# "WINDOWS 10.." "CHANNEL" COMPLEXITIES

by Francis Chao fchao2@yahoo.com







An International
Association of Technology
& Computer User Groups

## Web location for this presentation:

http://aztcs.org
Click on "Meeting
Notes"

#### SUMMARY

- The "Windows 10.." operating system arrives to us by means of five distribution "channels":
- ☐ RETAIL
- □ OEM\_DM
- ☐ OEM\_COA\_NSLP
- □ Volume\_KMS
- □ Volume\_MAK

#### **TOPICS**

- Channel Complexity
- Three Channels:
- RETAIL Channel
- OEM\_DM Channel
- OEM\_COA\_NSLP
- Determining the Channel
- Motherboard-based Activation Key for the OEM\_DM Channel

#### CHANNEL COMPLEXITY

- "Channel" is an attribute of every copy of "Windows..." that is sold
- "Channel" is also called "Product Key Channel" inside Microsoft's documentation and inside every copy of "Windows.." that is sold

### CHANNEL COMPLEXITY (continued)

 The current channel complexity is Microsoft's response to the rampant piracy that occured for versions of Windows.. prior to "Windows 10".

Their "Digital Licenses" represent massive storage of information in their world-wide system of "data centers".

#### THREE CHANNELS

The "Windows 10.." operating system arrives to us by means of three "channels":

RETAIL
OEM\_DM
and
OEM COA NSLP

#### "RETAIL" CHANNEL

- "RETAIL" channel product units of "Windows 10.." are available in two flavors:
  - ☐ Installation media and product key
  - ☐ Product key only
- Product key is a real 24-charactor key that is stored in the Windows "Registry (until you do a clean reinstall).

### "RETAIL" CHANNEL (continued)

- Both 64-bit and 32-bit are available in each product unit package
- Phone and text chat support from Microsoft for a defined number of days.

#### "OEM\_DM" CHANNEL

- "OEM\_DM" means
   "Original Equipment Manufacturer
   \_Direct to Manufacturer
- "OEM\_DM" product units of "Windows 10.." sold by Microsoft with a manufacturer-specific proprietary installation media and motherboard-based product keys that can only be used by the manufacturer.

- "OEM\_DM" CHANNEL (continued)
- In other words, there are two activation keys inside a OEM-DM channel "Windows 10.." computer: A unique 25-character key inside the motherboard and a generic, administrative placeholder 25-character key inside the Windows Registry that is stored on the C: hard drive partition

- The manufacturer-specific installation media and motherboard-based product keys are not available to the end user or to anyone who might repair or modify the computer in the future.
- Phone and text chat support for the computer end-user is not available from Microsoft

 A unique 25-character activation key is stored in the "MSDN" table inside the "ACPI" firmware table inside the UEFI (formerly called a BIOS) inside the motherboard of the computer: This 25-character activation key is of no use to the end user or to any person who subsequently works on the computer.

 This motherboard-based unique 25character activation key cannot be re-used by the manufacturer on another motherboard after a single installation of "Windows 10.." by the manufacturer

- A second 25-character manufacturer-specific placeholder key is placed into the Windows "Registry" (which resides on the C: hard drive) during the manufacturer's installation process.
- This second 25-character placeholder key is also known as an "administrative key".

- "OEM\_DM" CHANNEL (continued)
- This second 25-character activation key is of no use to the end user or to any person who subsequently works on the computer.
- This 25-character activation also resides somewhere inside the "Recovery discs" or "Recovery Partition" that the manufacturer provides for restoring the computer's internal hard drive

- This 25-character placeholder key is re-used for thousands, perhaps millions, of computers that are made by the computer manufacturer.
- This 25-character placeholder key is published in numerous places on the Web of the Internet as "invalid product keys"

### "OEM\_COA\_NSLP" CHANNEL

"OEM\_COA\_NSLP" means
 "Original Equipment Manufacturer
 \_Certificate of Authenticity
 \_Non-System Locked Pre installation

- "OEM\_COA\_NSLP" product units of "Windows 10.." are available in two flavors:
  - With installation media and product key
  - ☐ With product key only

(continued)If you buy a "OEM\_COA\_NSLP" product units of "Windows 10.." that is product key only, you can make a "Windows 10.." installation disc using the exact same "Media Creation Tool" that everyone else gets from

https://www.microsoft.com/enus/software-download/windows10

 Phone and text chat support for the buyer or user of a OEM\_COA\_NSLP copy of "Windows 10.." is not available from Microsoft

 A unique 25-character activation key is provide for each and every "product unit" of "Windows.." that is sold in the "OEM\_COA\_NSLP" channel

- This unique 25-character activation key can be entered either during or after the installation process of Windows.
- This unique 25-character activation is then stored in the Windows "Registry" which is stored on the C: drive (until you do a "fresh re-install)

### DETERMINING THE CHANNEL FOR A "WINDOWS.." COMPUTER

 Start up a "Command prompt" window or a "Windows Powershell" prompt window. It does not matter if you use a "admin" prompt or a regular one. In "Windows 10...", right-click on the Start menu to start up one of the above-mentioned prompts.

### DETERMINING THE CHANNEL FOR A "WINDOWS.." COMPUTER (continued)

- Type in slmgr -dli or slmgr /dli
- Press the Enter key of the keyboard once

#### uickeii



C:\WINDOWS\system32\cmd.exe

Microsoft Windows [Version 10.0.17763.292] (c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\lizorban>slmgr /dli

Windows Script Host

X

Name: Windows(R), Core edition

Description: Windows(R) Operating System, OEM\_DM channel

Partial Product Key: P9XQR

License Status: Licensed



# VIEWING THE MOTHER-BOARD BASED ACTIVATION KEY INSIDE A "OEM\_DM" CHANNEL COMPUTER

 The motherboard-based activation key inside a OEM\_DM channel computer is of no use to you, a computer technician, or anyone else but some computer owners like to look at it:

VIEWING THE MOTHER-BOARD
BASED ACTIVATION KEY INSIDE A
"OEM\_DM" CHANNEL COMPUTER
(continued)

Method 1:

 Download and use the free
 OEMKey.exe
 software program at
 https://neosmart.net/OemKey/

VIEWING THE MOTHER-BOARD
BASED ACTIVATION KEY INSIDE A
"OEM\_DM" CHANNEL COMPUTER
(continued)
Method 2:

Download and use the free RWEverything software program at http://rweverything.com/ and follow the instructions to access the MSDN table in the motherboard

VIEWING THE MOTHER-BOARD BASED ACTIVATION KEY INSIDE A "OEM\_DM" CHANNEL COMPUTER (continued)

Method 2 (continued):
 at
 https://www.nextofwindows.com/how
 -to-retrieve-windows-8-oem-product-key-from-bios

### WHAT WINDOWS 10.."CHANNEL" WILL YOU END UP WITH?

- If you walk into a store and purchase an HP, Dell, Asus, Lenova computer, you will get an OEM\_DM channel copy of Windows 10 Home 64-bit
- If you or a tech upgrades the Windows 10 Home 64-bit up to Windows 10 Pro 64-bit, you will usually get a Retail channel copy

### WHAT WINDOWS 10.."CHANNEL" WILL YOU END UP WITH? (continued)

 If you have a company custom-build a computer for you, you will usually get a Retail channel copy of Windows 10 Home 64-bit or Windows 10 Pro 64-bit

### WHAT WINDOWS 10.."CHANNEL" WILL YOU END UP WITH? (continued)

 If you buy a copy of Windows 10 Pro from a retail store, you will get a Retail channel copy

### WHAT WINDOWS 10.."CHANNEL" WILL YOU END UP WITH? (continued)

If you order a copy of Windows 10... from a Web site, read the fine print: You can get either a Retail channel copy or a "OEM\_COA\_NSLP" channel copy. The fine print will either call it an "OEM" copy or an "OEM System Builder" copy. This information is sometimes in very tiny font!!

#### REFERENCES

https://www.techspot.com/guides/17
 60-find-your-windows-product-key/