. All e-mail should be downloaded into the program preferred for daily use prior to deleting from the mail server. Check with a network technician to determine the most appropriate manner for accomplishing server mail deletions.

## **Microsoft Virtual PC Help and Support**

http://support.microsoft.com/vpcmac7/

# If further assistance is needed, please contact Artsystems Support. 212-620-5500 x 2

mailto:Support@artsystems.com