

VIRTUAL MACHINES-- AN OVERVIEW

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An International
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**Web location for this
presentation:**

<http://aztcs.apcug.org>

Click on “**Meeting
Notes**”

SUMMARY

You can use free virtual machine programs to run separate operating systems in your existing computer. By doing so, you can realize massive savings in time, space, and costs.

TOPICS

- Two Types of "Virtual Machine Programs" (= "Hypervisors")
- 3 "Hypervisor" options: "VMware Player", "VirtualBox", and "Hyper-V"

TYPE 1 VERSUS TYPE 2 "HYPERVISORS"

- "Virtual machine program"
= "Hypervisor"
= software program that can create virtual machines
- "Virtual machines" have virtual motherboards, virtual USB ports, virtual sound cards, virtual hard drive controllers, virtual mice, virtual keyboards, etc.

**Real computer (= "host computer")
runs 64-bit version of "Windows.."**

**"Type 2" Hypervisor such as
"VMware Workstation Player" or
"VirtualBox" runs inside
"Windows.."**

**"Virtual Machine(s)" running
Linux, Windows.., Unix, etc.**

**Real computer (= host computer)
runs "Type 1" Hypervisor
such as "Hyper-V"**

**"Windows 10"
or "Windows 8"
runs inside
"Hyper-V"
as a "Root
Partition"**

**"Virtual
Machine(s)"
inside
"Hyper-V"
running Linux,
Windows...,
Unix, etc.**

IMPLEMENTING "VIRTUAL MACHINES"

**Real computer (= "host computer") runs
64-bit version of "Windows 10",
or "Windows 11"**

**BIG STEP 100: INSTALL A
"VIRTUAL MACHINE
PROGRAM"**

**Real computer (= "host computer")
runs 64-bit version of "Windows.."**

**Install the free "VMware
Workstation Player" program
= "virtual machine program"**

The actual steps for "BIG STEP 100" are located at:

http://aztcs.apcug.org/meeting_notes/winhardsig/virtualmachines/vmware-1-installing.pdf

**BIG STEP 200: CREATE A
NEW "VIRTUAL MACHINE"
USING THE "VIRTUAL
MACHINE" PROGRAM**

**Real computer (= "host computer")
runs 64-bit version of "Windows.."**

**"VMware Player" (6.x or 7.x)
= "virtual machine program"**

Create a new "virtual machine"

The actual steps for “Big Step 200” are located at:

http://aztcs.apcug.org/meeting_notes/winhardsig/virtualmachines/vmware-2-createVM.pdf

**BIG STEP 300: INSTALL A
"GUEST OPERATING SYSTEM"
INTO THE
"VIRTUAL MACHINE"**

**Real computer (= "host computer")
runs 64-bit version of "Windows.."**

**"VMware Player" (6.x or 7.x)
= "virtual machine program"**

**Install "Windows 10 Pro
Technical Preview"
as a
"guest operating system"
inside the "virtual machine"**

The actual steps for “Big Step 300” are located at:

**[http://aztcs.apcug.org/meeting
notes/winhardsig/virtualmachin
es/vmware-3B-install-
Win10ProTechPrev.pdf](http://aztcs.apcug.org/meeting-notes/winhardsig/virtualmachines/vmware-3B-install-Win10ProTechPrev.pdf)**

**BIG STEP 400: INSTALL THE
VIRTUAL MACHINE PROGRAM'S
DRIVERS INTO THE
"VIRTUAL MACHINE"**

**= INSTALL
"VMWARE TOOLS"
INTO THE
"GUEST OPERATING SYSTEM"**

**Real computer (= "host computer")
runs 64-bit version of "Windows.."**

**"VMware Player" (6.x or 7.x)
= "virtual machine program"**

**"Virtual machine" runs
"Windows 10 Pro Technical
Preview"
as a "guest operating system"**

Install "VMware Tools"

BIG STEP 400:

- 1. Start the Virtual Machine Program**
- 2. Start the Virtual Machine**
- 3. Click on "Player"**
- 4. Click on "Manage"**
- 5. Click on "Install VMware Tools..."
etc.**