

INSTALL AND RUN "VIRTUAL MACHINES" INSIDE YOUR REAL PHYSICAL "WINDOWS.." COMPUTER

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SUMMARY

You can install "virtual machines" inside your existing Windows.. computer. Then you can install and run "guest operating systems" inside these "virtual machines" to try out computer operating systems that are different from the one that is running in your existing Windows.., Linux.., or MacOS.. computer.

TOPICS

- Type 1 versus Type 2 Hypervisors
- Three Hypervisor Options for a "Windows.." Computer

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" running one of
the following operating "guest
operating systems": Linux,
Windows.., MS-DOS, 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" (= "Parent
Partition")**

**"Virtual Machine" running one
of the following "guest
operating systems" : Linux,
Windows..., MS-DOS, Unix, etc.**

THREE HYPERVISOR OPTIONS FOR A "WINDOWS.." COMPUTER

- "VMWare Workstation Player"
- "VirtualBox"
- "Hyper-V"

THREE HYPERVISOR OPTIONS FOR A "WINDOWS.." COMPUTER (continued)

- "VMWare Workstation Player" and "VirtualBox" are both free for "private in-home use". Neither is free for use in any business, company, government entity, or non-profit organization
- "Hyper-V" is bundled into "Windows 10 Pro", "Windows 10 Education", "Windows 10 Enterprise". 9

THREE HYPERVISOR OPTIONS FOR A "WINDOWS.." COMPUTER (continued)

- "VMWare Workstation Player" is owned by the "VMware" company
- "VirtualBox" is owned by the "Oracle" company
- "Hyper-V" is owned by the "Microsoft" company

THREE HYPERVISOR OPTIONS FOR A "WINDOWS.." COMPUTER (continued)

- "VMWare Workstation Player" and "VirtualBox" will run in any version of "Windows.."
- For "retail" copies of "Windows..": "Hyper-V" is bundled with the "Windows 8.1 Pro" and "Windows 10". It is not available in "Windows 10 (core)" or "Windows 10 Home".

THREE HYPERVISOR OPTIONS FOR A "WINDOWS.." COMPUTER (continued)

- "VMWare Workstation Player" has great USB 2/3 and audio support
- "VirtualBox" has unreliable USB 2/3 and audio support
- "Hyper-V" has no USB or audio support for Linux operating system but "Hyper-V" runs faster than the other two "VMware Workstation Player" and "VirtualBox"

**GENERIC IMPLEMENTATION
PROCEDURE FOR
RUNNING
"VIRTUAL MACHINES"**

**Real computer (= "host computer") runs
64-bit version of "Windows 7",
"Windows 8.1," or "Windows 10"**

**BIG STEP 100:
INSTALL A
"VIRTUAL MACHINE
PROGRAM"
(= "hypervisor")**

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

**Install the a single "virtual
machine program" such as
"VMware Workstation Player",
"VirtualBox", or "Hyper-V"**

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

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

**"virtual machine program"
(= "hypervisor")**

Create a new "virtual machine"

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

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

**"virtual machine program"
(= "hypervisor")**

**Install a
single "guest operating system"
inside the "virtual machine" such
as Ubuntu Linux, Windows 10
Enterprise Evaluation, etc.**