

"WINDOWS 11.." AND "..10.." ACTIVATION

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TuCS COMPUTER
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An International
Association of Technology
& Computer User Groups

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Notes”**

SUMMARY

If you take an existing "Windows 10" computer and upgrade it for free, your copy of "Windows 10" will be activated with a "Digital License".

If you purchase a retail copy of "Windows 11" and use it to install or upgrade a computer, you will be activating with a 25-character "Windows 10 Product Key".

TOPICS

- Microsoft's Activation Servers
- Do Not Comply With All Initial Requests for A Product Key (For "Windows 11" and "Windows 10")
- 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
- "Anniversary Update" Converts "Product Key" to "Digital License"
- Linking Your "Microsoft Account" to a "Digital License" Activation

MICROSOFT'S ACTIVATION SERVERS

- The activation process for most of Microsoft's software products including "Windows.." depends on their server farms:

MICROSOFT'S ACTIVATION SERVERS (continued)

- 1+ million servers for Microsoft services such as "OneDrive", "Bing", "Outlook.com", "Skype", "Xbox", according to Steve Ballmer. See <https://www.datacenters.com/microsoft-data-center-locations>



An aerial view of the Microsoft data center in Quincy, Washington

After years of operating in third-party facilities, **Microsoft** began building its own data centers in 2007 as it ramped up its battle with Google in the online services arena. Its first in-house project was a huge data center in the small Washington town of Quincy, where Microsoft invested \$550 million in building a 470,000 square foot data center supported by hydro-electric power from nearby dams on the Columbia River. A year later it unveiled a



An aerial view of the 470,000 square foot Microsoft data center in San Antonio.

6. MICROSOFT DATA CENTER, DUBLIN, 550,000 SF

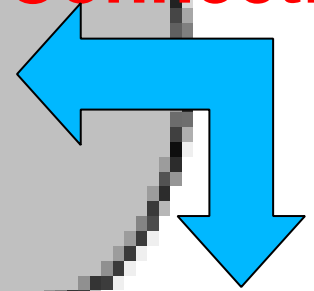


5. MICROSOFT CHICAGO DATA CENTER, Chicago 700,000 SF



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

**Internet
Connection**



**Activated
"Windows.."**

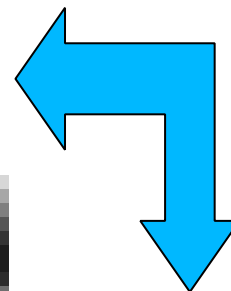
MICROSOFT'S ACTIVATION SERVERS (continued)

- The activation record for your specific Windows 10 or Windows 11 computer is represented by the red rectangle in the following diagram:

Microsoft's Activation Servers

UUID of your motherboard
Product Name (Win.10 or Win. 11)
Edition ("Home" or "Pro"
or "Education" or "Enterprise"),
Product Bitness (64 or 32)
Date or Date Code
Status (full, trial, or Insider Preview)
and
optionally,
your Microsoft account's email
address/username if you have "linked"
the 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 LICENSES DATABASE

"Product Key" DATABASE,

Microsoft's Activation Servers

UUID of your motherboard,
Product name ("Windows 11" or "Windows 10")
Edition ("Home" or "Pro" or "Education" or "Enterprise"),
Bitness (64bit or 32bit, for Windows 10 only),
Date or date code
Status (Full, trial, or Insider Preview)
and Optionally, your Microsoft account's email address if
you linked it to your Microsoft Account

"Product Key" (25 characters)
Product name ("Windows 11" or "Windows 10")
Edition ("Home" or "Pro" or "Education"
or "Enterprise"),
Bitness (64bit or 32bit), and
Number of remaining activations for product key

MICROSOFT'S ACTIVATION SERVERS (continued)

- Microsoft states that they never store the 25-character product key and the UUID of a computer's motherboard in the same database record

DO NOT COMPLY WITH ALL INITIAL REQUESTS FOR A PRODUCT KEY IF AND WHEN YOU ARE INSTALLING IN "WINDOWS 11.." OR "WINDOWS 10.."

- When installing or upgrading to "Windows 11.." or "Windows 10..", 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 11.." OR "WINDOWS 10.." (continued)

- Unlike previous "Windows.." products, "Windows 11" and "Windows 10" are both kinder and gentler, even if you do not activate it.

DO NOT COMPLY WITH ALL INITIAL
REQUESTS FOR A PRODUCT KEY IN
"WINDOWS 11" OR "WINDOWS 10.."

(continued)

- Unlike previous "Windows.." products, "Windows 11" or "Windows 10" will both 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 11.." OR "WINDOWS 10.."

(continued)

- After installing or upgrading to "Windows 11" or "Windows 10", if you need to activate it with a 25-character "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.." (continued)

- Unlike previous "Windows.." products, "Windows 11" and "Windows 10" 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 11" or "Windows 10" is not activated. Unactivated copies of "Windows 11" and "Windows 10" 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.

Microsoft's Activation Servers

DIGITAL LICENSES DATABASE

"Product Key" DATABASE

Microsoft's Activation Servers

DIGITAL LICENSES DATABASE:

ACTIVATION #1 WITH DATE CODE

ACTIVATION #2 WITH DATE CODE

ACTIVATION #3 WITH DATE CODE

ACTIVATION #4 WITH DATE CODE

ACTIVATION #5 WITH DATE CODE

ACTIVATION #6 WITH DATE CODE

ACTIVATION #7 WITH DATE CODE

"Product Key" DATABASE

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

- Reason 2:

If you use a newly-purchased Retail key for "Windows 11" or "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 11" or "Windows 10" 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 11" or "Windows 10.." into a blank hard drive or if you upgrade a copy of "Windows 7", "Windows 8", or "Windows 8.1", ignore any and all requests to enter in a 25-character activation key:

TWO WAYS TO ACTIVATE "WINDOWS 11.." OR "WINDOWS 10"

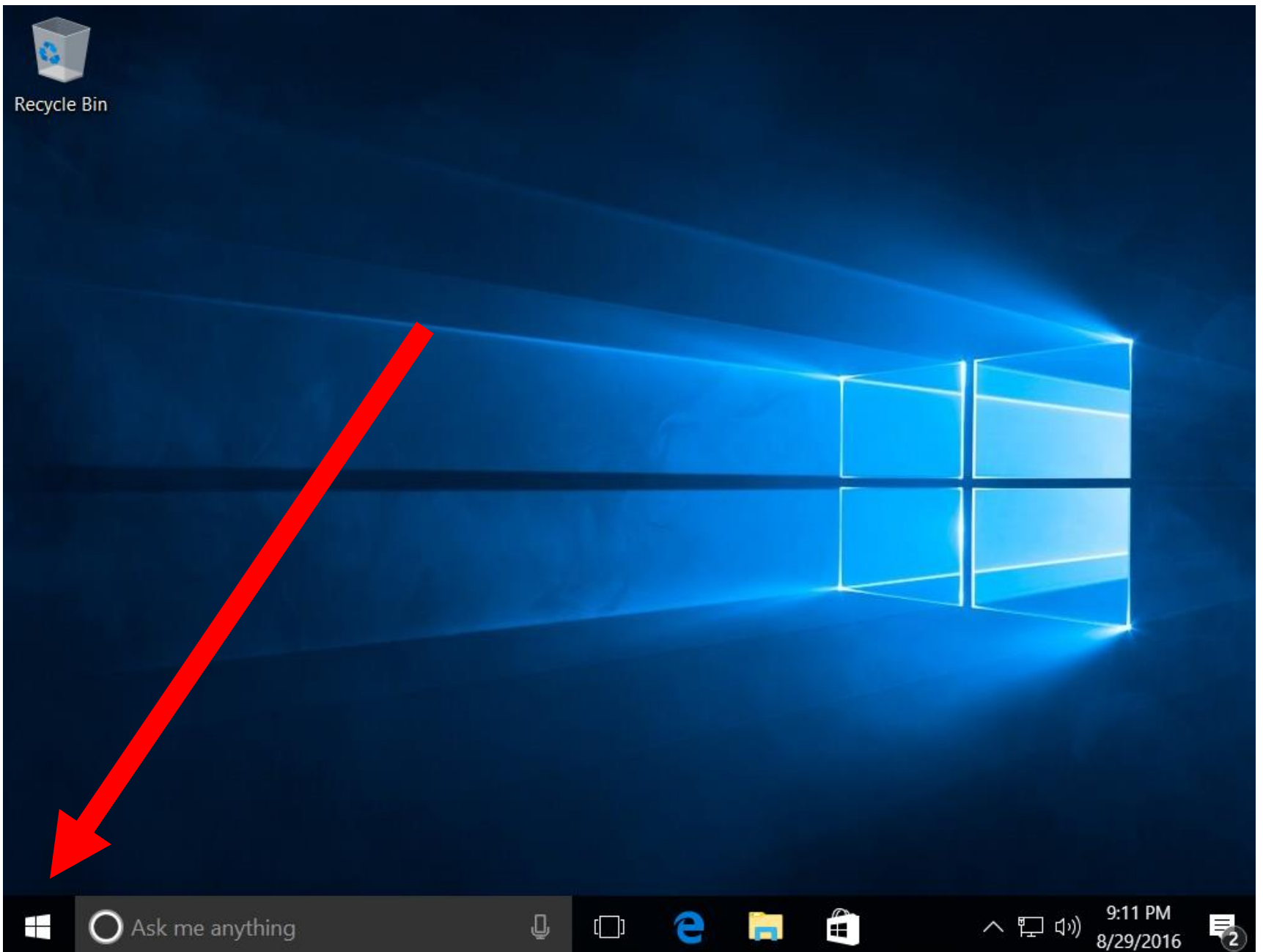
- Method 1:
"Digital License" Method
(No "Windows 10" product key is used to activate "Windows 11" or "Windows 11" if you are upgrading from the previous version of "Windows..")
- Method 2:
"Product Key" Method
(A 25-character "Windows 10 Product Key" is used.)

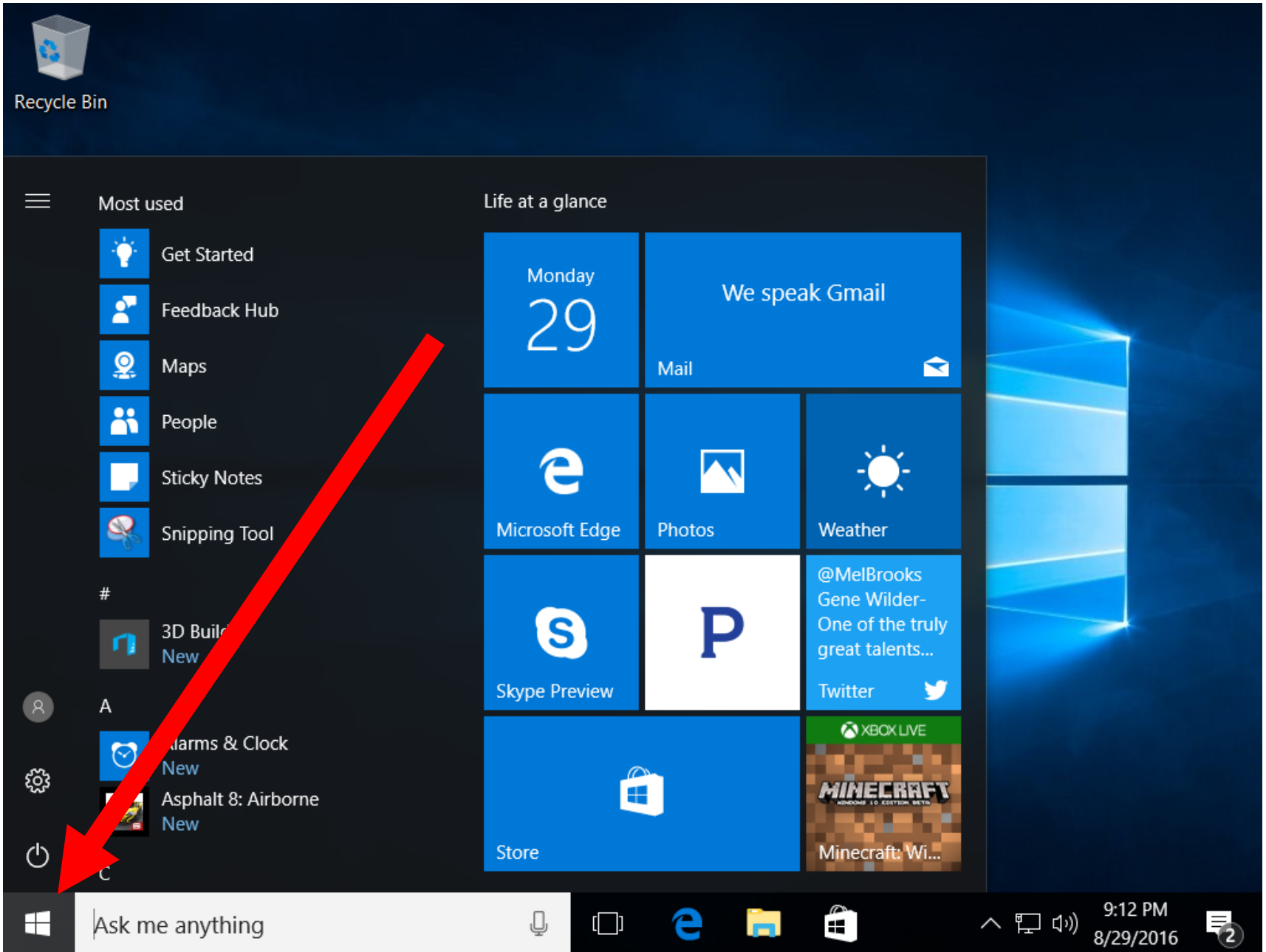
TWO WAYS TO ACTIVATE "WINDOWS 11.." OR "WINDOWS 10" (continued)

- 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 11" OR "WINDOWS 10" COMPUTER?

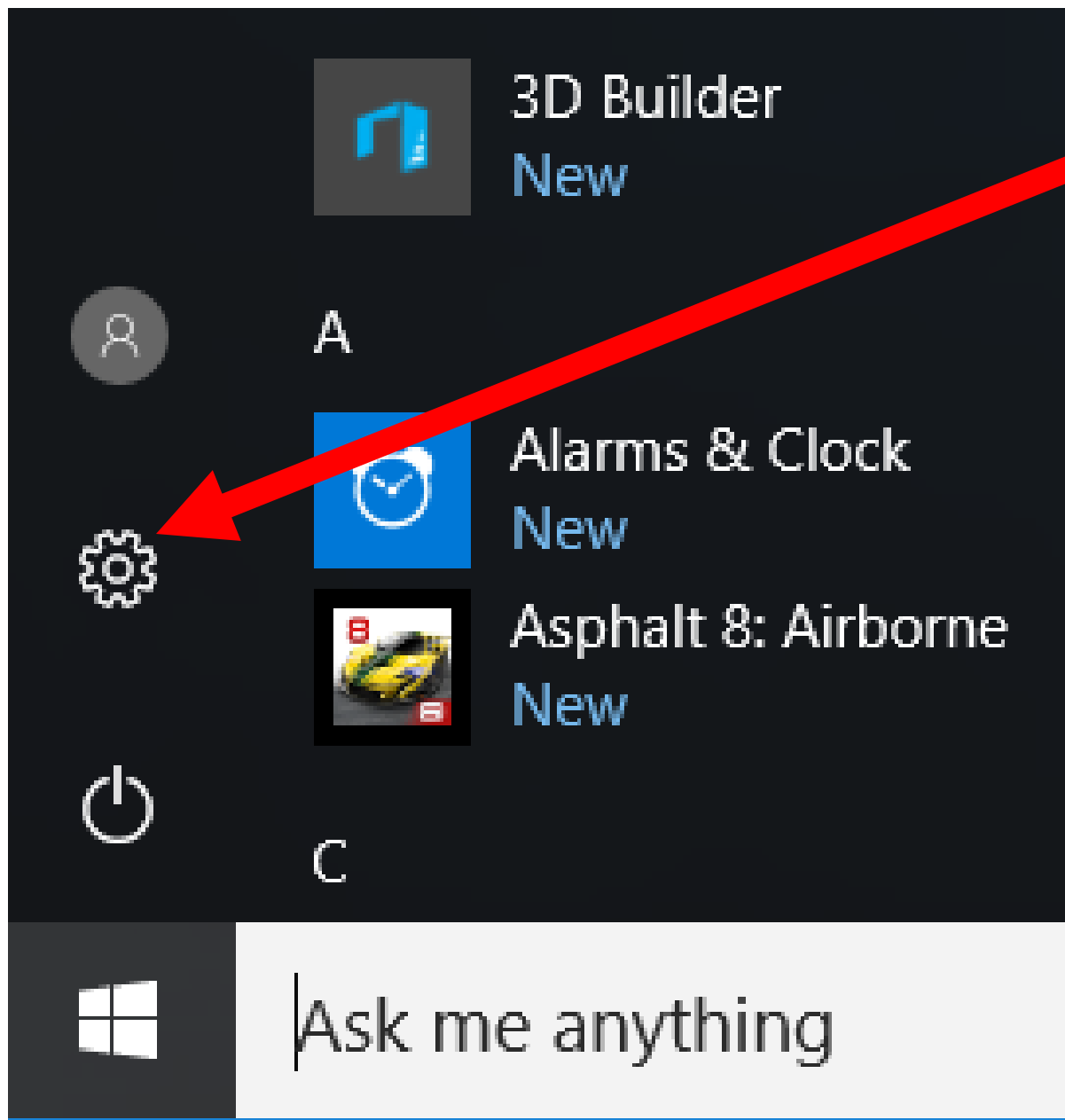
- Step 1:
Click on the "Start" button.

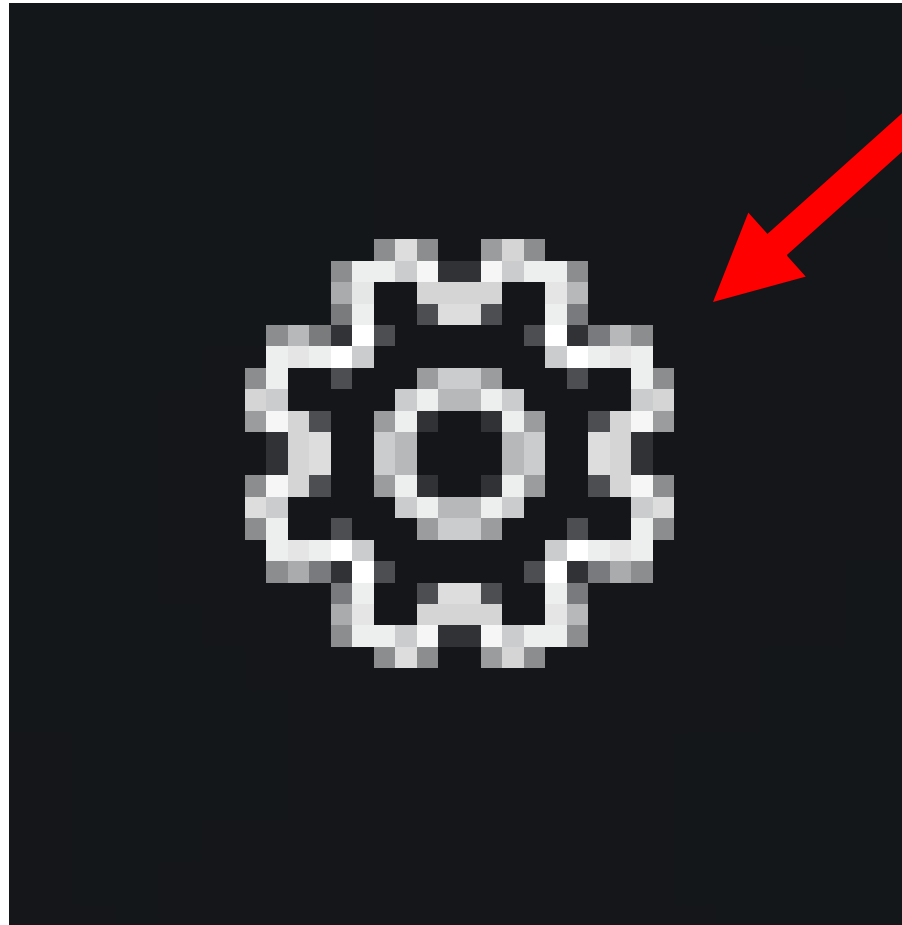




WHICH METHOD OF ACTIVATION WAS USED IN MY "WINDOWS 11" OR "WINDOWS 10" COMPUTER? (continued)

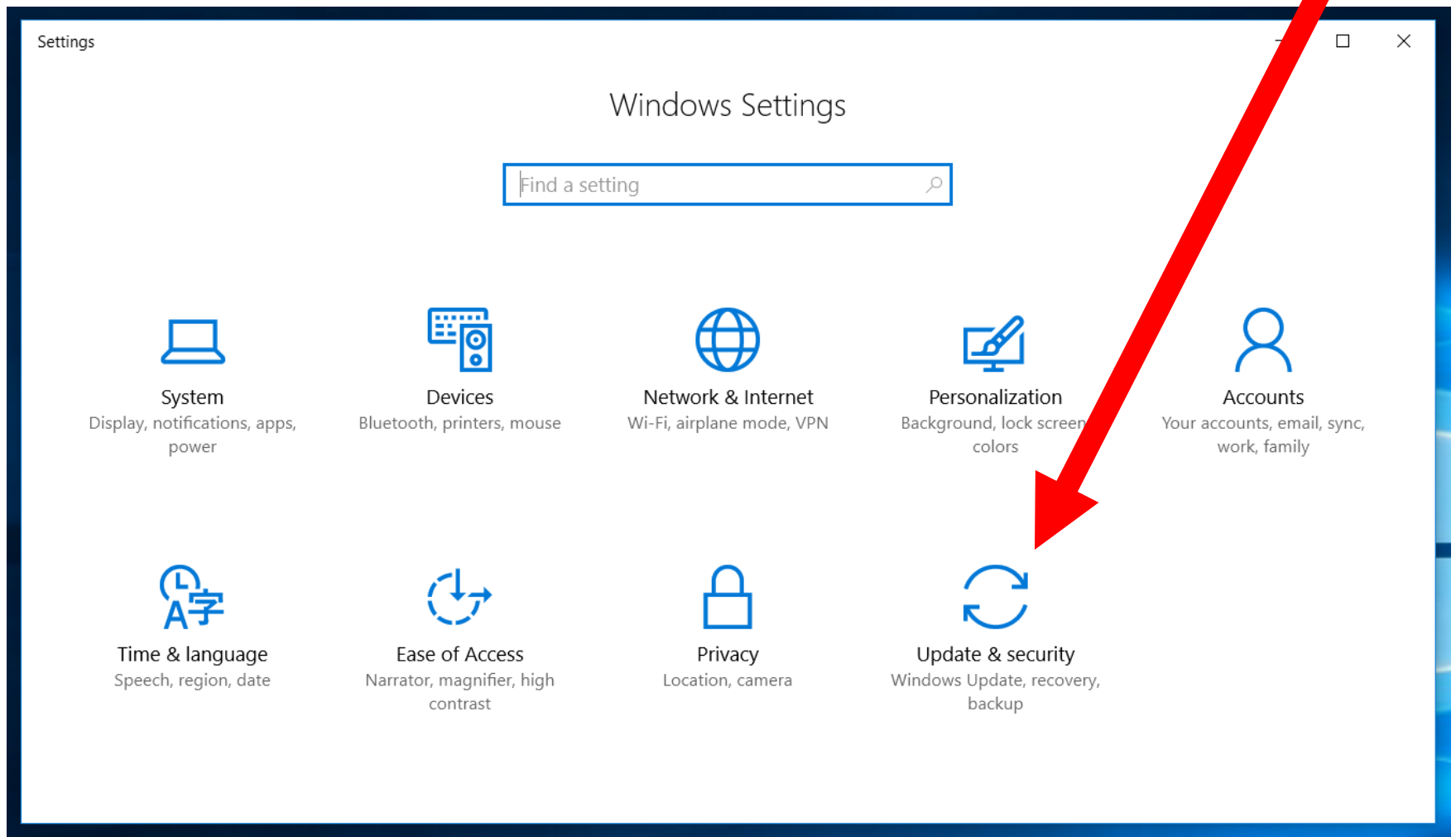
- Step 2:
Click on the "Settings" icon:





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

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

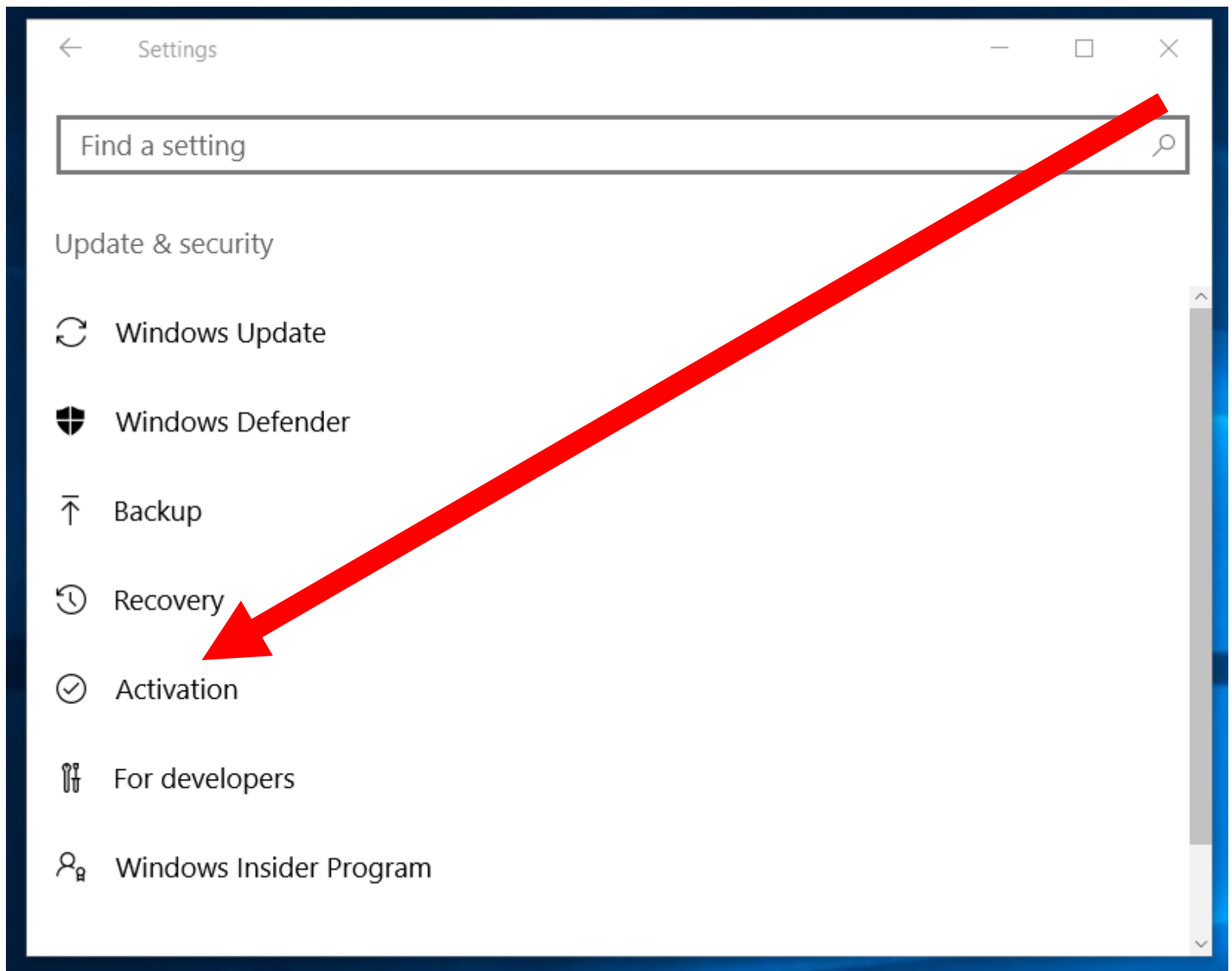


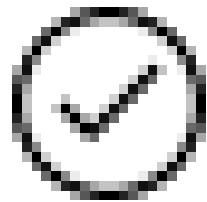


Update & security
Windows Update, recovery,
backup

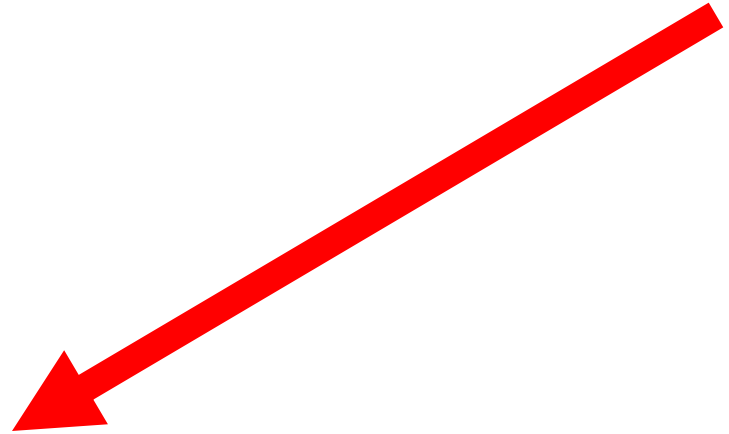
WHICH METHOD OF ACTIVATION WAS USED IN MY "WINDOWS 11" OR "WINDOWS 10" COMPUTER? (continued)

- Step 4:
Click on "Activation":





Activation



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

- If Windows 10 has 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

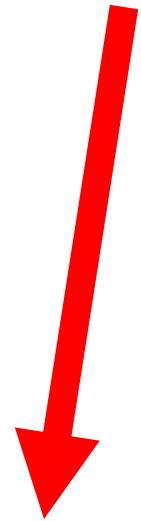
Your Microsoft account unlocks benefits that make your experience with Windows better, including the ability to reactivate Windows 10 on this device.

[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 11" OR "WINDOWS 10" COMPUTER? (continued)

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

Activation: Windows is activated
and

Product Key: xxxxxx-xxxxxx-xxxxxx..
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-KXXXXH

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 11" and "Windows 10"
are the first "Windows.." products
that can be activated by means of
a "Digital License"

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 its 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, the edition of "Windows 11" or "Windows 10" ("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
```

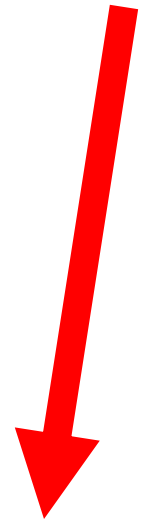
DETAILS OF "DIGITAL LICENSE "

ACTIVATION (continued)

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

Edition Windows 10 Home

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

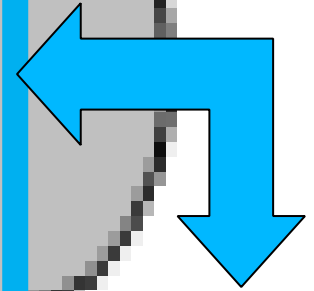


" DIGITAL LICENSE" ACTIVATION

Activation Servers Operated by
Microsoft:

UUID of your motherboard,
Product Name (Win. 11 or Win. 10)
Edition (Home or Pro),
Bitness (64 or 32 for W.10 only)
Date or Date code
and
optionally, your Microsoft
account's email address
if you link your license to a
Microsoft Account

Internet
Connection



Activated
"Windows.."

" DIGITAL LICENSE" ACTIVATION

Activation Servers Operated by Microsoft:

UUID of motherboard,

Product name (Win. 11 or Win. 10)

**Edition (Home or Pro
or Education or Enterprise),**

Bitness (64 or 32)

Date or Date code

**and optionally, your Microsoft account's
email address if you link your license to
a Microsoft Account**

DETAILS OF "PRODUCT KEY" ACTIVATION

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

DETAILS OF "PRODUCT KEY" ACTIVATION (continued)

- "Product Key" activation occurs when you purchase and install a retail copy of "Windows 11" or "Windows 10" and you use a 25-character "Product Key" to activate a copy of "Windows 11" or "Windows 10"

DETAILS OF "PRODUCT KEY" ACTIVATION (continued)

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

"PRODUCT KEY" ACTIVATION

Microsoft's Activation Servers

UUID of motherboard,
Product name ("Win.11" or
"Win.10")

edition (Home or Pro)

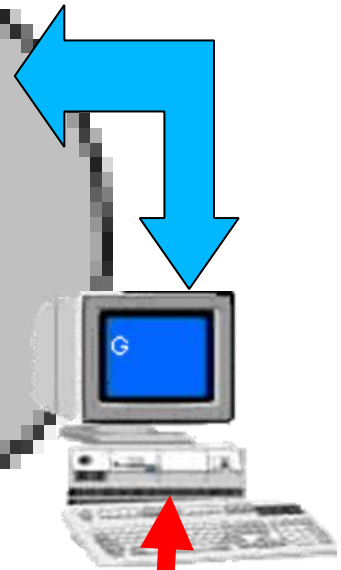
Bitness (64 bit or 32 bit)

Status (Full, trial, or Insider
Preview)

Date or date code

and optionally, your Microsoft
account's email address if you link
your license to a Microsoft

Internet
Connection



Activated
"Windows
11 or 10"

" PRODUCT KEY" ACTIVATION

Microsoft's Activation Servers

UUID of motherboard

**Product name ("Win.11" or "Win.10")
edition (= Home or Pro)**

**Bitness (64 bit or 32 bit for Windows
10 only)**

Status (Full, trial, or Insider Preview)

Date or date code

**and optionally, your Microsoft
account's email address if you link
your license to a Microsoft Account**

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 11 or 10 Product Key" (that you purchased) is temporarily stored up in the Windows registry inside your computer (instead of a placeholder key).

LINKING YOUR "MICROSOFT ACCOUNT" TO A "DIGITAL LICENSE" ACTIVATION

- If a copy of "Windows 10" has a been upgraded to or beyond the "Anniversary Update" (= "Version 1607") "Digital License" or any copy "Windows 11", you can link it to your "Microsoft Account".

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 11" or "Windows 10" when you change your computer's motherboard and also resolve other activation issues.

LINKING YOUR "MICROSOFT ACCOUNT" TO A "WINDOWS 10" 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:

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,
Product Name (=Win. 11 or Win.10)
and
edition (= Home or Pro),
status (= full, trial, or "Insider Preview")
date or date code
and
your linked Microsoft
account's
email address (optional)**

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF "WINDOWS 10 "

(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" (continued)

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

← 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 the PC from another, encrypt your data and more.

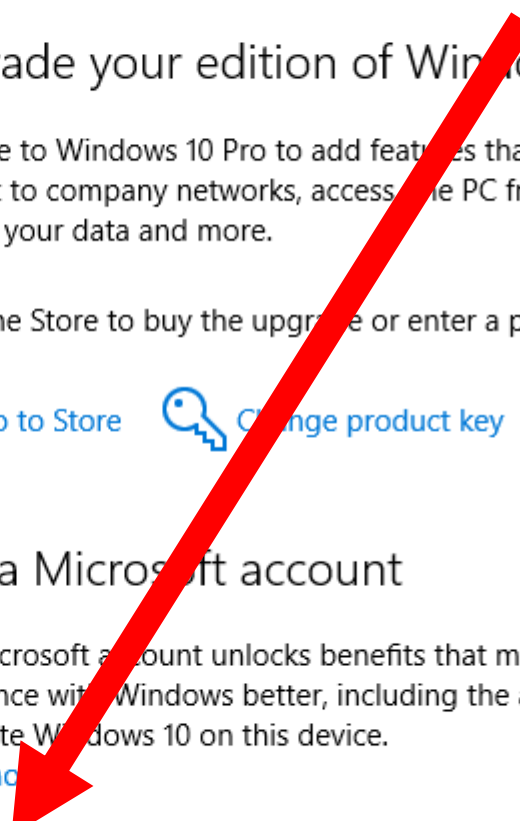
Go to the Store to buy the upgrade or enter a product key.

 [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](#)

 [Add an account](#)



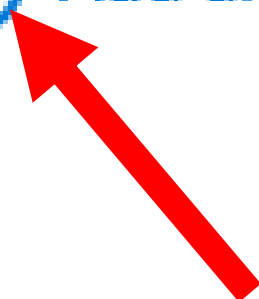
Add a Microsoft account

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" (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" (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 A THE ACTIVATION OF "WINDOWS 10" (continued)

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

←

Settings

—

□

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⚙️

Home

Find a setting

🔍

Update & security

🔄

Windows Update

🛡️

Windows Defender

↑

Backup

🕒

Recovery

✅

Activation

🛠️

For developers

👤

Windows Insider Program

Windows

Edition

Windows 10 Pro

Activation

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

[Learn more](#)

Update product key

To use a different product key on this device, select change product key.

🔑

[Change product key](#)

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Edition Windows 10 Pro

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

[Learn more](#)

←

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 linked to your Microsoft account

[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

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

- After you link your "Microsoft Account" to the activation process, if you originally activated "Windows 11" or "Windows 10" 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" (continued)

- After you link your "Microsoft Account" to the activation process, "Windows 10" 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" (continued)

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

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

- If you go back to logging into "Windows 11" or "Windows 10" with a local account, the 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 computer

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

- The process of linking a Microsoft Account to a copy of "Windows 11" or "Windows 10" 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 11" or "Windows 10" 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:

Product name (Win. 11 or Win. 10)

UUID of motherboard,

Edition (Home or Pro),

Status (trial, full, or "Insider Preview")

Date or date code

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

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

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

LINKING YOUR "MICROSOFT ACCOUNT" TO THE ACTIVATION OF "WINDOWS 11" OR "WINDOWS 10" (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 11" or "Windows 10" 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

WINDOWS 11.. OR ..10.. 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 a the "MSDM" table of the "ACPI" of the motherboard

Hard drive stores the Windows "Registry" in "hive" folders and in RAM

Windows.. Generic 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 usually 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 placeholder 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 11" or "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 11" or "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 11" or "Windows 10", 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 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.." COMPUTER

- If you acquire a used "Windows 11.." or "Windows 10.." computer that does not have a hard drive, you can install a hard drive into it and then install DVD's for "Windows 11 Home", "Windows 11" Pro", "Windows 10 Home", or "Windows 10 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.." until you determine this!

IF YOU ACQUIRE A USED "WINDOWS 11.." or "..10.." COMPUTER (continued)

- If you buy a new copy of "Windows 11" or "Windows 10.." with a new "Product Key" and the computer already has a "Digital License", 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 of "Windows 11", their activation servers can only store one "digital license".

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

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

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

- In "Windows 11" or "Windows 10", 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 11" or "Windows 11" operating system,

REFERENCES

- <http://www.makeuseof.com/tag/everything-know-windows-product-keys/>
- Older generic placeholder product keys that you will find in the Registry of free upgrades from Windows 7 and Windows 8.1 can be found at <https://www.maketecheasier.com/windows-10-activation-procedure/>

REFERENCES (continued)

- 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 be found at <https://www.tenforums.com/tutorials/95922-generic-product-keys-install-windows-10-editions.html> and <https://winaero.com/blog/generic-key-to-install-windows-10-rtm/>