



Minimum IT requirements

KLAES 7.12.2+

Dear User,

This document was last updated in October 2018.

More features in the program also increase the demands on the computers. Because the requirements are ever-changing we recommend asking for the newest specifications before installing the new Klaes software.

Please note for all following configurations of single computer / network / Terminal Server:

The listed hardware requirements are the **minimal basics** only. For a faster work we suggest outperforming components.

We suggest to run Klaes 7 on the 64 Bit editions of the approved operating systems.

Klaes 7 **doesn't** run on Windows 95/98/Millennium/XP or Windows 2003/2000/NT4!

The SQL Server 2005 is no longer maintained by Microsoft. Therefore, Klaes 7.9.4 and later versions can be installed only with the SQL Server 2008/2012/2014 or 2016.

The Klaes setup for local one user versions installs automatically SQL Server Express 2014 or 2016 if needed (depending on the Windows operating system).

- *You can't restore backups* from newer to older SQL Server versions. If you are using the SQL Server 2014 and want to transfer a complete backup of a Klaes mandator to partner companies or window traders they must use a Klaes version with SQL Server 2014 or 2016.
- *Klaes Trade data packages* can be imported by older SQL instances.

Klaes 7 creates detailed calculation reports for Excel so that Microsoft Excel 2010, 2013 or 2016 should be installed.

Klaes 7 will be able to prepare emails with PDF documents if there is a MAPI compatible 32-Bit email software for the delivery.

Klaes 7 can send dialing commands to your telephone software if it is TAPI 32 bit compatible. On a Terminal Server, the phone software must be able to handle the different lines for the users.

Single Computer:

At least a Core i3 CPU with 2.4 GHz, 4 GB RAM, 10 GB free on the hard disk and at least 6 GB free on the system partition (where Windows is located). DVD drive required!

Operating system: Windows Vista SP2, Windows 7 SP1, Windows 8* / 8.1*, Windows 10* (Klaes 7.8.2+)

**) required if the SQL Server 2016 is used*

Network:

In addition to the hardware (file servers, workstations, network cards and networking), the configuration of the operating system plays also an important role.



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We recommend Fast- or better [Gigabit Ethernet](#) for the network topology. The network installation should be made from a specialist to guarantee a stable, secure and efficient IT infrastructure.

Database:

In a network environment, the SQL Server software "Microsoft SQL Server Standard Edition 2008/2012/2014 or 2016" must be installed and purchased separately. If you buy den SQL Server 2014/2016 from us (with cheap prices) you will get it integrated in a Klaes setup wizard so that no deeper installation knowledge is required. If you have already an existing SQL Server, please install a SQL Server instance named [Klaes](#) additionally. Please ask us for the manual.

File Server:

DVD drive required, at least 8 GB RAM, at least Intel Xeon with two cores, 30 GB free on the hard disk, at least 6 GB free on the system partition (where Windows is located).
The CPUs should be clocked as high as possible (> 3.0 GHz) and the storage device should be fast, for instance SAS hard disks with 10000 rpm or SSDs.

Operating system: Windows 2008 SP2 or 2008 R2 SP1, Windows 2012*, Windows 2012 R2*, Windows 2016* (but the file system ReFS is not supported)

**) required if the SQL Server 2016 is used*

Terminal Server:

Basically the same requirements as described for the file server, but it's important to have enough RAM depending on the number of clients: Number of clients x 2 GB + 4 GB for the server + 4 GB for the SQL-Server.

For instance a calculation for 4 Terminal Server clients: $4 \times 2 \text{ GB} + 4 \text{ GB} + 4 \text{ GB} = 16 \text{ GB}$ RAM recommended. To use this large memory a 64 Bit operating system is required.

Operating system: Windows 2008 SP2 or 2008 R2 SP1, Windows 2012*, Windows 2012 R2*, Windows 2016* (but the file system ReFS is not supported)

**) required if the SQL Server 2016 is used*

Network Client PCs:

At least a Core i3 CPU with 2.4 GHz, 2 GB RAM (better 4GB RAM), 3 GB free space on the hard disk drive.

Operating system: Windows Vista SP2, Windows 7 SP1, Windows 8 / 8.1, Windows 10.

If you work on a Terminal Server, you can use older operating systems also for the Terminal Clients.

Tip:

For a network we recommend a Windows Terminal. This operating mode has unique benefits compared to traditional network systems.

In particular, the high performance and the worldwide accessibility are big advantages. But great requirements are demanded on the configuration and installation of the hard- and software.



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So, if you are interested in using this technology in your company, you should contact us.

* It would give us great pleasure to advise you in optimizing your IT infrastructure with our solutions, additionally in the usage of the cloud server solutions in our German data centers.

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