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ORIGINAL FWT PASTA GOT HIJACKED THROUGH THIS METHOD

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Microsoft Windows

What edition / version should I get?

In the following sections various recommended Windows versions are described and explained why they are superior to other similar versions.

Windows 10 Education

The "cleanest" semi-annual channel release of Windows 10. Education is the same as Enterprise except features no one uses and is by default configured to not have ads (due to regulations of some countries), so you can go with either if you plan to use a debotnet tool. **Pro Education is not Education, but a worse SKU based on Pro.**

Windows 10 Enterprise LTSC IoT 2021

Windows 10 21H2 based system. Differences from normal Windows 10 Enterprise are the lack of bloat like ads and UWP apps including Windows Store (can be manually installed) and lack of feature updates (security updates are provided for 10 years). If you aren't bothered by feature upgrades, you might want to get Education instead. Install VCLibs appx to restore clipboard and print screen history.

Windows Embedded 8.1 Enterprise

Windows 8.1 based system meant for embedded systems. It's like if Windows 8.1 had an LTSB/LTSC edition, this being the reason for recommendation. Unlike LTSC for Windows 10 this version includes Windows Store, but similarly misses other UWP apps. Unlike the POSReady releases the EOL matches that of Windows 8.1.

Windows 7 Enterprise

While Windows 7 is generally not recommended anymore, if you want to get one, get Enterprise. Feature-wise same as Ultimate, however can be activated by KMS_VL_ALL, which doesn't require BIOS/Legacy install. Before installing, it is recommended that you integrate Simplix update pack by downloading the .exe and drag & dropping your iso onto it. The update pack also comes with BypassESU which lets you receive ESU updates until 2023.

~~Windows Embedded POSReady 7~~

~~Windows 7 based system meant for Point-of-Service devices. Practically identical to Windows 7 Enterprise, has some extra features that you probably will never use. It also has support until 2021-10-12, unlike Windows 7 which reaches EOL on 2020-01-14, this being the main reason for using POSReady 7 over Windows 7. Installing features is a bit tricky though.~~

ESU turned out to be circumventable easily, so this will only become relevant in 2023.

What are N / KN editions?

Antitrust laws force Microsoft to provide these editions. N editions are made for Europe and remove Windows Media Player and related features. The later also includes various codecs which may result in YouTube videos not playing among other problems. While the features can be (mostly) restored with an optional update, using these editions is not recommended. KN editions used to be like N but also removing Messenger. Since MSN does not exist anymore, these editions have been discontinued.

Changing Windows 10/11 editions post-install

Windows 10/11 supports changing SKUs on the fly, however there are some restrictions. First, there are limited upgrade paths, refer to this matrix for available paths. Second, to change edition Windows must be able to activate the target edition (at least Microsoft says so, sometimes it works without). For us this means you need to install KMS_VL_ALL before changing edition (you might need to set SkipKMS38 to 0 in Activate.cmd if you have a HWIDgen / legit license). After you're done with that, you just need to select and enter the key for the version you want from here.

Non-Microsoft supported upgrade paths

Microsoft disallows certain upgrade paths that would otherwise work. You can bypass these restrictions by using an ISO and modifying UpgradeMatrix.xml. Remember that this is not supported or tested by Microsoft at all, prepare for the worst.

Downloading Windows

What the fuck is an SVF file

An SVF file is a SmartVersion difference patch, essentially the differences of a source and a destination file. Combining it with the source file required yields the destination file (ISOs in our case). These are often used for distributing Windows ISOs, because there is a huge overlap in terms of data between ISOs. Only having to distribute one ISO and 10 GB of SVFs for all edition and language combinations is much easier than 300+ GB of ISOs.

How do I extract an SVF file

With SmartVersion (freeware, signed, considered trusted). Download the zip for Windows x86 (x64 and Linux reported to randomly break by some anons, Linux users can just use wine), put smv.exe next to the SVF and the source ISO, open up cmd / PowerShell in the folder (Shift + Right click), and use the following command: `.\smv x <SVF file name> -br .`
In some links below multiple SVFs might be required to get to your desired edition, just apply them in order.

Do I even need an SVF file?

Probably not! Let the filenames guide you: Do you see an ISO matching to what you want to get? If so, you absolutely do not need to do anything with SVF files.

Links

- Techbench dump (**Client editions direct download from Microsoft**): ISO
- POSReady 7: ISOs
- Windows 7: ISO and SVFs or ISOs (en-US only)
- Embedded 8.1 Enterprise with Update 3: ISO and SVFs or ISO (en-US only)
- 10 Enterprise LTSC 2019 (1809 / 2019-03 refresh): Magnet (en-US only) or ISOs
- 10 Enterprise LTSC 2021 (21H2): Magnet (en-US only) or ISOs
- Mirrors by luzea: open directory, MVS Collection

Which edition is in which ISO?

- Consumer: Home, Pro, Education (and their N variants)
- Business: Pro, Education, Enterprise (and their N variants)
- LTSC: Enterprise LTSC (and its N variant)

For editions that are in both Consumer and Business there's no difference in content besides the default inserted key (Retail generic vs VL generic).

The Installer doesn't let me choose edition or requires key

Make a new file called `ei.cfg` in the `Sources` folder of the installation media with this content:

```
[Channel]
Retail
```

How do I verify ISOs aren't fake / infected?

Microsoft publishes SHA1 or SHA256 for MSDN subscribers. There are numerous automatic dumps of this online where you can look up your hashes, like here and here. Look up both SHA1 and SHA256 in both of them, since SHA256 is a recent change. If found in any, it's good.

Installing Windows

Optimize-Offline

Script for removing features from a Windows 10 ISO pre-installation. Available here (open source). Most changes it does can be done on a live installation in a rollbackable way instead, therefore not recommended for beginners. Doing things wrong or not following the documentation can result in a (subtly) broken install that can only be fixed by reinstalling.

Preparing installation media

On Windows you can write the ISO onto a pendrive using rufus (open source). On Linux use WoeUSB (open source). No, `dd` doesn't work. If you're on Mac, ~~you're fucked - use a VM or Bootcamp with Windows.~~ you can try following this, but you might be better off just using a Windows or Linux machine to make the installer.

Common problems

The Windows installer likes to get stuck at partitioning step. If this happens to you, try the following:

- Make sure the installation media is not in an USB3 port - Windows dislikes this sometimes when it doesn't have proper chipset drives yet.
- Remove all storage devices but the installation media and target device - Windows might refuse to install when any disk or disk controller driver is missing, even if it is not needed.
- Run DISKPART's CLEAN command on the target disk. This fixes corrupted or non-existent MBR or GPT. Note that this deletes all partitions.

Activating Windows

There are various ways of activating activating Windows, some worse, some better.

Recommended activators

MAS HWID

Activator that generates permanent Windows 10 Digital License by faking an update from an older Windows version. Your hardware identifiers are sent to Microsoft, therefore the license can survive reinstalls. It can also survive hardware changes if you tie it to a Microsoft account. Cannot activate older Windows, any Office and the following Windows 10 SKUs: Enterprise China Government and all Server SKUs. Ideal for activating normies' computers, since they can't break the activation with AVs or reinstalls. Open source, available on GitHub. If you plan to install Office it's recommended that you go with KMS_VL_ALL instead, as it adds no overhead to also activate Windows.

KMS_VL_ALL (by abbodi1406)

Activates volume capable editions of Windows 7 to 10. Uses no internet, networking, tasks, services, servers or drivers. Fully open source, link to source can be found in readme.html in the distribution. Works on all SKUs that can be activated with KMS. You can only activate Office with KMS, so if you plan on installing Office you should probably use this. Official thread (needs registration, or just use bugmenot). Official and updated pastebin from thread is here. Use AIO for a nice single .cmd file with menu, or traditional for easier auditing, automation, etc..

Not recommended activators

HWIDgen

Works same as MAS HWID, but closed source and made by a pretty weird guy. Official thread with download (register only, or use bugmenot).

KMS38

Activation option in HWIDgen for Win10 SKUs that don't support HWIDgen. Activates until 2038. Using it causes repeated trying, timeouting, erroring in event log after renewal interval (not activation interval) passes. Also doesn't support Office. Use KMS_VL_ALL instead.

DAZ Loader

Activator for OEM activatable Windows 7 SKUs. Messes with bootloader to inject SLIC tables used for OEM activation, thus also doesn't work with UEFI. Use a KMS compatible edition and KMS_VL_ALL instead. If you already installed a wrong edition with UEFI and really don't want to reinstall, look into WindSLIC.

KMSpico, Microsoft Toolkit, etc..

Outdated KMS activators using more bloated, performance hungry and inferior ways compared to KMS_VL_ALL.

Random exposed KMS servers on the internet

May go down anytime, which makes all your software unactivated. Also they are usually hosted in nations where exportation is banned by US law like Iran. It is also slower than KMS_VL_ALL since it does actual networking, but this should be obvious.

Buying keys on eBay

They are usually not for your region or breaking EULA in other ways (OEM / MAK key, etc..), which makes it about as legal as using any of the other activators. These keys might randomly stop working, possibly after the refund period has expired. Regardless, you might still want to do this for Office, since this is the cheapest possible alternative that requires no persistent software like KMS activators, making it suitable for getting Office for normies' computers. Different regions might require you to use phone activation.

Installing drivers

As a first step update your Windows, as it sometimes downloads driver updates too. Then, try grabbing all the missing drivers with SDI Origin. If something doesn't work try downloading the driver from the device manufacturer's site. If it still doesn't work and your computer / laptop is built by an OEM try getting the driver from their site (this sometimes occurs with touchpads of laptops).

Debloating and debotnetting

You can use privatezilla (open-source, user-friendly) or privacy.sexy (open-source, for advanced users) for debotnetting a live installation. Be aware that using such tools on an offline optimized installation might be counter-productive due to wrongly detecting already applied changes.

Microsoft Office

OfficeRTool

Tool for downloading Office 2016/2019/2021/365, with the option to pick which apps to use, which update channel to track, etc.. Official thread (available after registration). Official link from thread (password: `2022`). Download and install office, optionally use the disable telemetry feature. After this KMS_VL_ALL_AIO should be able to convert to volume and activate it.

TechBench

Microsoft provides ISO downloads via TechBench. You can grab them via TechBench dump. Installs all apps with default consumer configuration. After installing KMS_VL_ALL_AIO should be able to convert the license to volume and activate it.

Office Deployment Toolkit

See how to obtain and use this in Microsoft docs. Advanced Office deployment toolkit aimed at system administrators, OfficeRTool actually generates configurations for this.

Other Microsoft or Windows related links

Piracy

- Microsoft stuff: MDL
- Software: nsaneforums
- Games: rin, goggames

Adobe Products

Unfortunately with the death of traditional AMTemu (and CCMaker which used it) getting Adobe products became harder since there's no generic easy to verify crack available. What's usually recommended nowadays is m0nkrus's releases (try the pb.wtf link for registration-free download) who seem to be working together with PainteR (developer of AMTemu) and uses a newer (app-specific) version of AMTemu. Unfortunately the prepackaged huge ISOs are harder to verify, so you just hope that Ivan won't steal your chinese cartoons. Only detected as *HackTool:Win32/Cracking!MSR* by Defender which suggests there isn't malware coming with it, however **you must disable Defender during install** else the detection will block the crack from running. Post-install no detections seem to happen, however you might want to whitelist `Program Files\Adobe` and `Program Files (x86)\Adobe` from Defender to avoid future detections breaking your programs.

Other resources

- MSFN - best Windows-related support forum also harboring projects and their support threads (StartIsBack++, Glass8, OldNewExplorer, UniExtract2, WinNTSetup)
- VOGONS - forum for retro Windows/DOS; also harbors projects like dgVoodoo and DOSBOX for retro shit in newer OS stuff.
- Win-Raid - drivers / firmware / modding forum; also contains a Windows section with an userbase breaking limits of HW support for pre-10 Windows
- Station-Drivers - also drivers stuff, use if your OEM offers outdated-as-fuck drivers.
- retrosystemsrevival - download center with software and drivers primarily for retro windows
- Microsoft Update Catalog - download center for updates and WHQL drivers without the objectively unnecessary shit; perfectly navigable only from fucking IE though, due to botched searching by device's IDs & less accurate search results for non-IE browsers.
- TheHotfixShare - mirrors of hotfix updates offered by the recently-defunct Microsoft's Hotfix service
- reboot.pro - also a nice forum for windows stuff and harbor for projects like Ventoy, Rufus or ImDisk
- AskWoody - best place for discussing windows updates, bugs and tricks along with general technews; their DEFCON system is nice for tracking whether updates break havoc
- borncity - nice blog similar to above with a nice FAQ containing tips & tricks that can be useful

Other programs



Windows 10 Enterprise LTSC 2019

Like normal Windows 10 but without Windows Store and the Metro apps. Can be activated with MAK or KMS. Has dark explorer.

Windows Embedded 8.1 Industry

Like normal Windows 8.1 but without some junk apps. Can be activated with MAK or KMS.

Windows POSReady 7

Like normal Windows 7, but supported longer, until 2021-10-12. Can be activated with MAK or KMS.

KMS_VL_ALL (by abbodi1406)

KMS activator without any networking, tasks, services, drivers, etc.. Works on volume licensed Windows and Office.

HWIDgen

Generate a permanent, hardware ID tied Digital License by faking an upgrade from a previous Windows version. Only works on retail licensed Windows. Do not use KMS38, is inferior to proper one.

CCMaker

Adobe product downloader, installer, auto-activator with AMTemu. Do not use the 2019 products, some upped the DRM and AMTemu no longer works on them.

Browser

Firefox

Use custom user.js, enable resistFingerprinting and first party isolation. Use uBlock Origin, Smart HTTPS, Decentraleyes.

Firefox ESR

Same as above, except Extended Support Release.

(Ungoogled) Chromium

It's like chrome but without Google botnet. Use the same plugins as listed for Firefox.

Site with windows builds: chromium.woolyss.com

Tor Browser

Perfect anonimity, high security and anti-tracking. May make people think you're a pedophile.

Text Editor

Notepad++

Simple, fast, easy to use. Like Windows Notepad but with more features.

VSCodium

FOSS build of VSCode. IDE-like features. Good design, built on Electron.

Sublime Text

Kinda a mix of the other two. Has good design and lot of features, while being fast.

Torrent Client

qBittorrent

Fully featured BitTorrent client built on Qt. Like uTorrent before 3.0.

Deluge

Like qBittorrent except with GTK instead of Qt. Some people like it better.

PicoTorrent

Minimalist torrent client both design and feature wise. Uses wxWidgets.

Picture Viewer

nomacs

Simple image viewer. Like IrfanView but FOSS. Similar to old Windows image viewer.

JPEGView

Fully featured image viewer with some editing features.

Video Converter

FFMPEG

The god of all converters. Only CLI, but do you really need anything more than that? Supports basically anything known to mankind. Can filter, cut, etc..

Handbrake

A basic GUI converter for most general purpose needs. Supports a lot of formats, and a lot normie needs like DVD (yes, that boomer tech) ripping.

Picture Editor

GIMP

One of the most well-known FOSS software. Drawing green peppers is easier than circles.

Video Player

MPC-HC w/ K-Lite Codec Pack

Mimics the look and feel of the old Windows Media Player. Development stopped in 2017, so use clsid2's fork until someone takes over the project. Recommended to get with K-Lite Codec Pack bundle

Recommended to get with K-Lite Codec Pack bundle.

Paint.NET

Easier to use than GIMP, still has a lot of features.

mpv

Fork of mplayer2. CLI for settings, HUD for navigating while playing.

Krita

Painting program, mainly for artists and other kind of content creation.

mpv.net

Native Windows GUI for mpv (libmpv to be precise).

Music Player

Clementine

Fully featured cross-platform audio player.

Audacious

Simple audio player. Well known on Linux, recently started supporting Windows properly with installers and stuff.

foobar2000

One of the first. Fully featured native Windows music player. Has lots of plugins and themes.

AIMP

Modern-looking fully featured multiplatform music player.

Video Recorder

OBS

Supports recording and streaming.

Antivirus

Common Sense™

Just don't run viruses and update your software. Additionally, Windows Defender provides ~~some basic protection~~ the best protection according to tests.

Encryption

VeraCrypt

A fixed fork of TrueCrypt. Audited by an independent group. Supports full boot disk encryption on UEFI, supports deniable encryption. Keep those lolis safe!

BitLocker

The Windows builtin disk encryption software. Probably fine if you're just worried about your laptop getting stolen or something. Defaults to TPM instead of password, you should change that.

File Management

7-Zip

Archiver. Supports basically everything. Also supports calculating hashes, optionally from context menu.

fman

Dual-pane file manager. Kinda like if Total Commander was made now and not in 1993.

Everything

Properly indexes all files in a database, and lets you search files incredibly fast.

Search

Qwant

Privacy-aware search engine. Hosted in a non-five-eyes country (France).

SearX

Open source search engine. You can even host your own if you feel like.

Startpage

Supposedly more private Google "alternative" that proxies Google results. Only use if needed.

Games

GOG.com

DRM-free games. Mainly old and indie titles.

Steam

Probably the most well-known game store on PC. Has DRM and AAA titles.

PDF

Your browser

Both Chrome and Firefox include a PDF viewer, which is usually enough for generic needs.

Sumatra PDF

Minimalistic PDF reader.

Office Suite

Libre Office

A fork of Open Office. Mostly compatible with Microsoft Office.

Google

Google's in-browser cloud office suite. While it's botnet its still often better than installing Microsoft Office.

Microsoft Office 2019

The good old Microsoft Office. Is botnet, but sometimes you can't really avoid it.

File Cloud / Sync

Syncthing

Torrent based P2P file sync. Needs the other device to be on to sync.

Nextcloud

Self-hosted file cloud. You'll need a server.

Mega

End-to-end encrypted file hosting and cloud storage. 15 GB free, up to 8TB for paid.

Communication

Pidgin

Multi-protocol chat client. Supports XMPP, IRC and others.

Mumble

Self-hostable group voice-chat for gaming and generally shitposting with your mouth. Public server directory for finding servers to hop on.

Thunderbird

E-Mail client. Supports OpenPGP with plugin.

Your browser

You will probably be forced into using botnet communication means like Skype or Discord. The best way to use these without giving them too much data is using them in browser.

Maintenance

BleachBit

Like CCleaner but FOSS.

Yamicsoft Windows Manager

Like CCleaner with more features.

Package Manager

Chocolatey

NuGet based package manager, mainly for entire apps, also has lots of proprietary software.

Scoop

A package manager primarily focused on bringing Unix-y console programs to windows.

Misc Utilities

Open Hardware Monitor	Temp monitor	Sysinternals Suite	Windows Tools
Process Hacker	Better Task Manager	mp3tag	mp3 tagger
ShareX	Screenshot & instant share	Windows 10 DPI Fix	Non-blurry DPI scaling
cmder	Console emulator	wpd.app	Telemetry disabler
AutoHotKey	Macro software	HWiNFO	Hardware info
MusicBrainz Picard	Music tagging software	simplewall	Firewall
WinDirStat	Directory tree size stats		
WSUS Offline Update	Non-botnet Windows Update		
youtube-dl	Youtube downloader		

v1.3 (at 2019-07-07) by ~~<i forgot my trip>~~ !WinInfo80c
e-mail: windows-software-infographic@riseup.net

Hurr durr the infograph is shit

Reply to the latest infograph posted in any thread, and your suggestion will be considered for next release (sometimes a few days, sometimes a few months). Software changes based on objective factors (eg. software discontinued, other breaking changes) will be considered just from a single suggestion, subjective changes are checked mainly for popularity on /g/ and /fwt/, but also somewhat for software quality, suitability for the infograph (so your CAD software probably won't get in here), etc..

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