

Windows 7 goes Windows 10

Some guidelines for transition

Support for *Windows 7* will end on January 14th 2020. After this date no further updates or patches will be provided, which is the reason for *Windows 7* to be banned from the University's network for security reasons. All devices still running *Windows 7* are due to be upgraded to *Windows 10*. Further down, you will find answers to the most common questions regarding the transition from *Windows 7* to *Windows 10*.

Will *Windows 10* run on my device?

All desktops, laptops and tablet computers officially provided by the University, and not older than six to seven years, will run *Windows 10* decently. A minimum of 2 GB of RAM is necessary, while 4 or more GB of RAM are fine. Remember that especially single-core CPUs should be considered the lower end and will result in quite bad performance. An additional focus is the hard disk: With a slow conventional hard disk even a Dell Optiplex 7050 feels to have lower performance than an older Dell Optiplex 7010 featuring a fast conventional hard disk or – even better – a solid state drive. Switching old HDDs with modern SSDs improves the overall performance significantly and may increase the life cycle of your device up to 10 years, which makes a strong point in sustainability as well.

See figures below for desktop and laptop computers delivered with Windows 7 pre-installed:

	Windows 10 Ok?	SSD recommended?	UEFI?
HP EliteDesk 800G3	Yes	Yes (NVMe M.2)	Yes
Dell Optiplex 7050 (D8-Serie)	Yes	Yes (NVMe M.2)	Yes
Dell Optiplex 7040 (D7-Serie)	Yes	Yes (NVMe M.2)	Yes
Dell Optiplex 7020, 9030 (D6-Serie)	Yes	Yes	Yes
Dell Optiplex 9020 (D5-Serie)	Yes	Yes	Yes (*)
Dell Optiplex 7010, 9010 (D4-Serie)	Yes	Yes	Yes (*)
Dell Optiplex 790, 990 (D3-Serie)	Limited	No	No
Dell Optiplex 780, 980 (D2-Serie)	Limited	No	No
Dell Optiplex 760, 960 (D1-Serie)	Limited	No	No
HP Elitebook 8xx G3	Yes	Yes (NVMe M.2)	Yes
Dell Latitude Exx70 (E8 Serie)	Yes	Yes	Yes
Dell Latitude Exx50 (E6 Serie)	Yes	Yes	Yes
Dell Latitude Exx40 (E5 Serie)	Yes	Yes	Yes
Dell Latitude Exx30 (E4 Serie)	Yes	Yes	Yes
Dell Latitude Exx20 (E3 Serie)	Limited	Limited	No
Dell Latitude Exx10 (E2 Serie)	Limited	Limited	No
Dell Latitude Exx00 (E1 Serie)	Quite limited	Limited	No

You'll find more detailed information at <http://www-pc.ur.de/systemsw/win10/install.htm> .

In case of a fresh installation of *Windows 10*, and whether your device's BIOS is UEFI-compatible or not, switching from BIOS (legacy) to UEFI boot mode is highly recommended to benefit from *Windows 10*'s modern security features. Older devices may require a BIOS update. After exchanging you HDD against a SSD you'll also have to change the SATA operation mode from RAID to AHCI.

Fresh installation or upgrade?

Usually, a fresh installation is highly recommended, but remember to back up all your data beforehand! This is the best way to achieve a fast and flawlessly working system. On the other hand, when upgrading from 7 to 10, your data is kept in place, and so are outdated and often incompatible applications, unnecessary data and trash. In case you really can't or don't want to install a fresh copy of *Windows 10*, please perform the following steps:

- Start the upgrade procedure (see further down)
- Evaluate the result
- Perform a fresh installation, if the result does not suit you

How to install a fresh copy of Windows 10

Our in-house installation service enables you to install a fresh copy of *Windows 10* (currently Version 1809) containing all necessary standard applications (Office Professional) and tools via the University's network all by yourself. You don't need any special technical skills or training. Perform the following steps:

- Back up your data! The installation will wipe out everything!
- Boot your computer and hit F12 to trigger a so-called network-based PXE boot process
- Choose "Windows Installation" and follow the instructions presented to you

For further information see: <http://www-pc.ur.de/systemsw/sysinst/sysinst.htm>.

How to perform an upgrade

The upgrade process – as opposed to the installation process – keeps all your data and configuration in place. The operating system will be upgraded, but your applications will not. You have to take care yourself to receive current versions of Microsoft Office or Adobe Reader. These are the recommended steps:

- Back up all your data (you'll never know)!
- Remove problematic applications
- Provide enough free disk space
- Start the upgrade process by executing `F:\systemsw\WINDOWS10\upgrade.cmd`

For further information see: <http://www-pc.ur.de/systemsw/win10/upgrade.htm>.

What will happen to my applications and my data?

- A fresh installation will wipe all applications and all your data
- An upgrade will (try to) keep applications and data in place
- Backing up your data is highly recommended, no matter whether you choose to install a fresh copy of *Windows 10* or to upgrade an existing *Windows 7*

How to back up your data

Any external HDD or network share providing enough free disk space will suffice as a backup target. The complexity of your backup process depends on how your personal data is stored. While it is quite

easy to back up your data stored in your user profile, more intricate structures demand more work and planning to create a secure and reliable backup.

We recommend 'robocopy' and 'xcopy' to backup your data safely:

- `Robocopy <source> <destination> /e /dcopy:T /r:3 /w:1` copies all files and directories – including empty ones – and keeps timestamps, 3 retries max with 1 second pause each
- `Xcopy <source> <destination> /e /c` Xcopy <source> <destination> /d /t /e /k copies all files and directories – including empty ones – but omits hidden files. Timestamps are kept.

Can I keep my HDD when switching to a new SSD?

Generally, yes! Your data remains on the replaced HDD when switching to a new SSD. But please keep in mind that the elaborate permission system of modern Windows versions (starting with Windows 2000) may effectively prohibit access to your old data, because a fresh copy of Windows 10 also re-creates your SID (user identity), which could result in some unexpected behavior when accessing data from a previous installation of Windows.

We definitely recommend copying all your data from the replaced HDD to your user profile (Documents, Pictures, ...) within your fresh installation on the new SSD. Applications have to be reinstalled, nonetheless.

Does handling and user experience change?

Basically, it won't change much. Windows is still Windows, you know? Most shortcuts remain functional and unchanged, e.g. Win-L (lock), Win-D (desktop), Win-R (execute command), Strg-C & Strg-P (copy&paste), Strg-Alt-Del (task manager), and Alt+F4 (quit application). On the command line, as well, most things work the same as before. On the GUI level (your graphical user interface) Windows 10 introduces some changes, which are overall quite intuitive and easy to adapt to. Some users report initial irritation regarding the startup menu's new tile structure, which is easily customized to your needs. Furthermore, some naming conventions were modernized, e.g. 'programs' are called 'apps' now and the cogwheel symbolizes the system control panel. Remember to make use of the right mouse button to open a context sensitive menu anywhere possible, which will help and guide you through your transition process learning Windows 10.

Where can I get support for Windows 10?

As already mentioned above, all of our University's official devices can be re-installed as well as upgraded without extensive technical knowledge. Apparently, backing up your data may present the most delicate step within the respective procedure.

For further assistance please contact your workgroup manager (you'll find a list at <https://www.uni-regensburg.de/rechenzentrum/support/workgroupmanager/wgm-liste/>) or call our IT support desk (if you have a membership for PLUS support).

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