

WINDOWS 10 AND 11 ACTIVATION

by Francis Chao
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presentation:**

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Notes”

SUMMARY

If you take an existing "Windows 7" or "Windows 8" or "Windows 8.1" computer and upgrade it for free, your copy of Windows 10 or 11 will be activated with a "Digital License". If you purchase a retail copy of Windows 10 or 11 and use it to install or upgrade a computer, you will be activating with a 25-character Windows 10 or 11 Product Key.

TOPICS

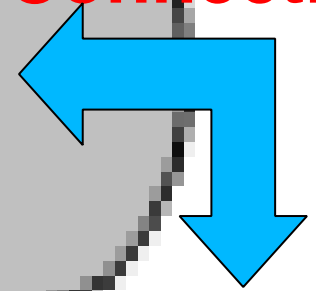
- Microsoft's Activation Servers
- Do Not Comply With All Initial Requests For A Product Key (For Windows 10 and 11)
- Two Ways to Activate "Windows 10"
- Which Method of Activation Was Used in My "Windows 10" Computer?

TOPICS (continued)

- Details of "Digital License" Activation
- Details of "Product Key" Activation
- Difference Between "Digital License" Activation and "Product Key" Activation
- Linking Your "Microsoft Account" to a "Digital License" Activation

**Server Farms
Operated by
Microsoft:**
Activation Servers
Other servers for
Outlook.com,
OneDrive, Bing, etc.

**Internet
Connection**



**Activated
"Windows 10"**

Microsoft's Activation Servers

DIGITAL LICENSE DATABASE:

**UUID of your motherboard,
edition ("Win10 Home",**

"Windows 10 Pro",

**"Windows 11 Home,
or "Windows 11 Pro)**

and

optionally, your

Microsoft account's

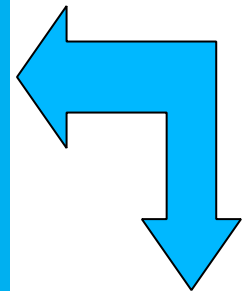
email address or

username if you have "linked" the

"Digital License to a Microsoft

Account

**Internet
Connection**



**Activated
"Windows
10"**

MICROSOFT'S ACTIVATION SERVERS (continued)

- Two separate databases inside Microsoft's activation servers:
"Digital Licenses" database
and
"Product Keys" database

Microsoft's Activation Servers

"DIGITAL LICENSE" DATABASE

"PRODUCT KEYS" DATABASE

Microsoft's Activation Servers

DIGITAL LICENSE DATABASE:

**UUID of your motherboard,
edition ("Windows 10 Home", "Windows 10 Pro", "Windows 11 Home", or "Windows 11 Pro"),
optionally, your Microsoft account's email address if you linked it to your Microsoft Account**

PRODUCT KEY DATABASE:

**"Product Key",
edition (Windows 10 Home, Windows 10 Pro, Windows 11 Home, or Windows 11 Pro),
Number of remaining activations for THE key**

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY IN "WINDOWS 10.."

- When installing or upgrading to Windows 10 or 11, do not comply with all initial requests for a product key.



Windows Setup



Activate Windows

If this is the first time you're installing Windows on this PC (or you're installing a different edition), you need to enter a valid Windows product key. Your product key should be in the confirmation email you received after buying a digital copy of Windows or on a label inside the box that Windows came in.

The product key looks like this: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

If you're reinstalling Windows, select I don't have a product key. Your copy of Windows will be automatically activated later.



[Privacy statement](#)

[I don't have a product key](#)

[Next](#)

If this is the first time you're installing Windows on this PC (or you're installing a different edition), you need to enter a valid Windows product key. Your product key should be in the confirmation email you received after buying a digital copy of Windows or on a label inside the box that Windows came in.

The product key looks like this: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

If you're reinstalling Windows, select I don't have a product key. Your copy of Windows will be automatically activated later.



I don't have a product key



Windows Setup



Select the operating system you want to install

Operating system	Architecture	Date modified
Windows 10 Pro	x64	7/16/2016
Windows 10 Home	x64	7/16/2016
Windows 10 Home Single Language	x64	7/16/2016
Windows 10 Education	x64	7/16/2016

Description:
Windows 10 Pro

Next

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY IN WINDOWS 10 OR 11 (continued)

- Unlike previous "Windows.." products, "Windows 10" is kinder and gentler, even if you do not activate it.

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY IN WINDOWS 10 OR 11 (continued)

- Unlike previous "Windows.." products, Windows 10 or 11 will let you complete an upgrade or installation, even if you do not comply with all initial requests for a product key.

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY FOR WINDOWS 10 OR 11 (continued)

- After installing or upgrading to Windows 10 or 11, if you need to activate it with a 25-character "Windows 10 Product Key" you have an indefinite amount of time to do so.

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY IN WINDOWS 10 OR 11 (continued)

- Unlike previous "Windows.." products, Windows 10 or 11 will not turn your Desktop black, delete what you are working on, and shut your computer down every 60 minutes, even if it is Windows 10 or 11 is not activated. Unactivated copies of Windows 10 or 11 are now kinder and gentler!

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY (continued)

- Reason 1:

A digital license may already be stored up in Microsoft's activation servers but the installation wizard will not notify you of this situation.

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY (continued)

- Reason 1 (continued):
If you enter in a newly-purchased Retail key at this point and Microsoft already has a "Digital License" stored up in their activation server system, your computer will now have two "Digital Licenses" and you will have to jump thorough hoops to re-use the newly-entered Retail key on another computer some day.

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY (continued)

- Reason 2:

If you use a newly-purchased Retail key for "Windows 10" and something goes wrong during the rest of the installation process:

and IF you have an "OEM System Builder" channel key you might need to buy another key (since OEM System Builders have zero "support from Microsoft

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY (continued)

- Reason 2 (continued):
If you use a newly-purchased Retail key for Windows 10 or 11 and something goes wrong during the rest of the installation process and you have purchased a "Retail" channel key, you will have to phone or text Microsoft support to reuse the "Retail" key

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY (continued)

- If you install Windows 10 or 11 into a blank hard drive or if you upgrade a copy of "Windows 7", "Windows 8", or "Windows 8.1", ignore the following request to enter in a 25-character activation key:



Windows Setup



Activate Windows

If this is the first time you're installing Windows on this PC (or you're installing a different edition), you need to enter a valid Windows product key. Your product key should be in the confirmation email you received after buying a digital copy of Windows or on a label inside the box that Windows came in.

The product key looks like this: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

If you're reinstalling Windows, select I don't have a product key. Your copy of Windows will be automatically activated later.



[Privacy statement](#)

[I don't have a product key](#)

[Next](#)



Windows Setup



Activate Windows

If this is the first time you're installing Windows on this PC (or you're installing a different edition), you need to enter a valid Windows product key. Your product key should be in the confirmation email you received after buying a digital copy of Windows or on a label inside the box that Windows came in.

The product key looks like this: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

If you're reinstalling Windows, select I don't have a product key. Your copy of Windows will be automatically activated later.



[Privacy statement](#)

[I don't have a product key](#)

[Next](#)

TWO WAYS TO ACTIVATE WINDOWS

10 or 11

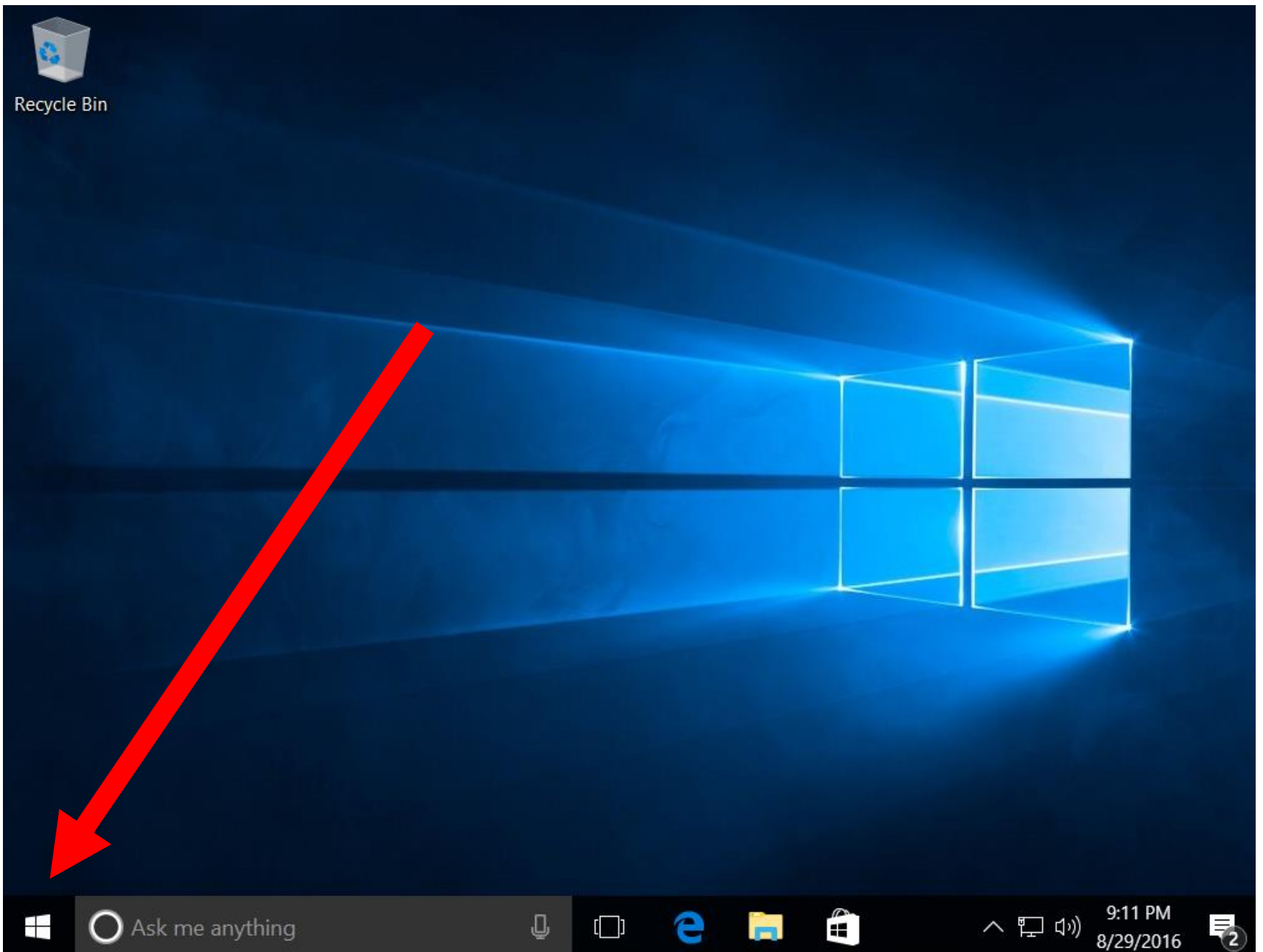
- Method 1:
"Digital License" Method
(No "Windows 10 or 11 product key is used to activate "Windows 10 or 11.")
- Method 2:
"Product Key" Method
(A 25-character "Product Key" is used.)

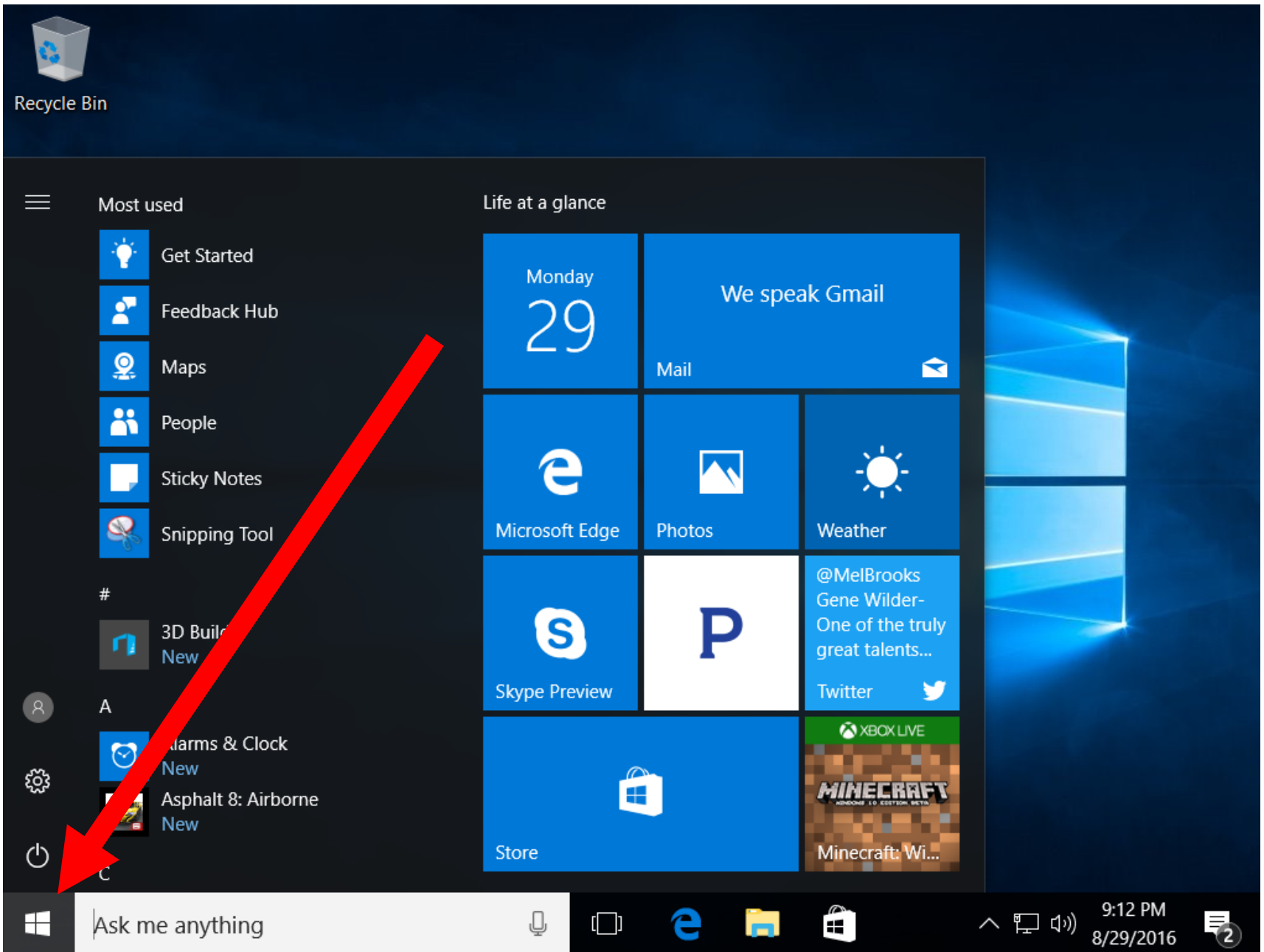
TWO WAYS TO ACTIVATE WINDOWS 10 OR 11 (continued)

- Microsoft's confusing description of the differences between the two activation methods is located at <https://support.microsoft.com/en-us/help/12440/windows-10-activation>

WHICH METHOD OF ACTIVATION WAS USED IN MY WINDOWS 10 OR 11 COMPUTER?

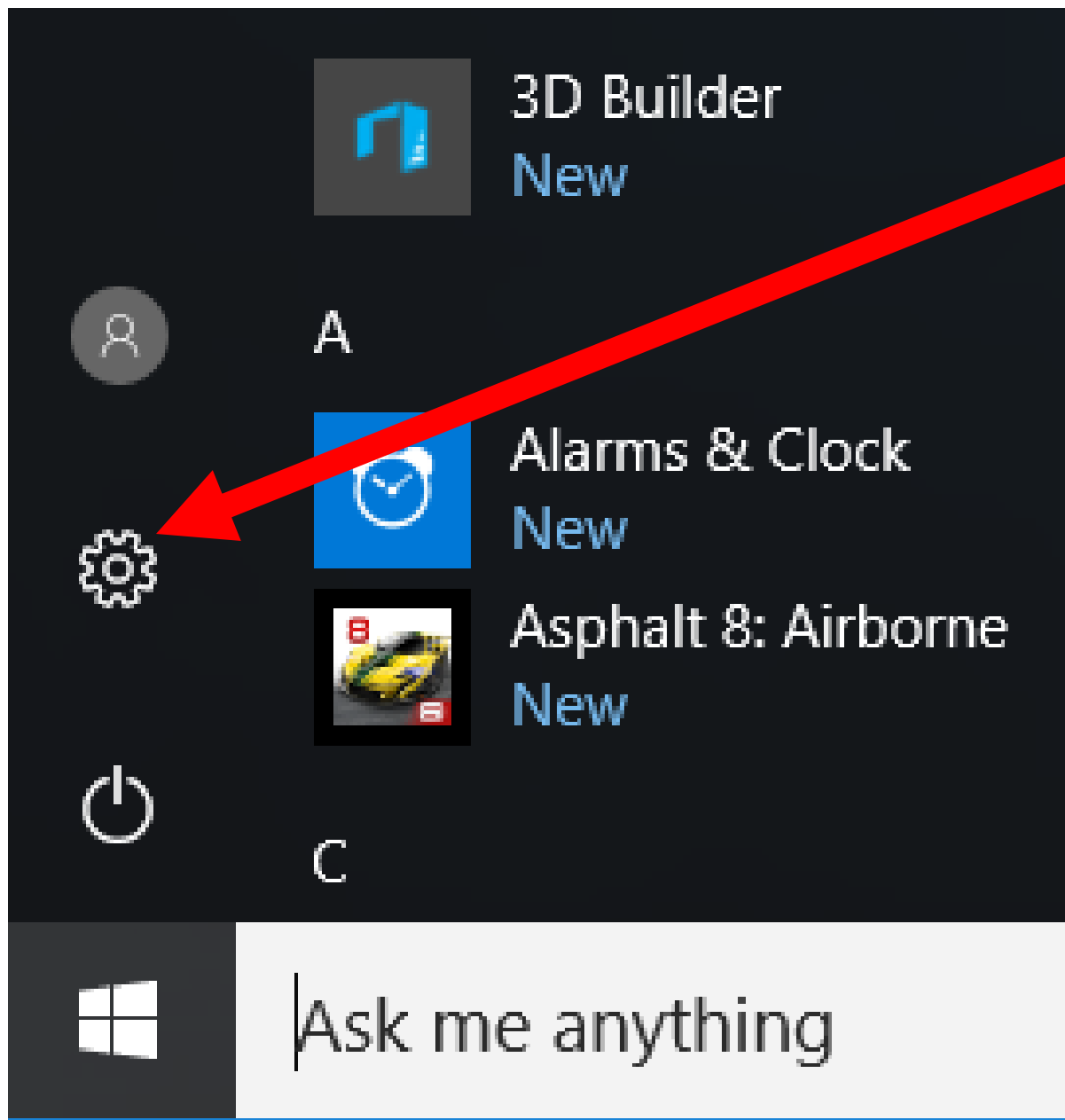
- Step 1:
Click on the "Start" button.

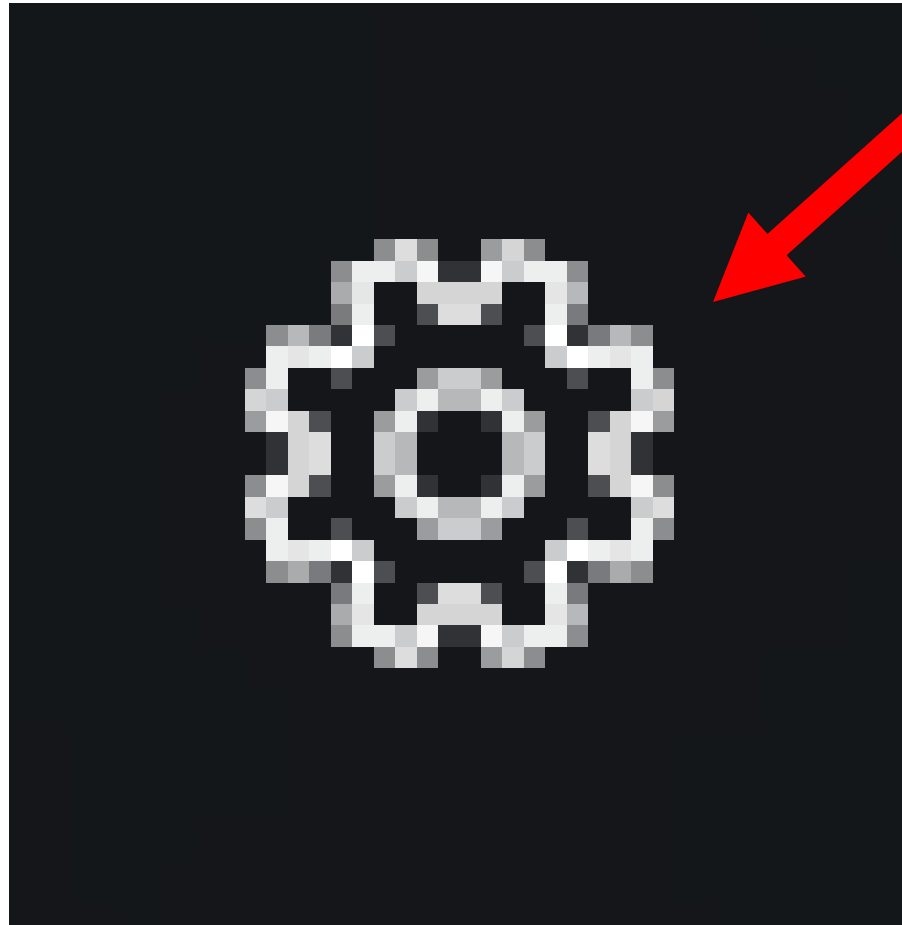




WHICH METHOD OF ACTIVATION WAS USED IN MY WINDOWS 10 OR 11 COMPUTER? (continued)

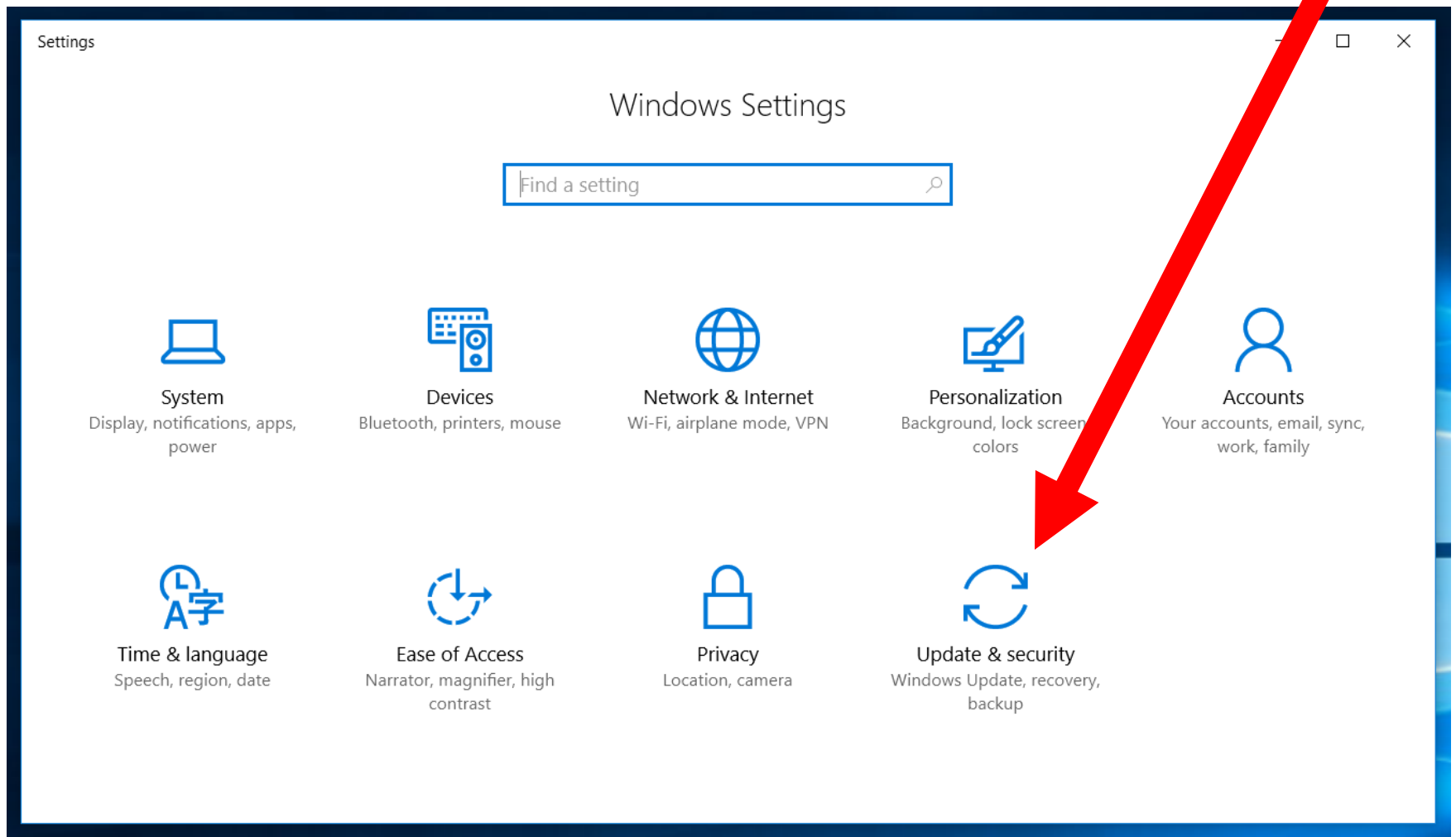
- Step 2:
Click on the "Settings" icon:

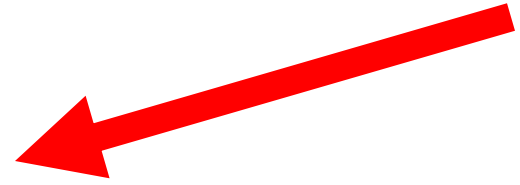




WHICH METHOD OF ACTIVATION WAS USED IN MY WINDOWS 10 OR 11 COMPUTER? (continued)

- Step 3:
Click on "Update & Security":

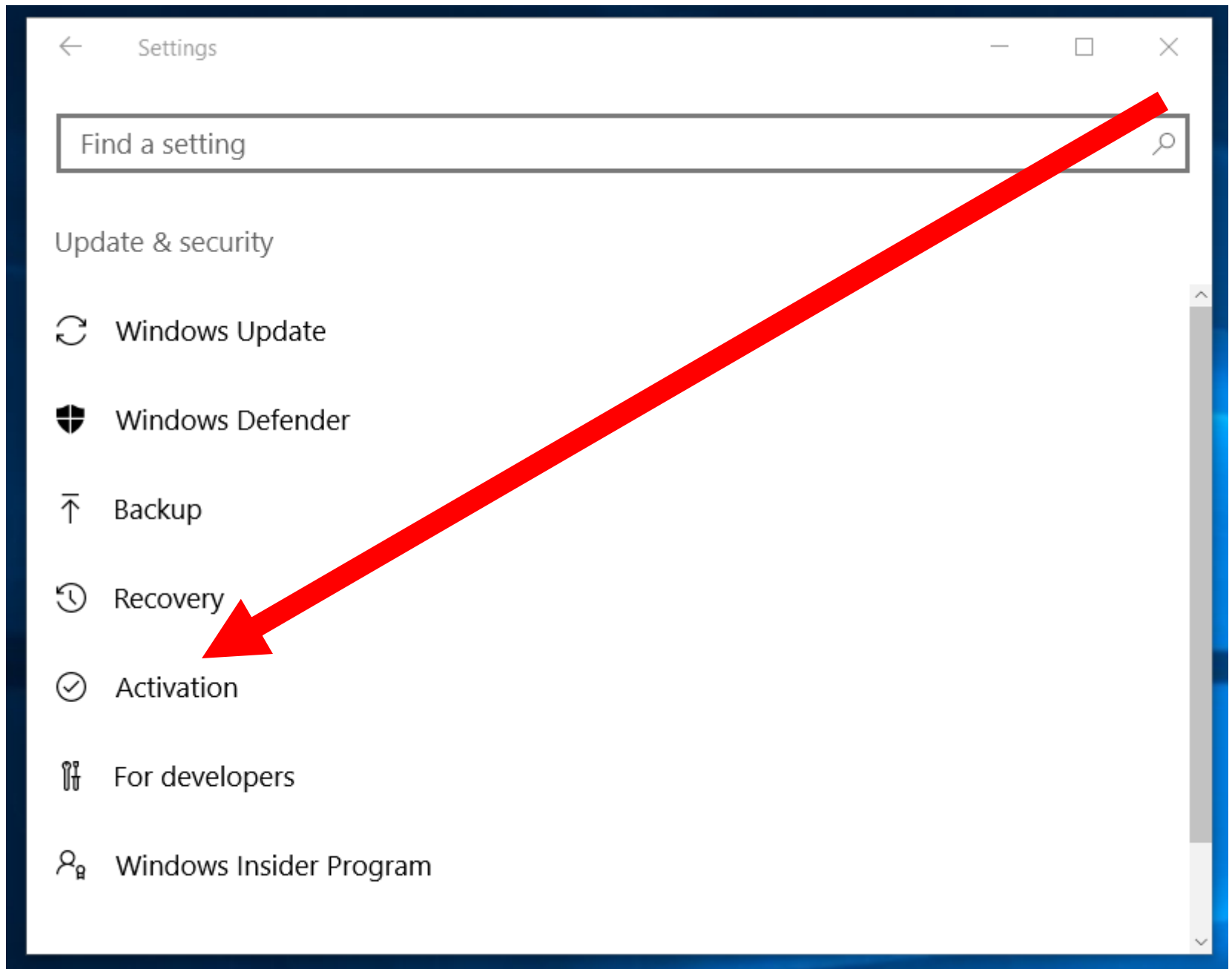


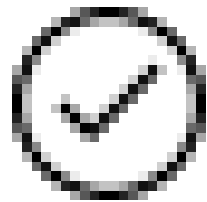


Update & security
Windows Update, recovery,
backup

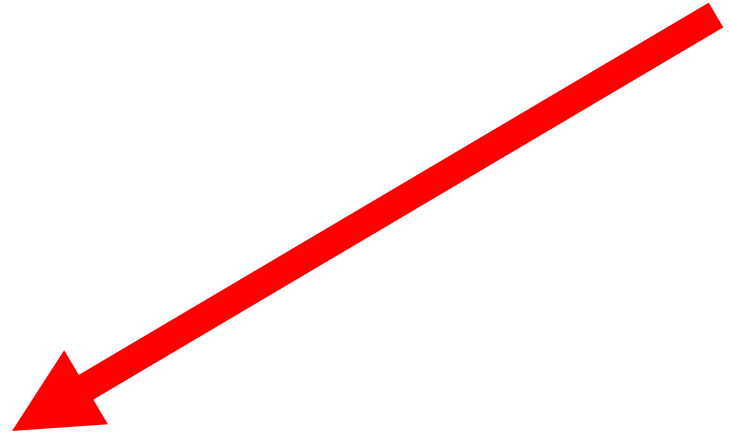
WHICH METHOD OF ACTIVATION WAS USED IN MY WINDOWS 10 OR 11 COMPUTER? (continued)

- Step 4:
Click on "Activation":





Activation



WHICH METHOD OF ACTIVATION WAS USED IN MY WINDOWS 10 OR 11 COMPUTER? (continued)

- If Windows 10 or 11 has already been activated with a "digital license", the "Activation" screen in "Settings" will state
Activation: Windows is activated with a digital license
and there will be no "Product Key:" line:

←

Settings

—

□

×

⚙️

Home

Find a setting

🔍

Update & security

↻️ Windows Update

🛡️ Windows Defender

↑ Backup

🕒 Recovery

✅ **Activation**

🔧 For developers

👤 Windows Insider Program

Windows

Edition

Windows 10 Home

Activation

Windows is activated with a digital license
[Learn more](#)

Upgrade your edition of Windows

Upgrade to Windows 10 Pro to add features that help you connect to company networks, access one PC from another, encrypt your data and more.

Go to the Store to buy the upgrade or enter a product key.

🛒 Go to Store

🔑 Change product key

Add a Microsoft account

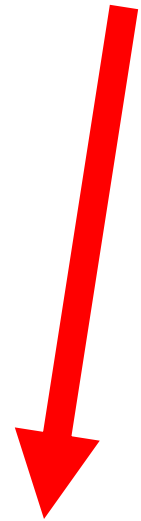
Your Microsoft account unlocks benefits that make your experience with Windows better, including the ability to reactivate Windows 10 on this device.

[Learn more](#)

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Edition Windows 10 Home

Activation Windows is activated with a digital license
[Learn more](#)



WHICH METHOD OF ACTIVATION WAS USED IN MY WINDOWS 10 OR 11 COMPUTER? (continued)

- If Windows 10 or 11 has already been activated with a "Product Key", the "Activation" screen in "Settings" will state

Activation: Windows is activated
and

Product Key: xxxxx-xxxxx-xxxxx..
like this:



Home



Update & security



Windows Update



Windows Defender



Backup



Recovery



Activation



For developers



Windows Insider Program

Windows

Edition Windows 10 Home

Activation Windows is activated

Product ID 00000-00000-00000-00000-00000

Product Key XXXXX-XXXXX-XXXXX-XXXXX-KXXXX

Upgrade your edition of Windows

Upgrade to Windows 10 Pro to add features that help you connect to company networks, access one PC from another, encrypt your data and more.



Go to the Store to buy the upgrade or enter a product key.

[Go to Store](#)[Change product key](#)

Add a Microsoft account

Your Microsoft account unlocks benefits that make your experience with Windows better, including the ability to reactivate Windows 10 on this device.

[Learn more](#)

Edition	Windows 10 Home
Activation	Windows is activated
Product ID	0  0
Product Key	XXXXXX-XXXXXX-XXXXXX-XXXXXX-K  H

DETAILS OF "DIGITAL LICENSE " ACTIVATION (continued)

- **Digital License**

(= "Digital Entitlement"

= "Device Based Activation")

"Windows 10" is the first and only
"Windows.." product that can be
activated by means of a "Digital
License". "Windows 11" is the
second such product.

DETAILS OF "DIGITAL LICENSE " ACTIVATION (continued)

- When you activate a copy of "Windows.." prior to "Window 10..", Microsoft does **not** store the UUID of the motherboard of your computer in it's activation servers

DETAILS OF "DIGITAL LICENSE "

ACTIVATION (continued)

- "Digital License" means that Microsoft's activation servers in their server farms store the UUID of the motherboard of a computer, and the edition of Windows 10 or 11 ("Home" or "Pro"), as part of the activation process.

DETAILS OF "DIGITAL LICENSE "

ACTIVATION (continued)

- "UUID" stands for "Universally Unique Identifier"
- A UUID is a 128-bit value that has a high probability of being unique that is used to label devices such as motherboards, hard drives, graphics adapters, etc.

DETAILS OF "DIGITAL LICENSE "

ACTIVATION (continued)

- According to https://en.wikipedia.org/wiki/Universally_unique_identifier:
.. a UUID is represented by 32 lowercase hexadecimal digits, displayed in five groups separated by hyphens, in the form 8-4-4-4-12 for a total of 36 characters

DETAILS OF "DIGITAL LICENSE " ACTIVATION (continued)

- If you look at the UUID that is stored inside the firmware of your computer's motherboard, it would look like this:

```
UUI D
```

```
- - - -
```

```
595B4D56-3B34-BA91-4F7C-F030072DAE75
```

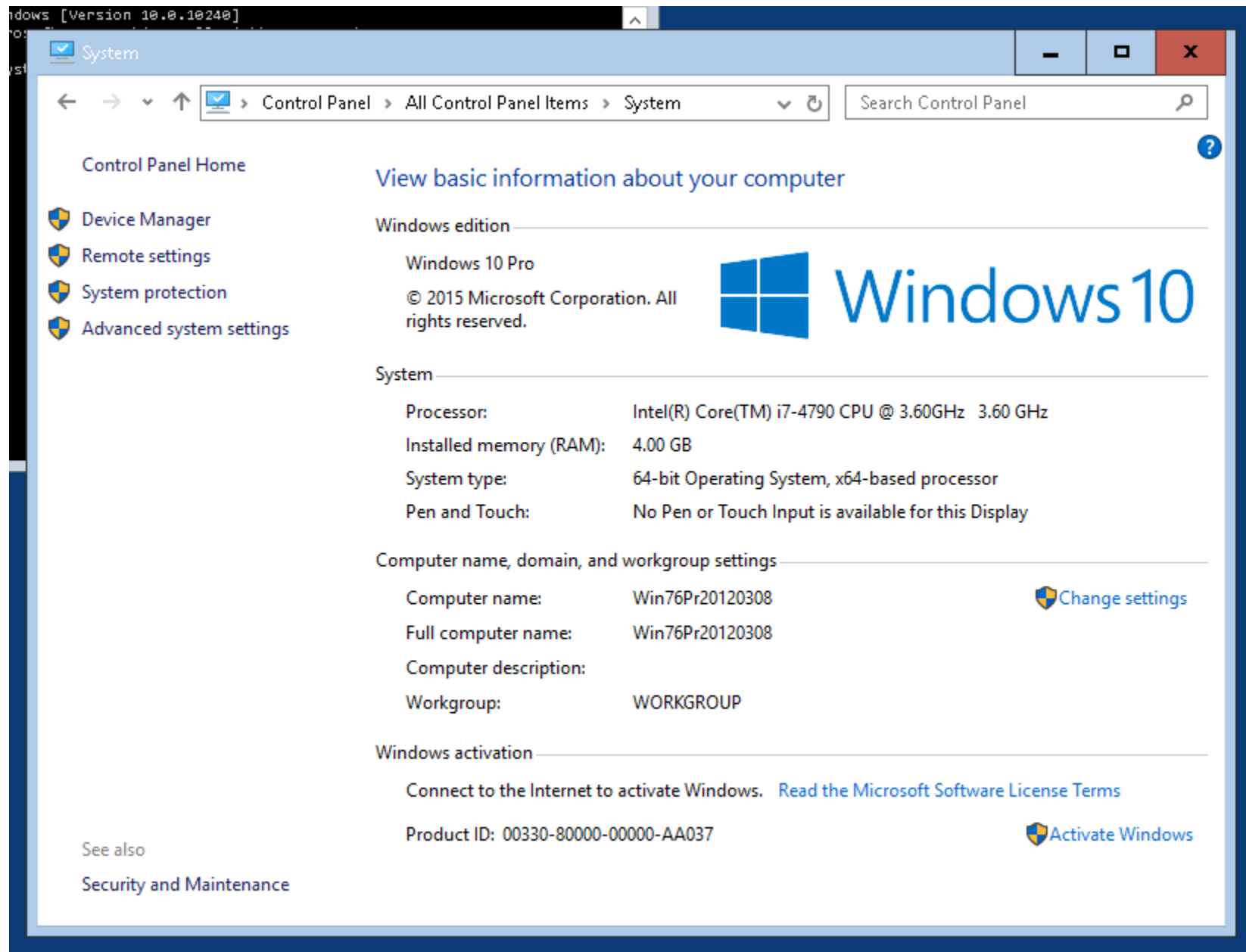
DETAILS OF "DIGITAL LICENSE "

ACTIVATION (continued)

- 595B4D56-
3B34-BA91-
4F7C-
F030072DAE75

DETAILS OF "DIGITAL LICENSE " ACTIVATION (continued)

- When "Windows 10" is not activated:
If you go to "System" in the "Control Panel":



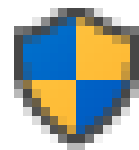
Windows activation

Connect to the Internet to activate Windows. [Read the Microsoft Software License Terms](#)

Product ID: 00330-80000-00000-AA037

 [Activate Windows](#)

License Terms



Activate Windows

DETAILS OF "DIGITAL LICENSE "ACTIVATION (continued)

- When Windows 10 or 11 is
"activated":
If you go to "System" in the
"Control Panel":

System

←

→

▼

▲

Control Panel

All Control Panel Items

System

Search Control Panel

Control Panel Home

Device Manager

Remote settings

System protection


Advanced system settings

View basic information about your computer

Windows edition

Windows 10 Pro

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Windows 10

System

Processor:

Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz 3.60 GHz

Installed memory (RAM):

4.00 GB

System type:

64-bit Operating System, x64-based processor


Pen and Touch:

No Pen or Touch Input is available for this Display

Computer name, domain, and workgroup settings

Computer name:

Win76Pr20120308

Change settings

Full computer name:

Win76Pr20120308

Computer description:

Workgroup:


WORKGROUP

Windows activation

Windows is activated

[Read the Microsoft Software License Terms](#)

Product ID: 00330-80000-00000-AA037

Change product key

See also

Security and Maintenance

60

Windows activation

Windows is activated [Read the Microsoft Software License Terms](#)

Product ID: 00330-80000-00000-AA037

 [Change product key](#)

Windows activation

Windows is activated [Read the Microsoft](#)

Product ID: 00330-80000-00000-AA037

DETAILS OF "DIGITAL LICENSE "

ACTIVATION (continued)

- If you upgrade a computer that has a genuine copy of "Windows 7.." or "Windows 8.1.." to "Windows 10 or 11, it will activate your new copy of "Windows 10 or 11 and the UUID of the motherboard of the computer will be stored in Microsoft's activation servers and a default, placeholder 25-character product key will be placed into the Windows registry in your computer:

DETAILS OF "DIGITAL LICENSE "

ACTIVATION (continued)

- This means that everyone who upgrades from Windows 7 or Windows 8 to Windows 10 or 11 sees the same default, placeholder product keys listed at <https://www.maketecheasier.com/windows-10-activation-procedure/> when running "Belarc Advisor" or other diagnostic software:

DETAILS OF "DIGITAL LICENSE "

ACTIVATION (continued)

- Use any Web browser in an Internet-connection computer to go to belarc.com
- Then download the free "Belarc Advisor":



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✓ ACCURATE
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- **Browsers:** Runs on Internet Explorer, Google Chrome, Microsoft Edge, Firefox, Safari, Opera, and many others.
- **File size:** 4374 KB.
- **License:** The license associated with this product allows for free personal use only. Use on multiple PCs in a corporate, educational, military or government installation is prohibited. See the license agreement for details.
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- **Browsers:** Runs on Internet Explorer, Google Chrome, Microsoft Edge, Firefox, Safari, Opera, and many others.
- **File size:** 4374 KB.

What do you want to do with
advisorinstaller.exe (4.27 MB)?

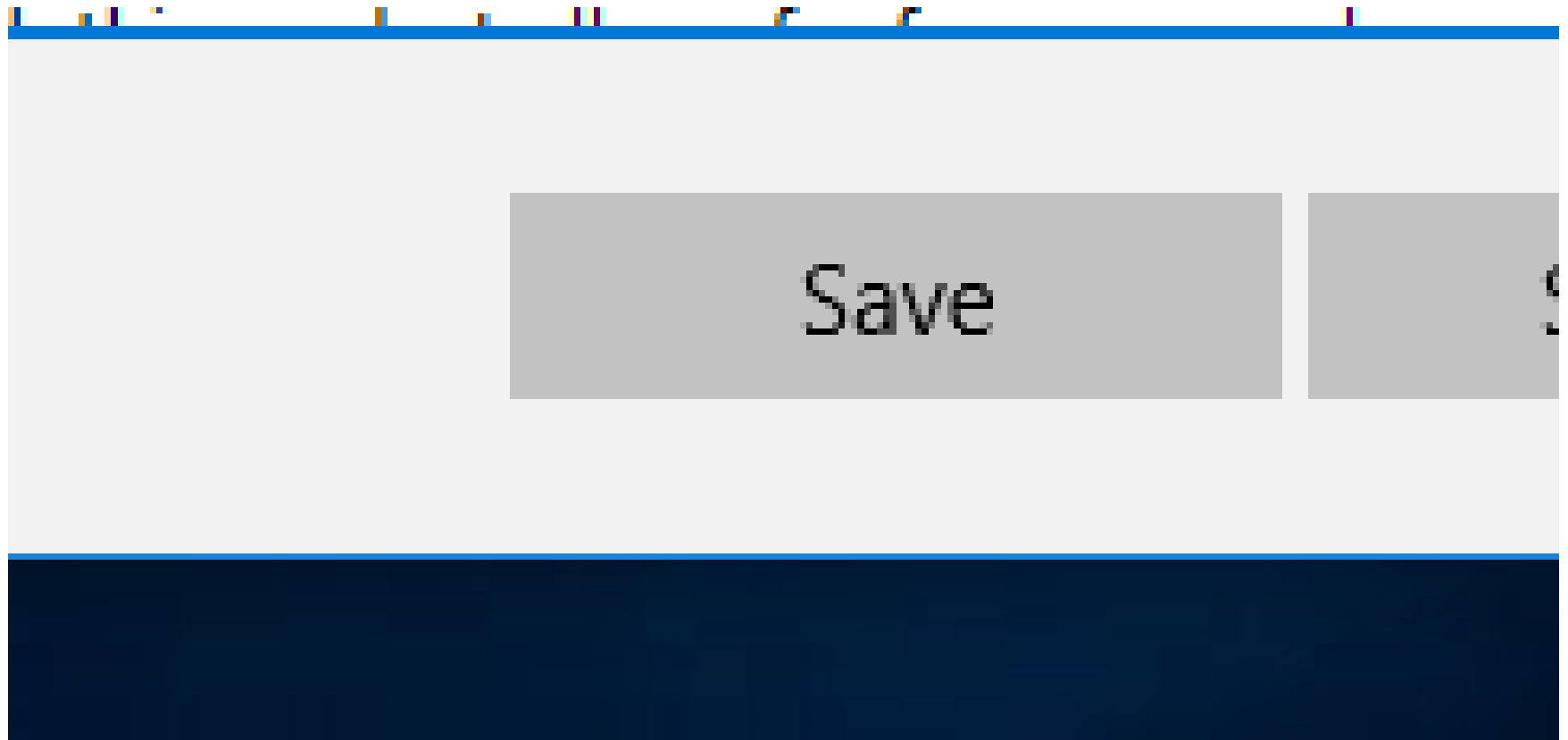
Save

Save as

Cancel



http://www.belarc.com/index.html rc.com





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- **File size:** 4374 KB.
- **License:** The license associated with this product allows for free personal use only. Use on multiple PCs in a corporate, educational, military or government installation is prohibited. See the license agreement for details.

advisorinstaller.exe finished downloading.

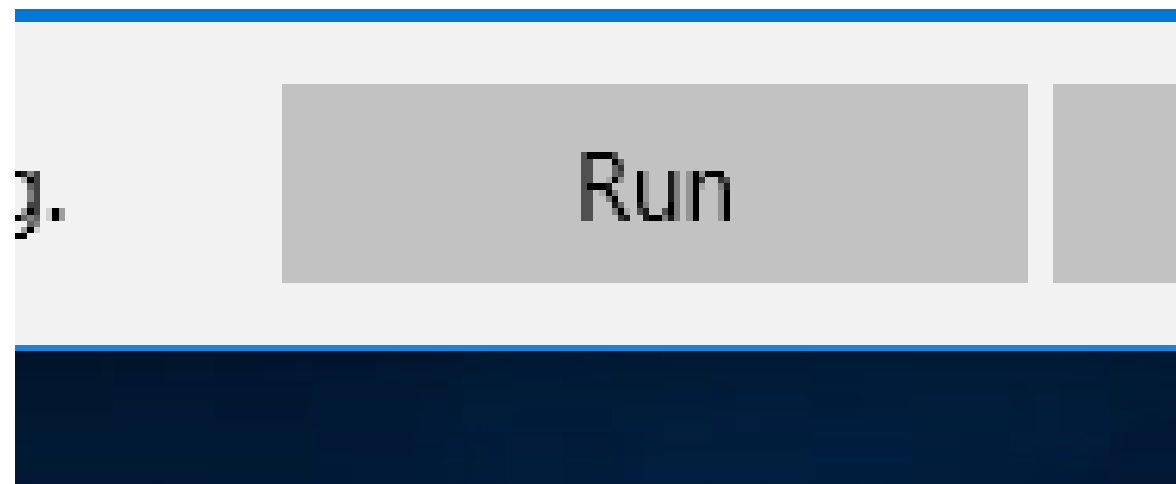
Run

Open folder

View downloads



Product allows for free personal use. Installation is prohibited. See the license



User Account Control



Do you want to allow this app to make changes to your device?



Belarc Advisor Installer

Verified publisher: Belarc, Inc.

File origin: Downloaded from the Internet

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Yes

No



Yes

New!



Try out the free Belarc Security Advisor for your Android phone or tablet and find out about vulnerabilities that anti-virus products can't fix.

You can get the Belarc Security Advisor by searching for Belarc on Google Play.

Continue Installing Belarc Advisor

on Windows 10, 8.1, 2012 R2, 8, 2012, 7,



Belarc Advisor



This is the Belarc License Agreement. Please read it carefully. Use the scrollbar to scroll down and view the entire Agreement.

Belarc, Inc. End-User License Agreement
for the Belarc Advisor ('Advisor')

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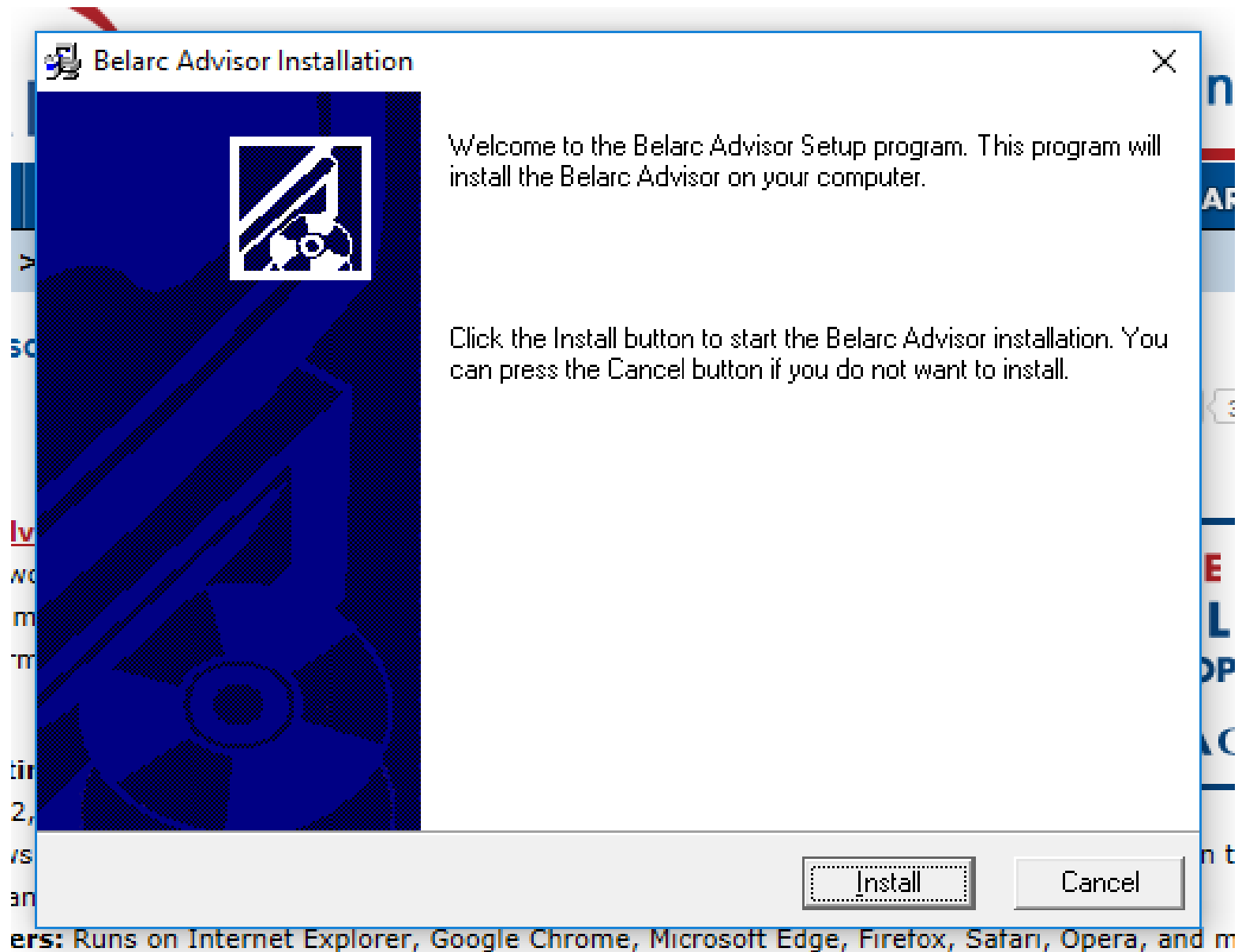
To accept the terms of this agreement, select "I Agree." If you choose to not accept the terms of this agreement, select "I Don't Agree" and the Belarc Advisor installer will exit.

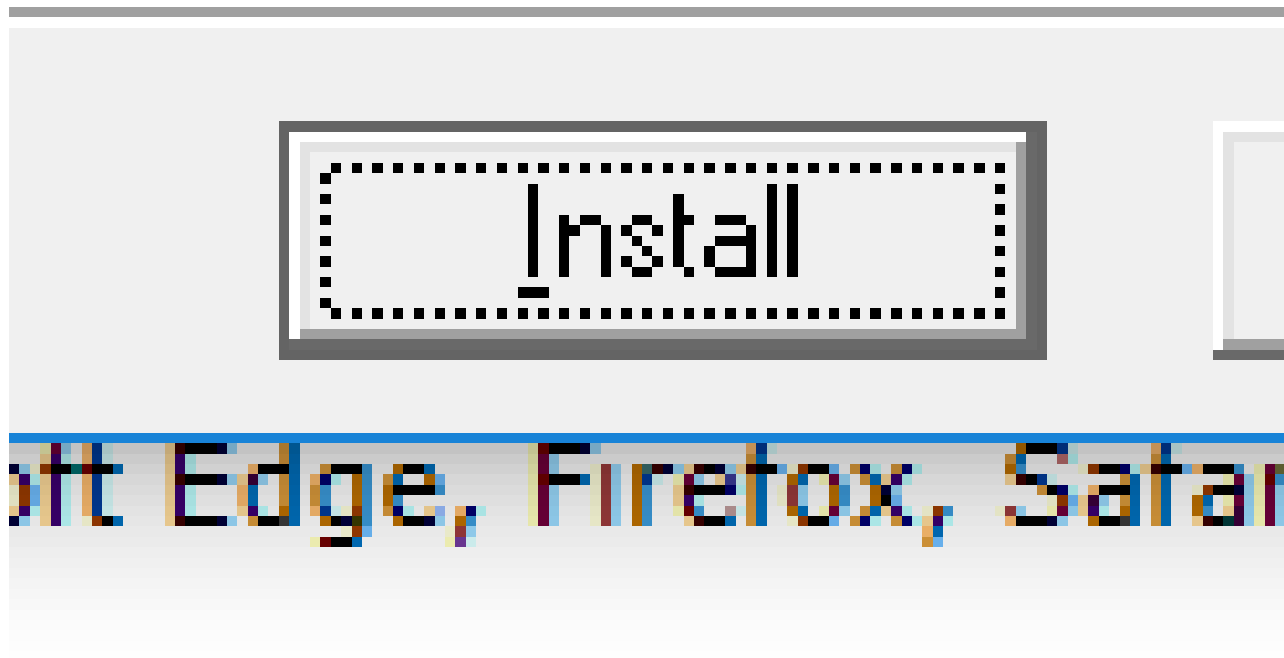
I Agree

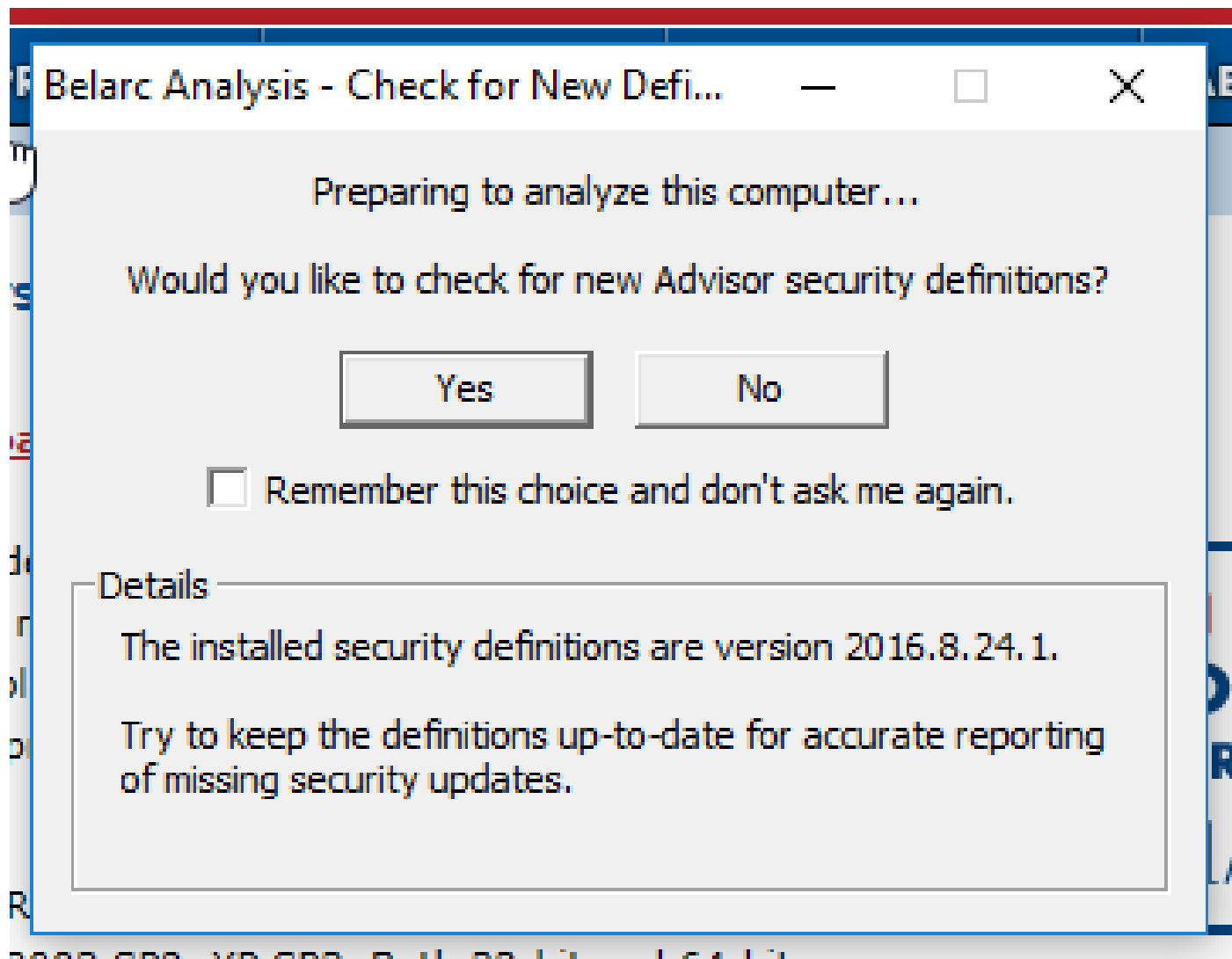
I Don't Agree

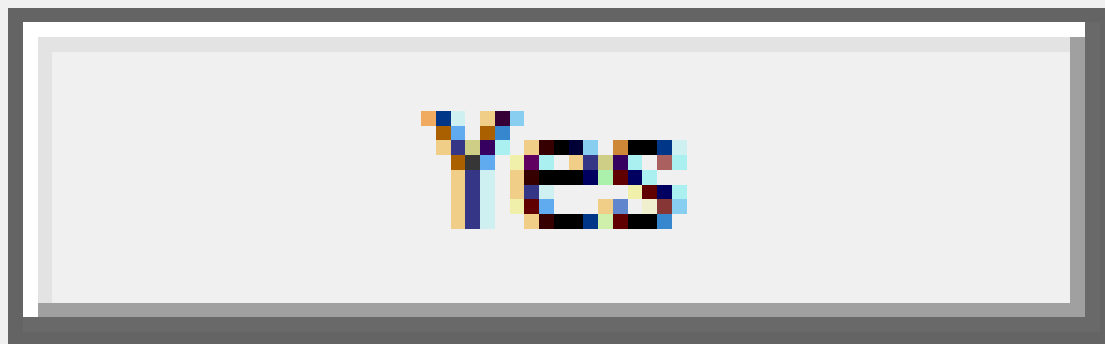
ers: Runs on Internet Explorer, Google Chrome, Microsoft Edge, Firefox, Safari, Opera, and m

re: 4374 KB









Advisor

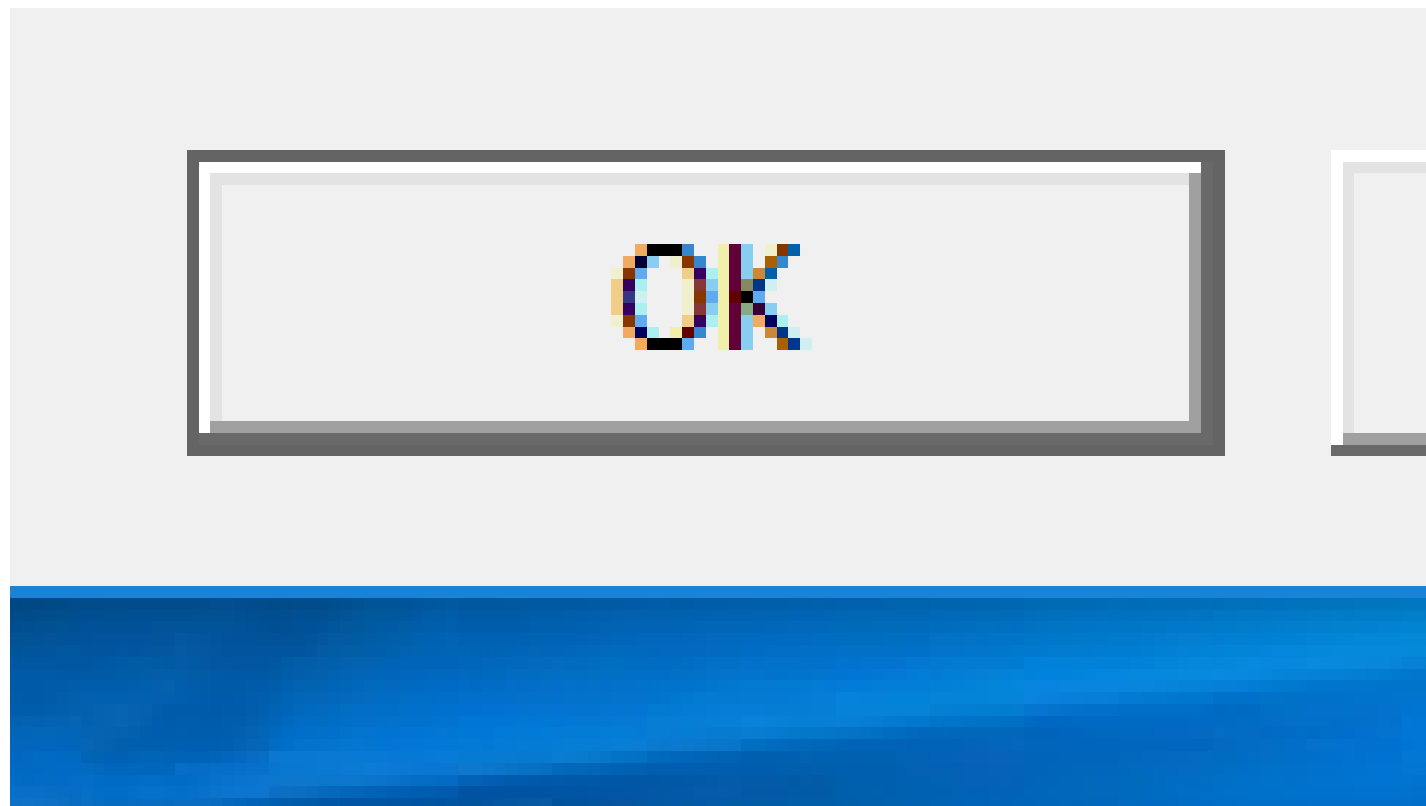


Your Advisor security definitions are up-to-date.

(Current version is 2016.8.24.1)

OK

Cancel



Advisor

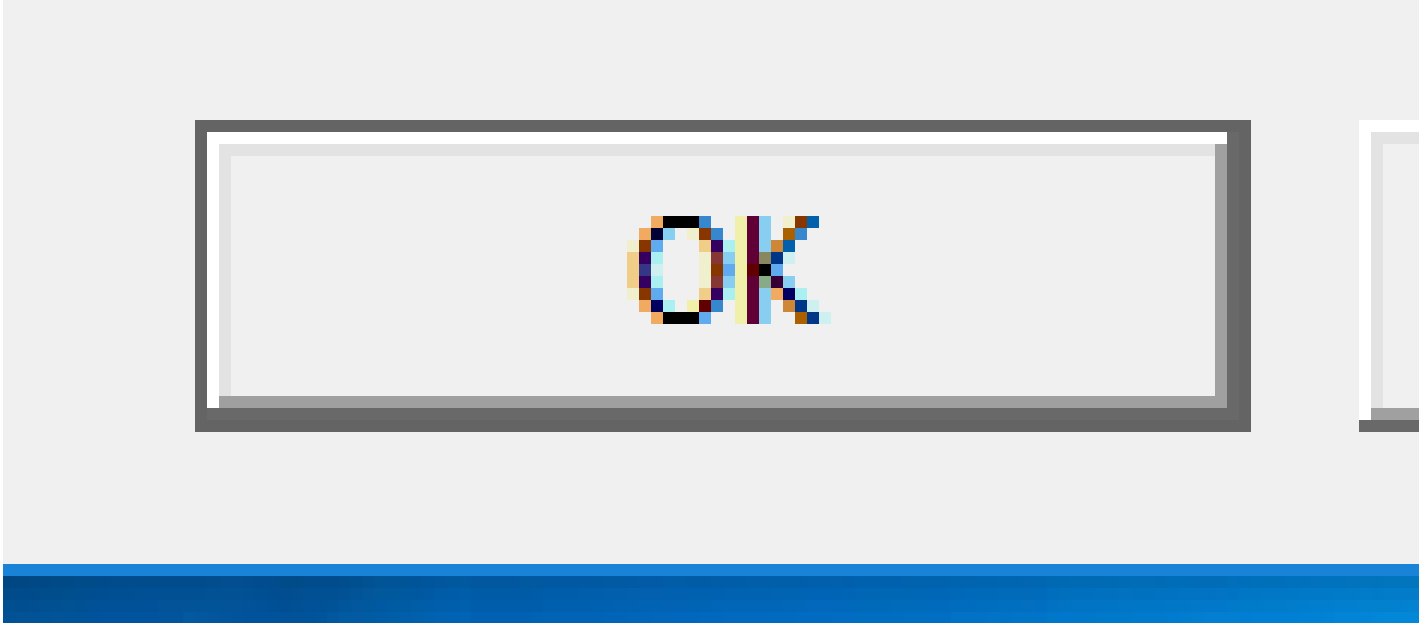


Your Advisor security definitions are up-to-date.

(Current version is 2016.8.24.1)

OK

Cancel



OK

Belarc Analysis

Checking for missing security updates.

28%



BELARC Advisor

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[Security Advisor for Android](#)
[Your Privacy](#)

System Security Status

Security Benchmark Score



Available only for Windows 7, Vista, and XP Pro

Virus Protection



Up-to-date

Security Updates



1 missing

Computer Profile Summary

Computer Name: DESKTOP-8TK656G (in WORKGROUP)

Profile Date: Tuesday, August 30, 2016 6:38:55 PM

Advisor Version: 8.5c

Windows Logon: testuser

In page Links:

[Try BelManage, the Enterprise version of the Belarc Advisor](#)

[Software Licenses](#)
[Software Versions & Usage](#)

Operating System

Windows 10 Home (x64) Version 1607 (build 14393.0)

Install Language: English (United States)

System Locale: English (United States)

System Model

VMware, Inc. VMware7,1

System Serial Number: VMware-56 4d a2 32 e7 e4

c1 da-b4 30 c0 e7 7d 4f f3 45

Enclosure Type: Other

Manage all your software licenses...
Try BelManage, the Enterprise version of the Belarc Advisor

Software Licenses [\[Back to Top\]](#)

Belarc - Advisor	410e9ab4
Microsoft - Internet Explorer	00326-10000-00000-AA118 (Key: YTMG3-N6DKC-DKB77-7M9GH-8HVX7)
Microsoft - PowerShell	89383-100-0001260-04309
Microsoft - Windows 10 Home (x64)	00326-10000-00000-AA118 (Key: YTMG3-N6DKC-DKB77-7M9GH-8HVX7)

Find unused software and reduce licensing costs...
Try BelManage, the Enterprise version of the Belarc Advisor

Software Versions & Usage (mouse over **i** for details, click **i** for location) [\[Back to Top\]](#)

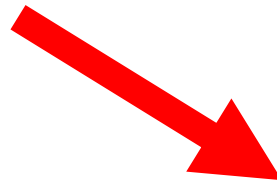
i Adobe Systems - Shockwave Flash version 22.0.0.209 (32/64-bit)	i Microsoft - SmartScreen version 1000.14393.0.0
i Assigned by your organization - Work or school account version 1000.14393.0.0	i Microsoft - Sticky Notes version 1.1.24.0 (64-bit)
i Belarc - Advisor version 8.5c	i Microsoft - Store version 11607.1001.51.0 (64-bit)
i GAMELOFT - Asphalt 8: Airborne version 2.6.0.6	i Microsoft - Store Purchase App version 1.0.45.0 (64-bit)
i king - Candy Crush Soda Saga version 1.68.500.0	i Microsoft - Windows Alarms & Clock version 10.1608.2312.0 (64-bit)
i Microsoft - .NET Framework version 4.6.1586.0	i Microsoft - Windows Calculator version 10.1608.2213.0 (64-bit)
i Microsoft - 3D Builder version 11.1.9.0 (64-bit)	i Microsoft - Windows Camera version 2016.816.20.0 (64-bit)
i Microsoft - Antimalware Service Executable version 4.10.14393.0 (64-bit)	i Microsoft - Windows Default Lock Screen version 10.0.14393.0
i Microsoft - App Installer version 1.0.2181.0 (64-bit)	i Microsoft - Windows Hello Setup version
i Microsoft - Connect version 10.0.14393.0	

Microsoft - Windows 10 Home (x64)

00326-10000-00000-AA118 (Key: YTMG3-N6DKC-DKB77-7M9GH-8HVX7)

Microsoft - Windows 10 Home (x64)

When Windows 10 is activated with a "Digital License", a generic placeholder product key is stored in the Windows registry



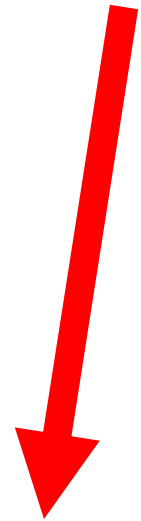
00326-10000-00000-AA118 (Key: YTMG3-N6DKC-DKB77-7M9GH-8HVX7)

DETAILS OF "DIGITAL LICENSE " ACTIVATION (continued)

- When you use a Windows 7, 8, or 8.1 product key to activate Windows 10 or 11 successfully, Microsoft's activation servers actually store the UUID of the motherboard and the edition of Windows 10 or 11 (Home or Pro)

Edition Windows 10 Home

Activation Windows is activated with a digital license
[Learn more](#)

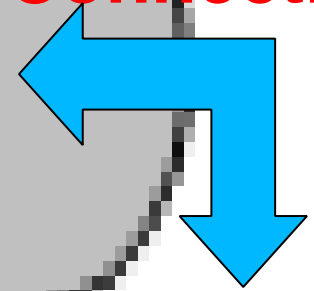


" DIGITAL LICENSE" ACTIVATION

**Activation Servers Operated by
Microsoft:**

**UUID of your motherboard,
edition (Windows 10 Home,
Windows 10 Pro,
Windows 11 Home, or Windows 11
Pro),
and
optionally, your Microsoft
account's email address if you link
your digital license to a Microsoft
Account**

**Internet
Connection**



**Activated
"Windows 10"**

" DIGITAL LICENSE" ACTIVATION

Activation Servers Operated by Microsoft:

**UUID of motherboard,
edition (Windows 10 Home, Windows
10 Pro, Windows 11 Home, or
Windows 11 Pro),
and optionally, your Microsoft
account's email address if you link
your digital license to a Microsoft
Account**

DETAILS OF "PRODUCT KEY" ACTIVATION

- "Product Key" activation is the original method of activating "Windows.." .
- A 25-character :Product Key" is provided inside each retail copy of Windows 10 or 11 that you purchase.

DETAILS OF "PRODUCT KEY" ACTIVATION (continued)

- "Product Key" activation occurs when you purchase and install a retail copy of Windows 10 or 11 and you use a "Product Key" to activate a copy of Windows 10 or 11

DETAILS OF "PRODUCT KEY" ACTIVATION (continued)

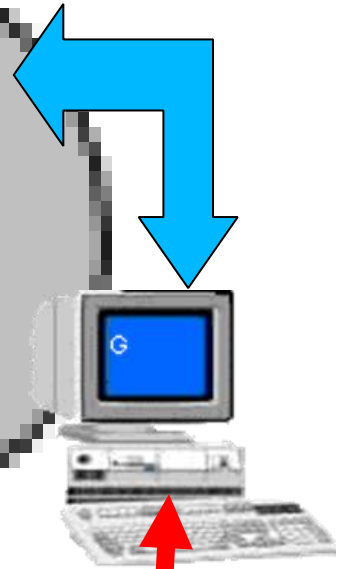
- When you purchase a copy of Windows 10 or 11 and you use it to either upgrade from any prior version of "Windows.." OR to install into a blank hard drive, Microsoft's activation servers actually store :
UUID of the motherboard and
the edition of Windows 10 or 11 (Home or Pro),

"PRODUCT KEY" ACTIVATION

Microsoft's Activation Servers

**UUID of motherboard,
edition (Windows 10 Home,
Windows 10 Pro, Windows 11
Home, or Windows 11 Pro)**

**Internet
Connection**



**Activated
"Windows
10"**

" PRODUCT KEY" ACTIVATION

Microsoft's Activation Servers

**UUID of motherboard,
edition (Windows 10 Home or
Windows 10 Pro or Windows 11
Home or "Windows 11 Pro")**

DIFFERENCES BETWEEN "DIGITAL LICENSE" AND "PRODUCT KEY" ACTIVATION

- There are is only one difference between "Digital License" and "Product Key" activation:

DIFFERENCES BETWEEN "DIGITAL LICENSE" AND "PRODUCT KEY" ACTIVATION (continued)

- DIFFERENCE:

In "Product Key" activation with a "Product Key " that is purchased from the "Retail" distribution channel, the 25-character "Windows 10 Product Key" (that you purchased) is stored up in the Windows registry inside your computer (instead of a placeholder key).

"DIGITAL LICENSE" ACTIVATION

**Activation Servers Operated by Microsoft:
UUID of motherboard,**

**edition (Windows 10 Home or Windows 10
Pro or Windows 11 Home or Windows 11
Pro),**

**status of Windows.. (trial, full, or "Insider
Preview")**

and

**your Microsoft account's email address
username if you have linked your
"Microsoft Account"
to the digital license**

LINKING YOUR "MICROSOFT ACCOUNT" TO A "DIGITAL LICENSE" ACTIVATION (continued)

- If your "Microsoft account" is linked to your "Digital License" activation, you can then use the "Activation Troubleshooter" in Windows 10 or 11 when you change your computer's motherboard and also resolve other activation issues.

LINKING YOUR "MICROSOFT ACCOUNT" TO A "DIGITAL LICENSE" ACTIVATION (continued)

- After you "link your digital license to your Microsoft account", the email address that you use to log into your Microsoft account will be stored up at Microsoft's activation servers along with the other information that corresponds to your "Digital License".

LINKING YOUR "MICROSOFT ACCOUNT" TO A "WINDOWS 10" ACTIVATION (continued)

- Prior to making your digital license linked to your Microsoft Account, your digital license will look like this up at Microsoft's activation servers:

Microsoft's Activation Servers

**UUID of motherboard,
edition (Windows 10 Home,
Windows 10 Pro, Windows 11
Home, or Windows 11 Pro"
status (trial, full, or "Insider
Preview"),**

LINKING YOUR "MICROSOFT ACCOUNT" TO A "WINDOWS 10" ACTIVATION (continued)

- After making your digital license linked to your Microsoft Account, your digital license will look like this:

"DIGITAL LICENSE" ACTIVATION

Microsoft's Activation Servers

**UUID of motherboard,
edition (Windows 10 Home,
Windows 10 Pro,
Windows 11 Home, or "Windows 11
Pro),
status (trial, full, or "Insider Preview")
and
your linked Microsoft
account's
email address or username**

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

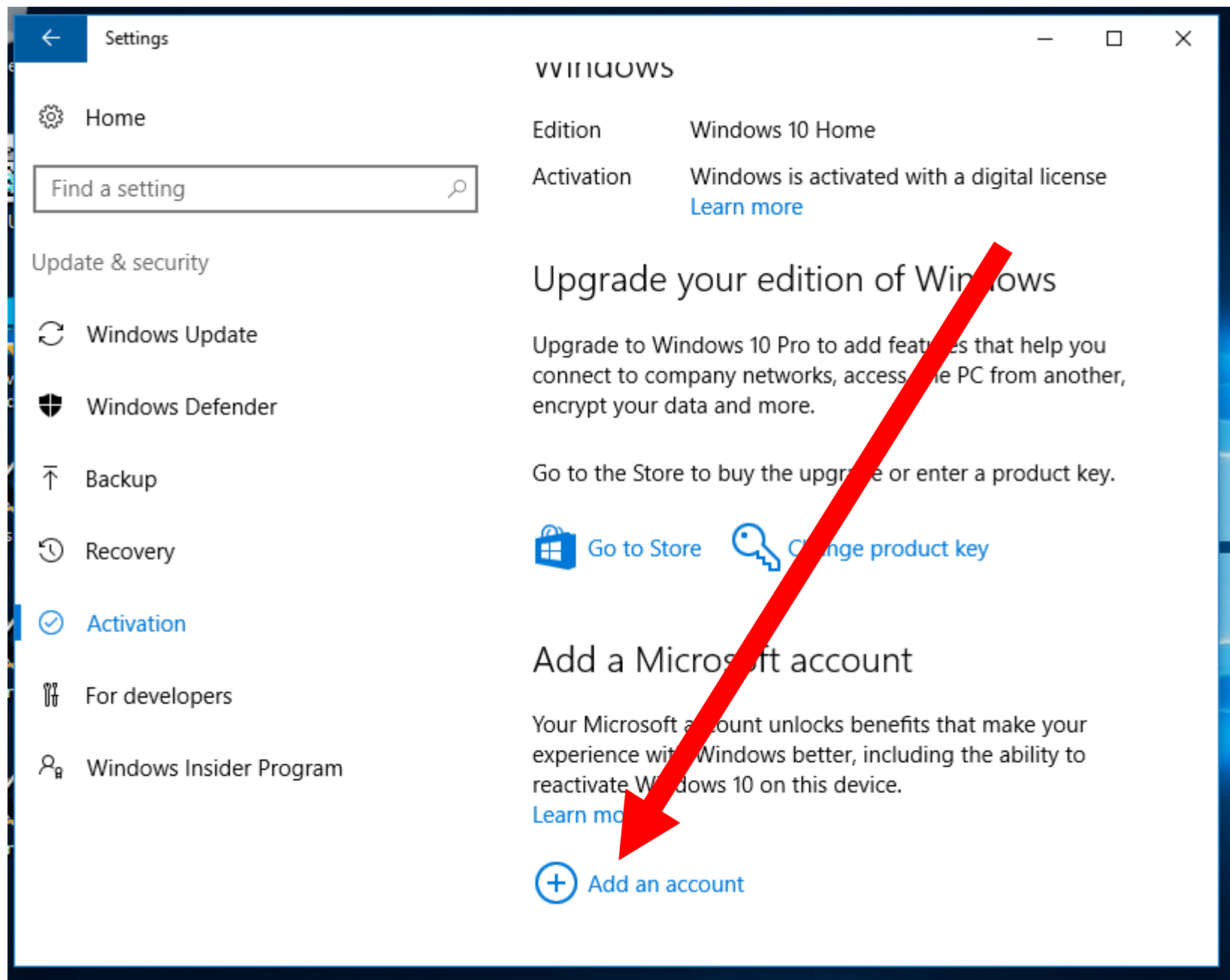
- There are two ways for you to link your "Digital License" to a "Microsoft Account":

Method 1: "Add a Microsoft Account" from the "Activation" screen in "Settings"

Method 2: Run the "Sign in with a Microsoft Account instead" from "Accounts" in "Settings"

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF OF WINDOWS 10 OR 11 (continued)

- Details of Method 1:
Click on the "Settings" gear icon.
Click on "Update & security".
Click on "Activation".
Click on "Add an account".



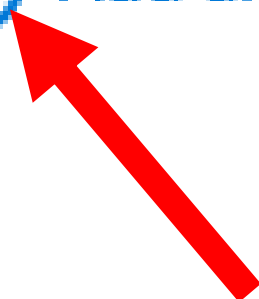
Add a Microsoft account

Your Microsoft account unlocks benefits that make your experience with Windows better, including the ability to reactivate Windows 10 on this device.

[Learn more](#)



Add an account



LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

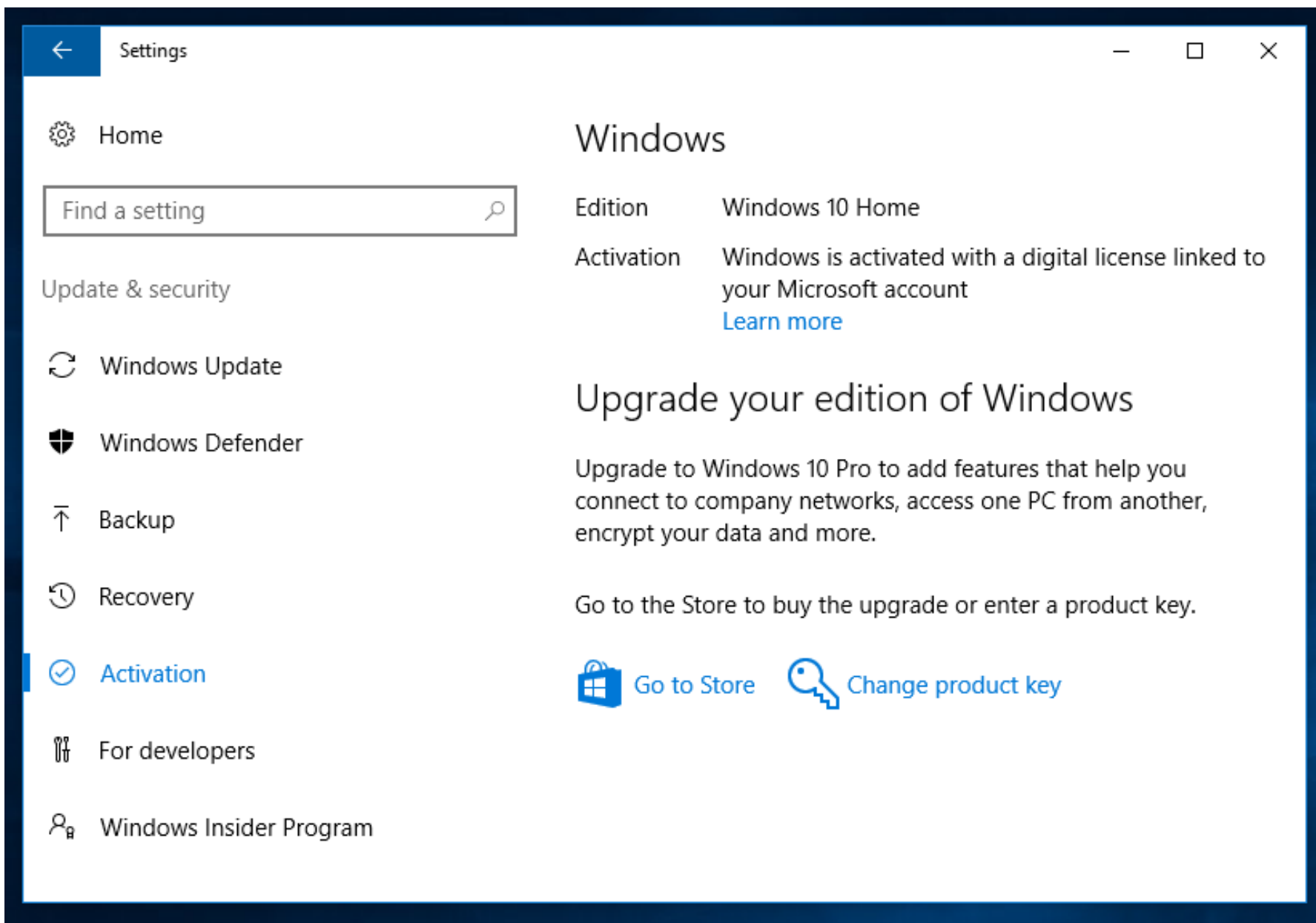
- Details of Method 2:
Click on the "Settings" gear icon.
Click on "Accounts".
Click on "Sign in with a Microsoft
account instead".
etc.

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF OF WINDOWS 10 OR 11 (continued)

- After you link your "Microsoft Account" to the activation process, your "Activation" screen will say
"..linked to your Microsoft Account."

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

- If you are running "Windows 10 Home", it looks like this:



Edition Windows 10 Home

Activation Windows is activated with a digital license linked to your Microsoft account

[Learn more](#)

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

- After you link your "Microsoft Account" to the activation process, if you originally activated Windows 10 or 11 with a "Product Key", the registry of "Windows 10" will still have your original 25-character "Product Key" in it as determined by software programs such as "Belarc Advisor", if your key is a "Retail" channel key.

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11" (continued)

- After you link your "Microsoft Account" to the activation process, Windows 10 or 11 will start requiring you to log into your computer with your "Microsoft Account" (if you were logging into your computer with a "local account" prior to the linking process).

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

- If you wish to go back to logging into Windows 10 or 11 with a "local account" after "Adding a Microsoft Account" to the activation of "Windows 10", go to "Settings", "Accounts", "Sign in with a local account", etc.

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

- If you go back to logging into Windows 10 or 11 with a local account, Microsoft's activation servers will no longer store your Microsoft account's email address so you can no longer use the "Activation Troubleshooter" to re-activate if you change the motherboard of the computer₁₂₂

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

- The process of linking a Microsoft Account to a copy of Windows 10 or 11 that was activated by means of a "Product key" converts the activation to a "Digital License" even if you then revert back to logging into Windows 10 or 11 with a "local account".

IF YOU REVERT BACK TO LOGGING IN WITH A "LOCAL ACCOUNT", MICROSOFT'S ACTIVATION SERVERS WILL STOP STORING YOUR MICROSOFT ACCOUNT'S EMAIL ADDRESS:

**Activation Servers Operated by
Microsoft:**

DIGITAL LICENSE RECORD:

**UUID of motherboard,
edition (Win10 Home, Win10 Pro,
Win11 Home, or Win11 Pro),
status (trial, full, or "Insider
Preview")**

**& ~~your Microsoft account's email~~
~~address (optional)~~**

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

- See <https://support.microsoft.com/en-us/help/20530/windows-10-reactivating-after-hardware-change>

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

- The process of linking your "Microsoft Account" and then continuing or starting to log into your copy of Windows 10 or 11 is only important if you plan to change the motherboard of your computer soon.

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF WINDOWS 10 OR 11 (continued)

- We recommend linking your "Microsoft Account" and then going back to logging in with a local account in order to convert your "product key" activation to a "digital license" activation in order to mitigate the privacy issues of logging into Windows 10 or 11 with a "Microsoft Account".

TO GET THE UUID OF A MOTHERBOARD

- Many not-free diagnostic software programs can give you the UUID of a motherboard
- However, to get the UUID of a motherboard for free: open a "Windows Powershell" or a "Command Prompt" window and copy one of the following lines of code into it.

Then press the <Enter> key once:


```
wmic csproduct get uuid
```

```
wmic path win32_computersystemproduct  
get uuid
```

```
get-wmiobject
```

```
Win32_ComputerSystemProduct | Select-  
Object -ExpandProperty UUID
```

```
(get-wmiobject
```

```
Win32_ComputerSystemProduct).UUID
```

WHEN YOU INSTALL OR UPGRADE FROM FROM AN EARLIER VERSION OF "WINDOWS.."

- If you use a Windows 10 or 11 installation media DVD to either install onto a blank hard drive or to upgrade from Windows 7, 8, or 8.1,
AND you put in an invalid Windows 7, 8, 8.1, or 10 "Product Key", the installation process will continue but you will have an "not activated" copy of Windows 10.. unless a digital license already exists for the UUID of the motherboard of the computer.

WINDOWS 10 OR 11 COMPUTER

Motherboard's UUID is stored in non-volatile memory (for all desktop and laptop computers)

If this is a OEM_DM computer that is built by a large computer manufacturer, then an "OEM Product Key" is stored in the "MSDM" table of the "ACPI" of the motherboard

**Hard drive stores the Windows "Registry" in "hive" folders and in RAM:
a "Placeholder Product Key" is stored in the "Windows Registry":**

WHEN YOU INSTALL OR UPGRADE FROM FROM AN EARLIER VERSION OF "WINDOWS.." (continued)

- If a large computer manufacturer built the computer, the computer manufacturer will place a unique, single-use "OEM Product Key" in the MSDM table in the motherboard of the computer
AND the computer manufacturer will place a generic administrative product key in the Windows "Registry" in the hard drive of the computer

WHEN YOU INSTALL OR UPGRADE FROM FROM AN EARLIER VERSION OF "WINDOWS.." (continued)

- The generic administrative product key in the Windows "Registry" in the hard drive of the computer is not unique:
The computer manufacturer will re-use this generic administrative product key thousands of the computers that it installs "Windows 10" into.

WHEN YOU INSTALL OR UPGRADE FROM FROM AN EARLIER VERSION OF "WINDOWS.." (continued)

- If you buy and install a "Retail" "Product Key Channel" copy of "Windows 10", the actual 25-character "product key" that you buy and then use will be stored in the Windows "Registry"
- If you buy and install a "OEM_.." copy of Windows 10 or 11, a generic, administrative, placeholder 25-character product key will be stored in the Windows "Registry"

WHEN YOU INSTALL OR UPGRADE FROM FROM AN EARLIER VERSION OF "WINDOWS.." (continued)

- To determine if a 25-character "product key" that is stored in the Windows "Registry" is a "Retail" product key or a generic, administrative, placeholder product key, search for it in the Google or Bing search engine since all generic and manufacturer's generic product keys are published on the Internet

IF YOU ACQUIRE A USED WINDOWS 10 OR 11 COMPUTER

- If you acquire a used Windows 10 or 11 computer that does not have a hard drive, you can install a hard drive into it and then install using "installation media" DVD's for "Windows 10 Home", "Windows 10 Pro", "Windows 11 Home" or "Windows 11 Pro" into the computer to determine if the computer has any existing "digital licenses" up in Microsoft's activation servers:
Do not buy a new copy of Windows 10 or 11 until you determine this!

Activation Servers Operated by Microsoft:

"PRODUCT KEY" DATABASE

**UUID of motherboard of your
newly-acquired, used computer,
edition = "Home"**

**UUID of motherboard of your
newly-acquired, used computer,
edition = "Home"**

IF YOU ACQUIRE A USED WINDOWS 10 OR 11 COMPUTER (continued)

- If you buy a new copy of Windows 10 or Windows 11 with a new "Product Key" and the computer already has a "Digital License", AND then you use the new "Product Key", Microsoft has then managed to sell the same "digital license" twice since they only store one "digital license" for a specific motherboard "UUID":
For a specific edition and bitness of Windows 10 or 11, their activation servers can only store one "digital license".

IF YOU USE A "WINDOWS 7 PRO" KEY TO
ACTIVATE OR RE-ACTIVATE A
"WINDOWS 10 HOME" COMPUTER..

- Then your "Windows 10 Home" computer will upgrade itself to "Windows 10 Pro". However, if you use key.vbs or "Belarc Advisor" to view the 25-character "activation key" that is stored in the "Registry" will not have the "Windows 7 Pro" key stored. Instead a default "placeholder" key for "Windows 10 Pro" will be stored inside the "Registry" of the "Windows 10 Pro" operating system

DIFFERENCES BETWEEN "WINDOWS 7", AND WINDOWS 10 OR 11

- In "Windows 7", the 25-character "activation key" is stored inside the "Registry" and you can use key.vbs or "Belarc Advisor" to view it

DIFFERENCES BETWEEN "WINDOWS 7", AND WINDOWS 10 OR 11 (continued)

- In Windows 10 or 11, the 25-character "activation key" that is stored in the "Registry" is a "placeholder key" that used for hundreds of thousands of computers. While you can still view this "placeholder key" using key.vbs or "Belarc Advisor", this "placeholder key" is **of no use to you** for re-installing the "Windows 10" operating system,

REFERENCES

- Placeholder keys for the additional flavors of "Windows 10" can also be found at <https://winaero.com/blog/generic-key-to-install-windows-10-rtm/> However, ignore their advice to use these keys during the installation or upgrade process.

REFERENCES (continued)

- Placeholder keys for the additional flavors of "Windows 10" can also be found at <https://www.tenforums.com/tutorials/95922-generic-product-keys-install-windows-10-editions.html>

REFERENCES (continued)

- Placeholder keys for the "Windows 11" can be found at <https://www.elevenforum.com/t/generic-product-keys-to-install-or-upgrade-windows-11-editions.3713/>

REFERENCES (continued)

- <https://www.elevenforum.com/t/windows-10-and-windows-11-digital-licencing-explained.14051/>