"WINDOWS 10.."
"CHANNEL"
COMPLEXITIES

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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 re-install).

"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

"OEM_DM" CHANNEL (continued)

- The manufacturer-specific installation media and mother-board-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

"OEM_DM" CHANNEL (continued)

- 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.

"OEM_DM" CHANNEL (continued)

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

"OEM_DM" CHANNEL (continued)

- 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

"OEM_DM" CHANNEL (continued)

- 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" CHANNEL (continued)

- "OEM_COA_NSLP" product units of "Windows 10.." are available in two flavors:
  - With installation media and product key
  - With product key only

"OEM_COA_NSLP" CHANNEL (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/en-us/software-download/windows10

"OEM_COA_NSLP" CHANNEL (continued)

- Phone and text chat support for the buyer or user of a OEM_COA_NSLP copy of "Windows 10.." is not available from Microsoft

"OEM_COA_NSLP" CHANNEL (continued)

- 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

"OEM_COA_NSLP" CHANNEL (continued)

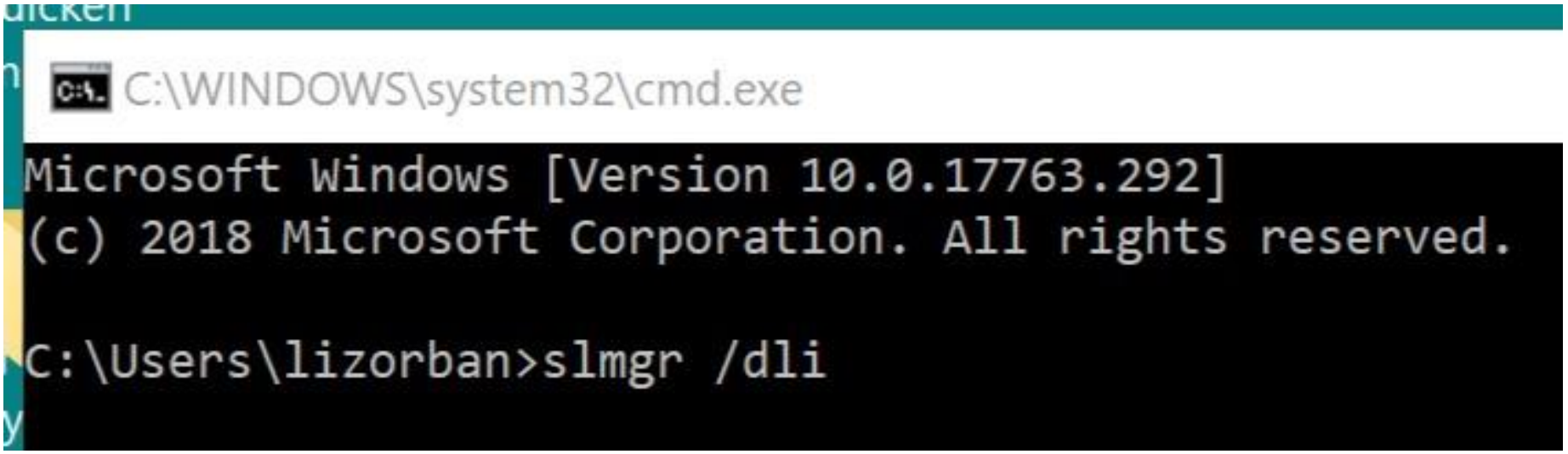
- This unique 25-character activation key can be entered either during or after the installation process of Windows.
- This unique 25-character activation is then stored in the Windows "Registry" which is stored on the C: drive (until you do a "fresh re-install)

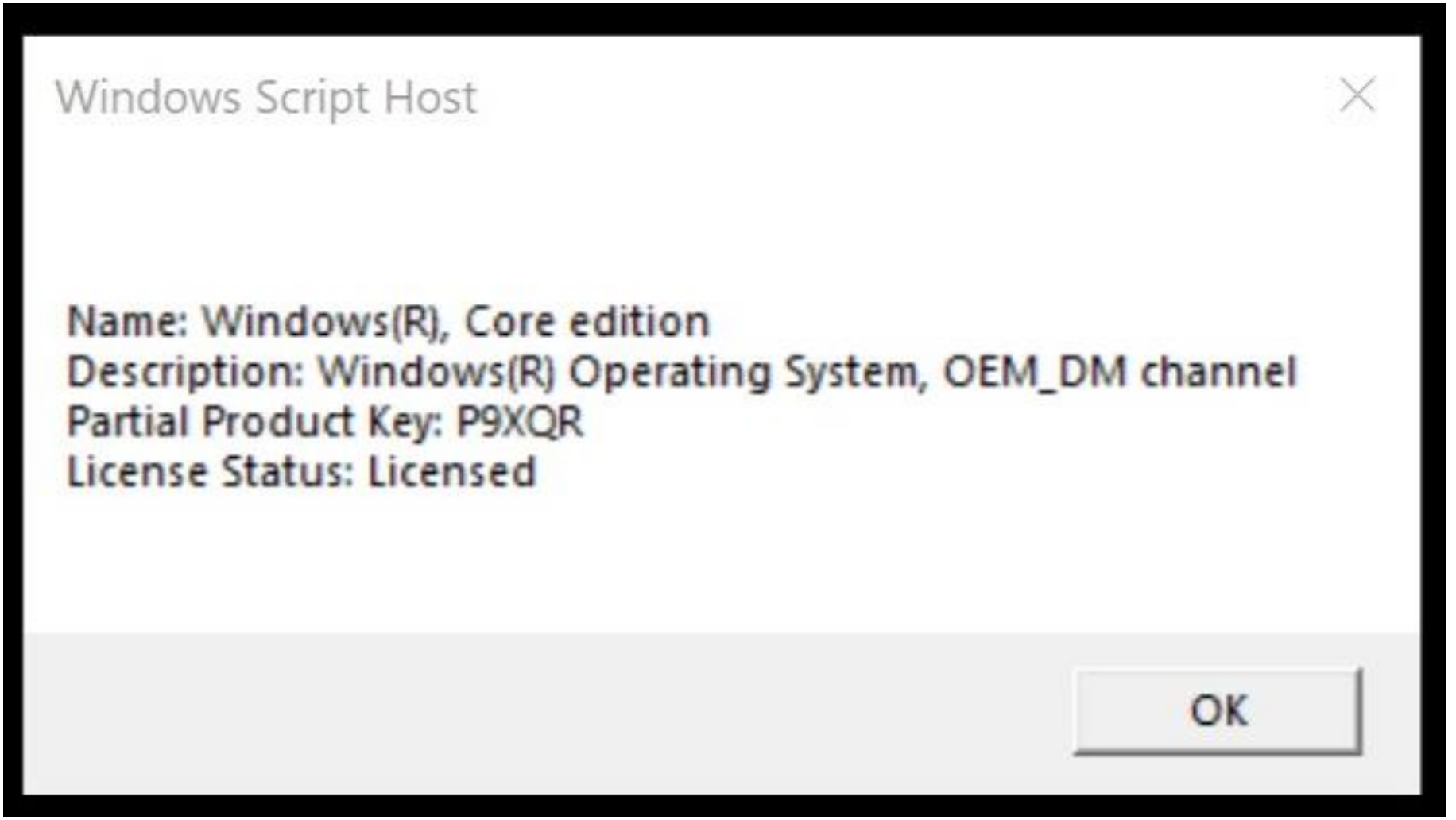
DETERMINING THE CHANNEL FOR A "WINDOWS.." COMPUTER

- 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


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
Name: Windows(R), Core edition
Description: Windows(R) Operating System, OEM_DM channel
Partial Product Key: P9XQR
License Status: Licensed
OK

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!!

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

- If you have an "OEM.." channel computer and then you do a free upgrade from Windows 7 to 10, or a free upgrade from Windows 10 to 11, your "channel" will change for "OEM.." channel to "Retail" channel with a "Digital License" where Microsoft's activation servers in store the UUID of the motherboard.

REFERENCES

- https://www.techspot.com/guides/1760-find-your-windows-product-key/