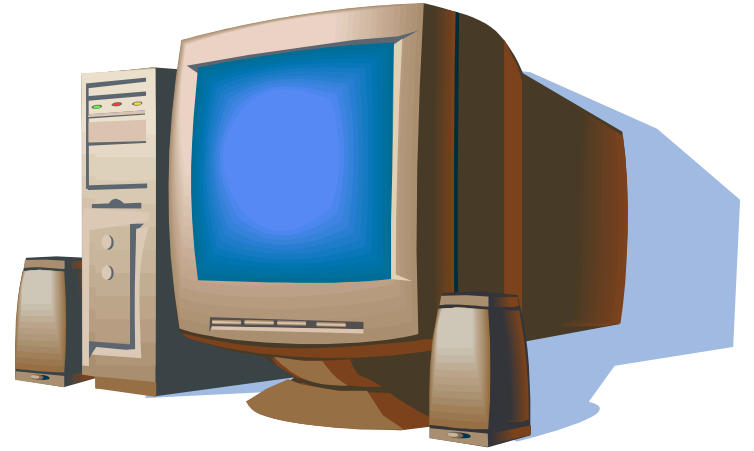


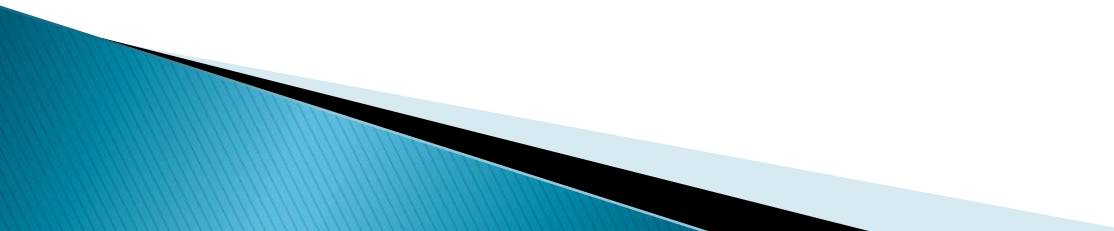
Virtual PC



By Kathy Walker

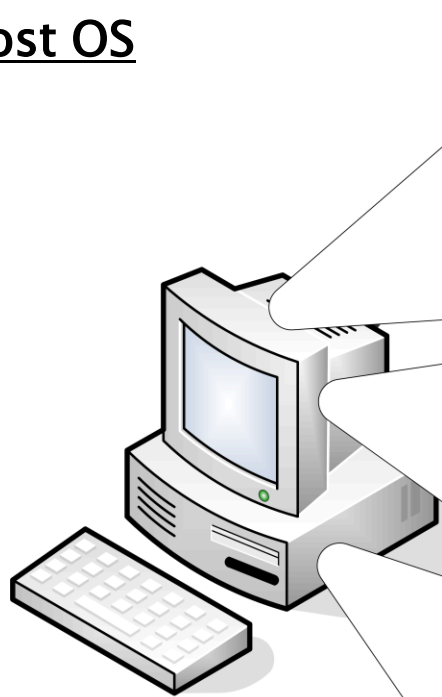
**Presented at the ChPCUG
meeting February 11, 2009**

Terminology for Virtual PC

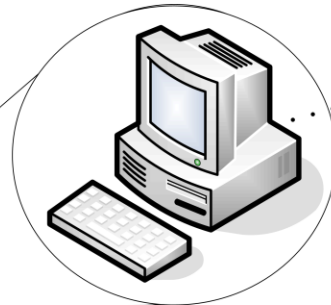
- ▶ Host Operating System is the OS running on the physical computer
 - ▶ Guest Operating System is each of the operating systems which run through Virtual PC.
- 

Why Use Virtual PC?

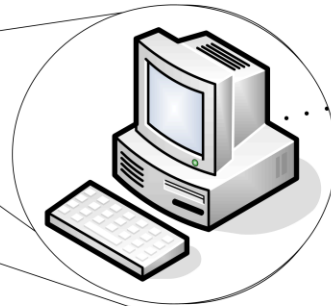
Host OS



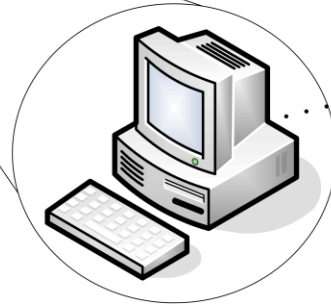
**Physical Computer
Running
Virtual PC 2007 and
64-bit Windows Vista
Host Operating System**



**Virtual Machine Running
Windows 98 SE
Guest Operating System**



**Virtual Machine Running
MS-DOS
Guest Operating System**



**Virtual Machine Running
Windows 2000 Professional
Guest Operating System**

Guest OS

VIRTUAL MACHINE TYPES

By Microsoft

- ▶ Virtual PC 2007 SP1* and Virtual PC 2004
- ▶ Virtual Server 2005 R2 SP1*
- ▶ Hyper V for Windows Server 2008*

To Download both 32- and 64-bit versions of Virtual computer 2007 sp1 go to:

<http://www.microsoft.com/downloads/details.aspx?FamilyId=28C97D22-6EB8-4A09-A7F7-F6C7A1F000B5&displaylang=en>

* Does allow 64-bit OS as guest as well as host

VIRTUAL MACHINE TYPES

By Others

- ▶ VMWare Workstation
 - supports 64-bit guests and hosts
- ▶ Sun's Virtual Box
 - Free for non-commercial use. Supports 32- and 64-bit hosts
 - Does not support 64-bit guests
- ▶ Parallels Workstation
 - Less than ideal
- ▶ Xen
- ▶ Others

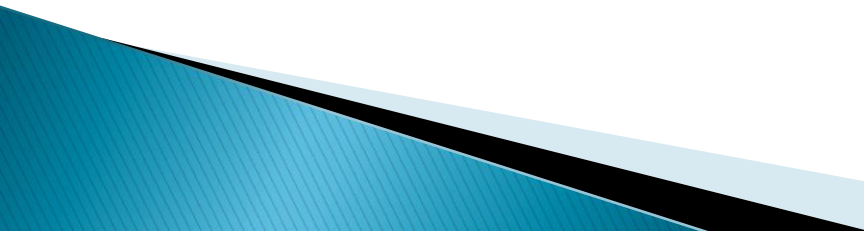
PC's Requirements to Install Virtual Computer

1. 400 MHz Pentium-compatible processor (1.0 GHz or faster recommended)
2. Requires approximately 35 MB of disk space
3. Hosts can be:

Windows Vista Business
Windows Vista Enterprise
Windows Vista Ultimate
Windows XP Professional

Windows XP Tablet PC Edition
Windows Vista SP1 (Enterprise,
Business, Ultimate)
Windows XP SP3

More Requirements to Install Virtual Computer

- ▶ An x86-based (32-bit) or an x64-based computer with a 400 MHz or faster (1 GHz recommended) processor with L2 cache. Virtual PC supports the use of AMD, Athlon/Duron, Intel Celeron, Intel Pentium II, Intel Pentium III, Intel Pentium 4, Intel Core Duo, and Intel Core2 Duo processors. You can run Virtual PC on a multi-processor computer, but it utilizes one processor only.
 - ▶ CD-ROM or DVD drive
 - ▶ Super VGA (800 x 600) or higher resolution monitor recommended
 - ▶ Keyboard and Microsoft mouse or compatible pointing device
- 

Requirements for Virtual PC

Guest Operating System	Minimum Memory*	Minimum Hard-Disk Space
Windows 98 Windows 98 SE	64 MB	500 MB
Windows Millennium Edition (Windows Me)	96 MB	2 GB
Windows 2000 Professional	96 MB	2 GB
Windows XP Home Edition	128 MB	2 GB
Windows XP Professional	128 MB	2 GB
Windows Vista Enterprise	512 MB	2 GB
Windows Vista Business	512 MB	2 GB
Windows Vista Ultimate	512 MB	2 GB

Examples:

Users will run Windows 98 and Windows 2000 as guest operating systems concurrently on Windows Vista Business. The minimum memory requirement is then:

$$512 \text{ MB} + 64 \text{ MB} + 96 \text{ MB} = 672 \text{ MB.}$$

Users will run Windows XP as a guest operating system on Windows Vista Ultimate. The minimum requirements is then:

$$512 \text{ MB} + 256 \text{ MB} = 768 \text{ MB.}$$

*At our February 11, 2009 meeting Mike said that he usually calculates a much larger amount of Ram for each host's OS. For host XP Pro, he used 768 MB of Ram.

Ubuntu with Virtual PC

- ▶ “After installing Hardy Haron in Virtual PC 2007, the computer became slow, audio was terrible, Firefox beta was prone too freezing and crashing for no apparent reason.”
- ▶ The author had to install VMWare Player 2.5 and a virtual appliance and down grade to Firefox 2.
- ▶ Needs 512 MB of Ram for Hardy Haron guest

Virtual PC Scenarios

Application Compatibility. Lets you run your older applications while continuing your migrating to Windows Vista.

Development and Testing. Can be done in a safe environment.

Technical support. Permits your technical support staff to support multiple operating systems on a single computer without rebooting the computer or buying additional computers.

Quality assurance. Helps you test and document software running on multiple operating systems on one computer.

Training. Allows you to train people on any x86 operating system without purchasing additional computers.

Resources

- ▶ Microsoft Virtual Computer Home Page at <http://www.microsoft.com/windows/downloads/virtualpc/default.aspx>
- ▶ “What Virtualization Tools are Available for Testing”, blogs.techrepublic.com, Scott Lowe, May 26, 2008
- ▶ Using Microsoft® Virtual PC 2007 for Application Compatibility White Paper, August 2006
- ▶ For the latest information see <http://www.microsoft.com/windows/virtualpc/default.aspx>