

10 Computer connections

In this chapter you learn about

- computer security
- network types
- external drives
- printers

To perform various actions with your folders and/or datafiles, it is necessary to know about different types of connections to your computer.

The most important connections, besides mouse and keyboard, are: networks, printers and USB-drives. CD-rom/DVD-drives have almost become obsolete technology for computers, and if you buy yourself a new computer, it will probably not have such a drive.

10.1 Networks

Your computer is probably connected to at least one **network**. A network is a number of computers connected to each other, so exchange of data is possible.

In the following the network types LAN, WLAN og WAN are described.

A so called LAN (Local Area Network) is a wired network at home or at work. Only those directly connected to the network by cables, have access. This type of network is very secure.

If the network is wireless, it is called a WLAN (Wireless Local Area Network). If it complies to international standards, it is also called a Wi-Fi. If you know the access code to a Wi-Fi-network, you can get access. WLAN is therefore less secure than a LAN, but easier and cheaper to set up. The use of wireless networks are common to laptops and smartphones.

An **intranet** is a local network for invited users. It is common in public institutions, but also a lot of companies use it. As a invited user you can get connected to the intranet, by using a unique username, and a password.

An **extranet** is a network used by companies and other organizations to communicate with their businesspartners, and works exactly like an intranet. When you order products from a company, it is typically through the companys extranet.

Finally there is a WAN (Wide Area Network) which is a network between cities or contries. The Internet – or just “the net” – is the largest WAN we have.

Read more about the Internet in chapter 12 [The Internet](#).

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10.2 CD-rom/DVD-drives



CD-rom/DVD-drive have been standard equipment for computers for a long time. They are no longer installed on new computers, as they are being replaced by other, newer technologies, like streaming, USB-drives and others. It is (still) possible to buy and connect an external DVD-drive to a new computer, so you can watch your DVD-movies, show/save data and so on.

To watch DVD-movies you need an app, like Windows Media Center, that can be downloaded from Windows Store (read more about this in chapter 13 [Windows store](#)).

CD-rom and DVD-drives will not be described further.

An advertisement for the Gaiteye running app. The background is a photograph of a person running on a dirt path during a sunrise or sunset, with a warm, golden glow. The Gaiteye logo, a yellow square with a white leaf-like shape, is in the top left. Below it, the text 'gaiteye' is written in a white, lowercase, sans-serif font, followed by the tagline 'Challenge the way we run' in a smaller, italicized font. In the center, the text 'EXPERIENCE THE POWER OF FULL ENGAGEMENT...' is written in a bold, white, uppercase font. Below this, a horizontal line of yellow dots is followed by the text 'RUN FASTER. RUN LONGER.. RUN EASIER...' in a bold, white, uppercase font. In the bottom right corner, there is a yellow button with the text 'READ MORE & PRE-ORDER TODAY' and 'WWW.GAITEYE.COM' in a bold, white, uppercase font. A white hand cursor icon is pointing at the button. The overall design is clean and modern, with a focus on the benefits of the app.



10.3 USB-drives

Universal Serial Bus (**USB**) is a so called data communication bus, that transports data from one place to another.



All contemporary computer have one or more USB-ports, so USB-drives can be connected to all new computers. A USB-drive can contain from a few Gigabyte (Gb¹¹) data up to 64 Gb or more – the amount is increasing all the time.

Compared to a DVD (that typically contains 4,7 Gb) an USB-drive of 500 GB can store the equivalent of more than 100 DVDs. Furthermore much longer to copy 500 GB of data to DVD than to USB-drives

The faster and more practical USB-drives are far more efficient.

USB comes in various speed variants, the high speed drives are compatible with low speed drives. It is important to notice which kind of USB ports that your computer have, and which kind of USB-drive you insert:

- USB 3.0 high-speed 4.86 Gbps (SuperSpeed USB)
- USB 2.0 high-speed 480 Mbit/s
- USB 1.0/1.1 full-speed 12 Mbit/s
- USB 1.0/1.1 low-speed 1,5 Mbit/s (mostly used for mouse, keyboard and modem)

USB 3.0 ports can also handle USB 2.0 Drives – but at the slower pace.

10.4 Printers

A printer can be connected directly to a computer e.g. via a USB-plug, or be connected to a network.



All computers that are connected to a network, can print on a network-printer that is connected to the same network.

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10.4.1 Add a printer

Usually, an installation CD will – still – be delivered with the printer. The CD will automatically begin the installation when inserted in the CD-drive, and when you follow the instructions, it is easy.

If your computer does not your computer have a CD-drive, the installation program must be downloaded from the Internet.

Installation of network printers are more difficult than USB-printers, as it sometimes may be necessary to know how to use codes and IP-adresses¹².

However, if it is a wireless network printer, and you have a WPS-button (Wi-Fi Protected Setup button) on your Router or Access Point, it is very easy. Depending of the equipment there are several variations of connecting the printer, so you need to look at the printer manual.

10.4.2 Print

The keyboard shortcut for Print is Ctrl+P in all Microsoft-programs. This command will also work in most other programs. Alternatively you must find a Print command in the **Files** –tab to print.

