

Recently /fwt/ has been having a serious spam / shill problem. Several problems of the shilling have been pointed out [here](#) and [here](#)'s my take on it. I could try and gather several other posts too but I don't feel like wasting my time on that.

Shilling reduced to ""acceptable"" levels. Still, I'll keep the [filter](#) (originally collected by one or more anons, I added some myself too) around here in paste.

Friendly Windows Thread Paste

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1. Microsoft Windows

1. What edition / version should I get?
 1. [Windows 10 Enterprise LTSC 2019](#)
 2. [Windows 10 Education](#)
 3. [Windows Embedded 8.1 Enterprise](#)
 4. [Windows 7 Enterprise](#)
 5. [Windows Embedded POSReady 7](#)
2. [What are N / KN editions?](#)
3. [Changing Windows 10 editions post-install](#)
4. [Non-Microsoft supported upgrade paths](#)
5. [Downloading Windows](#)
 1. [What the fuck is an SVF file](#)
 2. [How do I extract an SVF file](#)
 3. [Do I even need an SVF file?](#)
 4. [Links](#)
 5. [Which edition is in which ISO?](#)
 6. [The Installer doesn't let me choose edition or requires key](#)
 7. [How do I verify ISOs aren't fake / infected?](#)
6. [Installing Windows](#)
 1. [Optimize-Offline](#)
 2. [Preparing installation media](#)
 3. [Common problems](#)
7. [Activating Windows](#)
 1. [Recommended activators](#)
 1. [KMS_VL_ALL \(by abbodi1406\)](#)
 2. [Massgrave/MAS HWID](#)
 2. [Not recommended activators](#)
 1. [HWIDgen](#)
 2. [KMS38](#)
 3. [DAZ Loader](#)
 4. [KMSpico, Microsoft Toolkit, etc..](#)
 5. [Random exposed KMS servers on the internet](#)
 6. [Buying keys on eBay](#)
8. [Installing drivers](#)
9. [Debloating and debotnetting](#)

2. Microsoft Office

1. [OfficerTool](#)
2. [WOTOK online](#)
3. [Download and install](#)

3. Other Microsoft or Windows related links

1. [Piracy](#)
 1. [Adobe Products](#)
2. [Other resources](#)

4. Other programs

1. [Hurr durr the infograph is shit](#)

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 Enterprise LTSC 2019

Windows 10 1809 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). Some newer GPU drivers may drop support for it and some Store games don't support it. If those are important for you or aren't bothered by feature upgrades, you might want to get Education instead.

Windows 10 Education

The "cleanest" semi-annual channel release of Windows 10. Education is the same as Enterprise except features noone 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. Also the highest tier edition that can be activated using Digital License (aka HWID activators) therefore might be appropriate for installing for others' computers, since the license stays around after a reinstall. **Pro Education is not Education, but a worse SKU based on Pro.**

Windows Embedded 8.1 Enterprise

Windows 8.1 based system meant for embedded systems. It's like if Windows 8.1 had an LTSC/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. To receive extended updates until 2023-01-10 install [BypassESU](#) (open source). Before installing, it is recommended that you integrate Simplix update pack ([download](#) and [integration guide](#)). Backported telemetry can be removed, guide by an anon [here](#).

~~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 were 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 even exist anymore, these editions have been discontinued.

Changing Windows 10 editions post-install

Windows 10 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 anon, 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

- POSReady 7: [EVAL ISO + SVF](#)
- Windows 7 with SP1 (all editions): [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): [ISO and SVFs](#) or [Magnet \(en-US only\)](#)
- 10 SAC Consumer from Microsoft (lags behind MSDN refreshes): [ISO](#)
- 10 SAC Consumer / Business (latest refresh): [ISO and SVFs](#)
- A paste with lots of MSDN content by GezoeSloog@MDL (check this if others are down): [Paste](#)

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 SHA1s for MSDN subscribers. This is paid, however there are numerous automatic dumps online where you can look up your hashes, like [here](#) and [here](#).

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

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..

Massgrave/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, thus 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.

Not recommended activators

HWIDgen

Works same as Massgrave, 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. Then, using the device manager click through the devices and click "Update driver". This will install the latest Microsoft-reviewed driver available, without any unnecessary bundled programs. 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 often occurs with touchpads of laptops).

Debloating and debotnetting

You can use [W10Privacy](#) (freeware) or [wpd.app](#) (freeware) for debotnetting a live installation. Unfortunately there are no up-to-date open source tools, and running outdated tools can damage your install. Also 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 2016/2019/365. [Official thread](#) (available after registration). [Mirror](#) (2 for 2020-06-12 version. Use the convert to volume option to convert the installation to Volume licensing. After this use KMS_VL_ALL, and you should be done.

WOTOK online

An online C2R office installer. Open source. [Available](#) on MDL after registration. [Mirror](#) for 2020-06-05 version. Includes one-checkbox disabling of telemetry. Automatically enables activation if KMS_VL_ALL is installed. Some anons reported trouble getting it to work, if it doesn't work for you try using OfficeRTool.

Download and install

Run the tool of your choice, read and select the options you need. Both lets you select what versions and products to download and install. Note that Office 365 doesn't support LTSC, only 2019 does.

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 no register download) who seem to be working together with PainterR (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

| Open source software | | Freeware | | Has paid version / is paid | |
|---|--|---|---|----------------------------|--|
| The /g/ Windows Software Guide | | | | | |
| Operating System | | | Piracy | | |
|  | <p>Windows 10 Enterprise LTSC 2019</p> <p>Like normal Windows 10 but without Windows Store and the Metro apps. Can be activated with MAK or KMS. Has dark explorer.</p> |  | <p>KMS_VL_ALL (by abbodi1406)</p> <p>KMS activator without any networking, tasks, services, drivers, etc.. Works on volume licensed Windows and Office.</p> | | |
|  | <p>Windows Embedded 8.1 Industry</p> <p>Like normal Windows 8.1 but without some junk apps. Can be activated with MAK or KMS.</p> |  | <p>HWIDgen</p> <p>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.</p> | | |
|  | <p>Windows POSReady 7</p> <p>Like normal Windows 7, but supported longer, until 2021-10-12. Can be activated with MAK or KMS.</p> |  | <p>CCMaker</p> <p>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.</p> | | |
| Browser | | | | | |
|  | <p>Firefox</p> <p>Use custom user.js, enable resistFingerprinting and first party isolation. Use uBlock Origin, Smart HTTPS, Decentraleyes.</p> |  | <p>(Ungogled) Chromium</p> <p>It's like chrome but without Google botnet. Use the same plugins as listed for Firefox.</p> <p>Site with windows builds: chromium.woolyss.com</p> | | |
|  | <p>Firefox ESR</p> <p>Same as above, except Extended Support Release.</p> |  | <p>Tor Browser</p> <p>Perfect anonimity, high security and anti-tracking. May make people think you're a pedophile.</p> | | |
| Text Editor | | | Torrent Client | | |
|  | <p>Notepad++</p> <p>Simple, fast, easy to use. Like Windows Notepad but with more features.</p> |  | <p>qBittorrent</p> <p>Fully featured BitTorrent client built on Qt. Like uTorrent before 3.0.</p> | | |
|  | <p>VSCodium</p> |  | <p>Deluge</p> | | |



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



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



Sublime Text

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



PicoTorrent

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

Picture Viewer

Video Converter



nomacs

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



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..



JPEGView

Fully featured image viewer with some editing features.



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

Video Player



GIMP

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



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.



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

Antivirus



OBS

Supports recording and streaming.



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

Search



7-Zip

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



Qwant

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



fman

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



SearX

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



Everything

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



Startpage

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

Games

PDF



GOG.com

DRM-free games. Mainly old and indie titles.



Your browser

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



Steam

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



Sumatra PDF

Minimalistic PDF reader.

Office Suite

File Cloud / Sync



Libre Office

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



Syncthing

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



Google

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



Nextcloud

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



Microsoft Office 2019

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



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

Package Manager



BleachBit

Like CCleaner but FOSS.



Chocolatey

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



Yamicsoft Windows Manager

Like CCleaner with more features.



Scoop

A package manager primarily focused on bringing

| 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 |
| cmdr | Console emulator | wpd.app | Telemetry disabler |
| AutoHotKey | Macro software | HWiNFO | Hardware info |
| MusicBrainz Picard | Music tagging software | simplewall | Firewall |
| WinDirStat | Directory tree size stats | v1.3 (at 2019-07-07) by <i forgot my trip > !WinInfo80c e-mail: windows-software-infographic@riseup.net | |
| WSUS Offline Update | Non-botnet Windows Update | | |
| youtube-dl | Youtube downloader | | |

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..

Last content update: 2020-09-01
 by !WinInfo80c