



## protel SPE und Smart

Hardware and system requirements

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## Hardware and system requirements

What is this document about?

An appropriate hardware configuration makes sure in advance that the upcoming installation process and operation of your protel hotelsoftware will run smoothly.

Recommendations stated in this document are based on the specifications suggested by our software developers as well as on the experience we and our partners have made during thousands of installation processes.

The following information is to be primarily viewed as a recommendation if you are planning on the acquisition of new hardware components. If you wish individual advice, do not hesitate to contact us! We are glad to support you and your hardware dealer.

**Note**

Please note that new installations or the transfer of protel Systems to new hardware components must be executed on location by an employee authorized by protel. protel hotel software GmbH will otherwise not assume any warranty for this system!

What will this document show you?

This document describes requirements of the technical components:

- ▼ Operation of protel as a single work station - or as a client / server system
- ▼ Operation of protel in a terminal-server environment
- ▼ Peripheral equipment
- ▼ Remote Maintenance

Related Information

Further information about protel SPE and smart can be found in the following documents:

- ▼ [protel SPE and Smart product information](#)
- ▼ [Information on how to prepare system setup](#)
- ▼ [protel Update News](#)
- ▼ [Overview user rights](#)
- ▼ [Overview replacement codes](#)

For more information and detailed user documentation please contact the protel Support Team.

Support

▼ Also do not hesitate to contact us at [support@protel.net](mailto:support@protel.net) if you have any questions or doubts regarding the following recommendations. We will be happy to assist you!

## protel Editions

The SaaS product and service line with protel Air and bookatonce offers turnkey software solutions in the Cloud, while protel MPE, SPE, and Smart are individually installed on-site or run as a hosted application. All protel products can be operated via stationary or mobile workstations. protel provides the perfect solution for all hotel management needs.

### SPE, MPE, Smart

Protel SPE, protel MPE and protel Smart are native 32-bit Windows applications that can be installed on all conventional Windows client and server platforms. Other operating systems are not supported. All on-site editions are based on a standardized C++ software core:

**protel SPE:** The single property edition for medium-sized businesses and individual hotels.

**protel MPE:** The multi-property edition for central data management in hotel chains and cooperations.

**protel Smart:** The edition with limited scope of functionalities for small businesses.

If you would like to receive more information about MPE, please ask for our specialized document “Hardware and System Requirements for protel MPE”.

### Setup

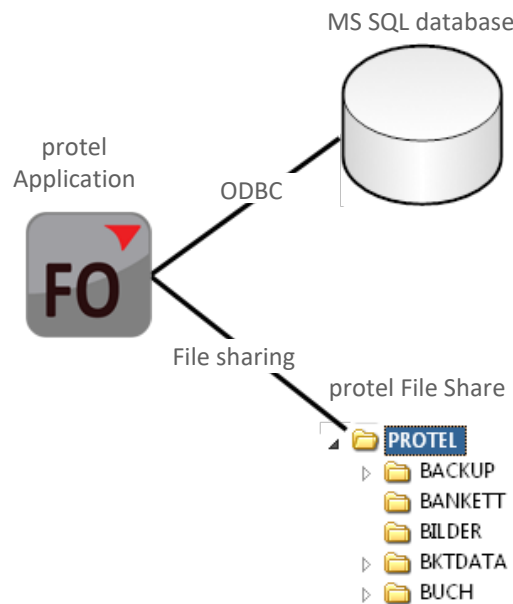
The setup for all editions installed on-site is the same. A software license code is required for activation. A hardware copy protection (dongle) is not used. This means it is always possible to update from a lower edition to a higher one, without having to re-install.

### Database system

For all editions, only **Microsoft SQL Server (2012, 2014, 2016, 2017, 2019)** is used as database system. The Microsoft SQL Server must be available at least as the standard edition, all express versions are not supported. In combination with a powerful hardware configuration, this allows high scalability from a single workstation to highly available cluster systems.

### protel Application

The protel application comprises two executable files (.exe) and a configuration file (.ini), which are saved locally on a (client) PC or a terminal server where they can be executed. For the setup, you will receive an installation script on CD which has to be executed on every client or server. This will not influence the system registration. The connection to the SQL database is established via ODBC (System DSN via MDAC) with a single data base user (SQL Server authentication). To store documents and reports, a central data archive (file share) is also required. Every user needs full access to this directory.



## Supported operating system

**Minimum requirements** The minimum requirements described here **apply to systems on which the protel database will solely be operated.** When working with server systems, we assume that a maximum of 20 simultaneous accesses to the database will be executed. Please also remember the [Microsoft guidelines](#) for the SQL Server. The deployment of additional protel modules can lead to additional hardware and/or higher performance hardware being required. Please find further information in the documentation provided with the respective modules.

### List of Compatible Operating Systems

This list contains operating systems which are compatible with protel SPE/protel Smart and *MS SQL Server 2019* (SQL Server Standard):

Compatible with  
MS SQL 2019

- Windows Server 2019 Essentials
- Windows Server 2019 Standard
- Windows Server 2019 Datacenter
- Windows Server 2016 Essentials
- Windows Server 2016 Standard
- Windows Server 2016 Datacenter
- Windows 10 Pro
- Windows 10 Enterprise
- Windows 10 Education

## Server, clients and workstations

### Stand-alone PC

In small businesses, it is possible to operate the database server and the protel application on only one PC system. To do so, a standard PC system will require the following minimum requirements:

- ▼ CPU: Intel Core i3
- ▼ RAM: 8 GB
- ▼ (available) HDD capacity: 100 GB

protel also recommends the use of redundancies such as hard-disk RAID systems and USV equipment.

<b>Please note</b>	We strongly recommend using a dedicated server system when deploying the protel Web Booking Engine (WBE), a link to an online booking portal, a channel manager, or if protel is used by multiple users at the same time.
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### Specifications for server operation

The minimum requirements for a dedicated server are as follows:

- ▼ CPU: Intel Core i3
- ▼ RAM: 8 GB
- ▼ (available) HDD capacity: 200 GB

protel also recommends the use of redundancies such as hard-disk RAID systems and USV equipment.

### Virtual server

Virtual servers running with Hyper-V or VMWare ESX are supported. Please allocate at least the following resources:

- ▼ CPU Cores: 2
- ▼ RAM: 10 GB
- ▼ (available) HDD capacity: 200 GB

### Specifications for client operation

Pure protel client systems should be equipped as follows:

- ▼ CPU: Intel Core 2 Duo
- ▼ RAM: 2 GB
- ▼ (available) HDD capacity: 5 GB

### Network operation

Network operation for protel SPE or protel Smart is only possible with TCP / IP networks; to do so, we recommend using fixed IP addresses.

At least the following systems should always be accessible via the same IP address:

- ▼ Server
- ▼ Clients by which key-cards are encoded via interface
- ▼ Clients communicating with credit card

The use of a windows domain is not necessary.

## Terminal server operation

Terminal server	<p>protel SPE or protel Smart can be operated both in LAN as well as with a connection to the Internet within a terminal session. The windows terminal services and the VDI solutions will be supported either by Citrix or VMWare. When operating in WAN mode, please make sure that high-performance lines - synchronous at best - are available and which are exclusively available for the terminal users.</p>
Full-Desktop	<p>Operating with a full desktop is also highly recommended. This means apart from protel SPE, all other applications are centrally hosted: MS Office, all file and email services, including their backups, virus protection and web browser.</p> <p>This has the advantage that the above mentioned line is solely used for the terminal sessions (transferred is merely the screen content by the terminal server) and protel SPE can also interact with applications perfectly.</p>
Hardware requirements for the terminal server	<p>The following details are based on physical machines with Windows Server 2012/2016/2019, 64 bit.</p> <p>An appropriate computing power can be achieved by various constellations and depends on the number of users. As minimum requirement we recommend:</p> <ul style="list-style-type: none"> <li>▼ CPU:             <ul style="list-style-type: none"> <li>▼ Per 10 users: 1 Quad Core CPU</li> </ul> </li> <li>▼ RAM:             <ul style="list-style-type: none"> <li>▼ Per server for the operating system: 4 GB</li> <li>▼ Additionally per user: 1 GB</li> </ul> </li> </ul> <p>When using virtual terminal servers the above mentioned values should be increased by 20%.</p>

## Specifications for systems using Mac OS X

Apple	<p>The use of protel SPE on computers using Mac OS X can only be supported by virtual machines manufactured by the company Parallels. But these PCs must not be used as protel server or SQL Server! Alternatively, the above mentioned terminal sessions can be used on the respective Windows machines.</p>
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## Compatibility with Office applications

Microsoft Office	<p>protel SPE is equipped with interfaces to Microsoft Office products starting with version 2007. OpenOffice or LibreOffice are not supported.</p>
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## Data backup

### Back up database

When installing the MS SQL Server, the protel employee will create a maintenance plan which saves a daily copy of the protel database to the local drive of the database server.

protel hotel software also recommends an additional backup to an external medium. The hotelier i.e., the hotel's technician is responsible for checking the backup copy and the data protection. protel explicitly recommends these security measures; you as client, however, are solely responsible for the actual implementation.

## Remote Maintenance

### Team viewer

The current version of Teamviewer is used by default for remote maintenance. Installing the free [Teamviewer Host](#) is recommended for server systems.

## About this manual

Symbols used in this documentation

- ▼ Background information and further information
- ▼ Please note: Important!

Please check:  
Is this the latest version?

Should you realize that certain processes described in this document seem incorrect, it is possible that you may not be using the latest version of this document.

All our documents are constantly updated in accordance with the ongoing development of the software. Should you be unsure about whether you are using the latest document, please feel free to contact us at [documentation@protel.net](mailto:documentation@protel.net).

Questions or suggestions are always welcome!

Feedback

If you are sure that you are using the latest version and still cannot find certain information or find the descriptions to be unclear, please write to: [documentation@protel.net](mailto:documentation@protel.net).

Need help?

If you need any support, please feel free to contact us at [support@protel.net](mailto:support@protel.net) or +49 231 915 930.

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