

# Huzar–Software applications environment

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## Introduction

Customs software of Huzar Software can run on computers with the Windows operating system, only in versions supported by its manufacturer – Microsoft. The software can be run on both workstations and terminal service servers. The software requires the database server service to be running. The software is available in versions for FirebirdSQL server and MSSQL server. The FirebirdSQL server version cannot be lower than 2.5.8, the software does not support version 4.X of the database server. MSSQL server version not lower than 2014.

*Huzar Software programs can be installed on Windows Server Host with Terminal Services enabled.*

*For two to five simultaneous users working with software, the working environment can consist of one server machine which will play the role of Application Server and Database Server.*

*Database Server might be a separate machine for better performance (if you have already running MSSQL services ).*

*Huzar-Software applications, running on Terminal Services, require additional application - WinSADGUARD*

## Requirements for computers - workstations

- Computer compatible with an Intel I3 processor or faster;
- Windows 10 or 11;
- 4 GB RAM;
- 2 to 10 GB free disc space for application data (excluding database) and temp files (check existing sizes of database files);
- screen resolution min. 1280 x 800;
- MSSQL or FirebirdSQL client installed in versions compatible with the database
- • PUESC certificate installed in the Windows user profile

## Requirements for Data Base Server

- Multicore Intel processor;
- min 8 GB RAM (1-4 workstations) / 16 GB RAM (up to 10 workstations) / min. 32 GB RAM (10 and more workstations);
- min 10 GB (50GB) disc space for databases and temp files (depending on database files sizes)
- network connection to the database server: minimum 1GB Mbps;
- MSSQL or FirebirdSQL service or higher installed. The FirebirdSQL version 2.5.X (the newest one) The MSSQL version minimum 2014;
- permanent server address;
- TCP port used by the MSSQL server and database files excluded from AV checking.

## Requirements for Application Server (Terminal Server)

- Physical or virtual machine with multicore processor;
- minimum 2GB RAM per user session;
- 2 to 10 GB free disc space for application data (excluding database) and temp files (check existing sizes of database files);
- network connection to the database server: minimum 1GB Mbps;
- permanent server address;
- TCP port used by the MSSQL server and database files excluded from AV checking;
- Internet connection enabled
- MSSQL or FirebirdSQL client installed and communication with server enabled
- User accounts set
- User PUESC certificates installed
- optional: printers drivers for local user printers enabled
- Access to email accounts enabled and required mail software (Outlook) installed (if needed)
- *Internet connection enabled with following ports - 80, 443 and sites opened:*

The following issues remain to be considered:

- ✓ "speed of operation" - resulting from slow refreshing/drawing of the screen on the terminal caused by a slow Internet connection between the branch and the terminal server - may be unacceptable to users (decrease in work quality),
- ✓ access to other applications and documents - where and how they are to be saved, file availability, sharing folders and circulation of locally created documents.

## Requirements for environment, where the software is run

- TCP port used by the MSSQL server and database files excluded from AV checking;
- access to e-mail via smtp/imap (or native exchange) protocols;
- access to Internet for each user (mandatory!); for the proper operation of Huzar Software programs, the firewall must provide the following connections:
  - for Internet connections: 443 (https protocol),
  - Huzar Software servers addresses:
    - *wildcat.huzar.pl* (188.117.152.142);
    - *www.huzar.pl* (93.157.100.77);
    - *Huzar Software remote assistance tcp wildcat.huzar.pl:8182*
    - *GUS service tcp wildcat.huzar.pl:8183*
    - *NetGuard service (if used) [https:// 84.205.177.20:10000/](https://84.205.177.20:10000/)*
    - *Geolocalization (for HuzarSENT) tcp wildcat.huzar.pl:8184*
  - access to Ministry of Finance websites:
    - <https://puesc.gov.pl>
    - <https://bcp.mf.gov.pl/bcpWS/BcpService>
    - [https://ws.puesc.gov.pl/seap\\_wsChannel\\_puesc2/DocumentHandlingPort](https://ws.puesc.gov.pl/seap_wsChannel_puesc2/DocumentHandlingPort)
    - [https://ws.puesc.gov.pl/seap\\_wsChannel/DocumentHandlingPort](https://ws.puesc.gov.pl/seap_wsChannel/DocumentHandlingPort)
    - <https://www.nbp.pl>

The user should have full rights to create and modify files and directories within the program's data directory. In the case of one station of the software package, the workstation can also act as a database server.

## Database installation

### FirebirdSQL specific requirements and installation tips

To avoid problems with database corruption and performance it is strongly recommended to add exceptions on database files in antivirus software if such is used.

All applications communicate with the Firebird server by default on port 3050 through TCP/IP protocol. Please ensure that communication on this port is not blocked.

The database server is installed as a service in the system and uses local system account to run the service.

Client installation To install the client you need to run the server installation package on the client machine and choose "Minimal client installation". Each workstation is considered as client and has to have the firebird client installed.

More information on Firebird SQL can be found on [www.firebirdsql.org](http://www.firebirdsql.org)

### MSSQL specific requirements and installation tips

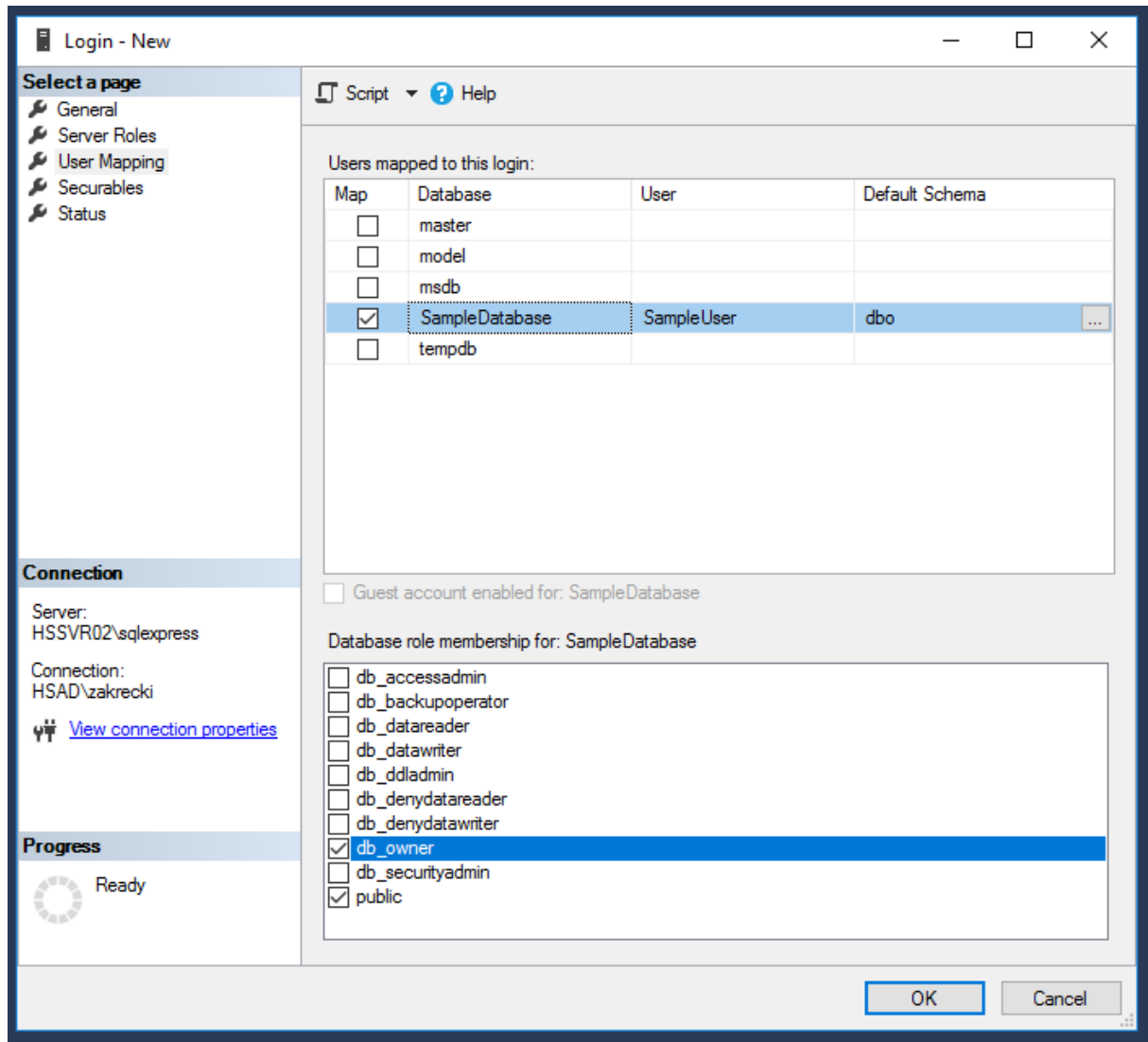
The program automatically creates databases (.mdf files and .ldf log files) on a computer running MS SQL. Database path can be defined in the login window, after clicking the Baza danych button.

Database path is defined in the „Baza” box.

You can define full path database file (eg. *c:\bazy\saddanems.mdf* for SAD documents base, *c:\bazy\fakturydanems.mdf* for VAT invoice file, *c:\bazy\taryfadanems.mdf* for customs tariff file) or the name of the database only (eg. *saddanems*, then the database will be created in MS SQL Server default directory). The SQL Server works on 1443 port by default and you don't need to configure it, except server access enabling by TCP/IP protocol and "Named pipes", which options (you should set them to „Enabled” and restart the server) are available in MSSQL configuration tools (eg. SQL Server Configuration Manager) provided with MS SQL Server. The default MS SQL server user is "sa". Password for this user is created by the administrator when the server is installed. This user has full administrative rights which allows WinSADMS work properly. If you don't want WinSADMS to working with „sa” user, you have to create your own user.

Sample steps for creating such user are following:

- Create the new login in SQL Server Management Studio to have the backup and restore database rights:
- Create the login (*Security->Logins node* on the highest level)
- Create the database manually (*Databases node*) and set the Owner to the new login or
- Change the owner in the existing database (select it, click it with the right mouse button and select *Properties->Files->Owner*). After selecting *Security->new\_login->right\_button\_mouse->Properties->User mapping option*, you should mark the database in which the Owner was set and then in *User and Default Schema* boxes you should set „dbo”, and on the *Database role membership list* you should mark „db\_owner” and „public”.
- Assign db\_owner role for user to created database with 'dbo' as Default Schema



Or you can do it with T-SQL:

- Adding login: `EXEC sp_addlogin 'new_login'`
- Changing owner: `USE database_name EXEC sp_changedbowner 'new_login'`
- Mapping existing user:
  - `EXEC sp_change_users_login`
  - `'Update_One','user_in_selected_database','new_login'`

Database creation T-SQL :

```
CREATE DATABASE database_name
ON
( NAME = database_name_dat,
FILENAME = 'database_file.mdf',
SIZE = 5MB,
FILEGROWTH = 5MB )
LOG ON
( NAME = database_name_log,
FILENAME = 'database_file.ldf',
SIZE = 1MB,
FILEGROWTH = 5MB)
```

```
COLLATE Polish_CI_AS;
```

```
ALTER DATABASE database_name SET RECOVERY SIMPLE  
ALTER DATABASE database_name SET READ_COMMITTED_SNAPSHOT ON WITH ROLLBACK AFTER 5  
ALTER DATABASE database_name SET ALLOW_SNAPSHOT_ISOLATION ON
```

```
USE database_name  
GO  
ALTER USER new_login WITH DEFAULT_SCHEMA=[DBO]  
GO  
ALTER ROLE [DB_OWNER] ADD MEMBER new_login
```

### Program WinSAD installation tips:

It is best practice not to install WinSADMS in C:\Program Files folder, because there may be problems with permissions to creating files needed and created by application (downloaded dictionaries and error log)

Run WinSADMS (or WinSADIB) Click "Baza danych" button - you can there choose database server and database name (if it was previously created by Administrator) Enter the database admin login and it's password – CLICK „OK” Then Click "Ochrona programu" button. Program will ask whether to create the database, click "Tak". Then there will appear a window where you can choose the type of authorization. Choose "Hasło sprzętowe" radiobutton and then click "Wyślij numer do Huzar Software" and send us an email with the number provided. Then you will have to wait for an email from us confirming that licence number was generated.

After that, you run the program again and in "Ochrona programu" you have to click "WinSADGuard" radiobutton and then click "Pobierz plik uprawnień". The program will download authorization file.

After completing these steps, **with the WinSADGUARD service running**, you can try to log into the program as a program user Administrator with the blank password.

### WinSADGUARD installation procedure

WinSADGUARD is a program for serving and granting licences to the WinSAD users. It could be run as an application or – better solution – as a service (as localsystem user). Before configuring WinSADGUARD, the WinSAD database file needs to be created (see steps above).

It is best not to install WinSADGUARD in C:\Program Files folder, because there may occur problems with permissions to creating files needed and created by application (downloaded dictionaries and error log). The program can be located in the same directory as WinSAD.

To properly setup WinSADGUARD program options, the program has to be started with windows system Administrator privileges, so please click the right mouse button on program icon and select „Run as Administrator”.

When the program is launched for the first time, licence type needs to be set – from menu „Ustawienia → typ zabezpieczenia” – please choose „numer sprzętu”. The licence number will be shown in blue color – please send it to us. Next, after our email response, from menu „Ustawienia” select „Pobierz plik uprawnień”.

From menu „Ustawienia” please select „Opcje pracy” - this is the place where the WinSAD database path needs to be set. Please click „Dodaj” button, choose „MSQL” or „FirebirdSQL” and fill out the form in the same way as in the WinSAD program (it simply must be the same database).

With the WinSADGUARD program running, please launch WinSAD. When the first window in WinSAD appears, click the „Ochrona programu” button, then select „Program WinSADGuard” and click „OK”, next click „OK” button once again and wait until program WinSAD starts.

If WinSAD is running properly you can perform the next step – switching the WinSADGUARD into the service mode (WinSADMS can be shut down).

From WinSADGUARD menu item „Ustawienia” please select „Tryb Pracy” and choose „Uruchom jako usługę” - the system user „localsystem” is preferred to be the owner of this service. If everything goes well you will see WinSADGUARD service in system services, and WinSADGuard application will switch to the preview mode – you can now close the program.