

Technical requirements for working with **VISMA**  
Horizon and HoP  
Updated on 11.03.2021.



# Content



<b>Internet Connection</b>	<b>4</b>
<b>Workstation and devices</b>	<b>4</b>
<b>DMS server recommendations</b>	<b>6</b>
Server recommendations	6
Support of the Horizon database management system (DMS)	8
<b>Application server's requirements</b>	<b>10</b>

There are different technical requirements based on whether you use Horizon as Cloud solution or as Installed On-Prem solution.

Cloud solution customers must take into consideration only requirements on “Internet connection” and “Workstation and Devices”.

On-prem customers must take into consideration all requirements.

Technical requirements	Cloud	On-Prem
1. Internet connection	x	x
2. Workstation and Devices	x	x
3. MS SQL server		x
4. Application server		x

## 1 Connection

Internet connection speed when working with a Horizon desktop client:

- At least 1 Mbit/s;
- Recommended – 10 Mbit/s for 10 users;
- With large amounts of data (for opening large lists) – 100 Mbit/s.

Quality:

- Packet loss ratio  $\rightarrow 0$ ;
- Average tremor in milliseconds  $< 5$ ;
- Average latency in milliseconds  $< 10$ .

If the required internet connection quality cannot be ensured, we recommend using the Terminal server solutions.

## 2 Workstation and devices

### Workstation for using Horizon client

- Processor – the minimum requirements depend on the requirements of the OS in use, suggested Dual Core, 1.8 GHz, PassMark  $\geq 2000$  or better;
- Memory – the minimum requirements depend on the requirements of the OS in use, it is suggested to have at least 2 Gb or more of available memory for Horizon;
- Disk space – min 1.5 Gb of free space, recommended  $>10\text{Gb}$ ;
- Screen resolution 1366x768 or larger;
- Additional software – for data export, MS Excel, MS Word, Open Office, Acrobat Reader can be used. For using the system's data import templates, MS Excel is required. Personnel order forms only work with MS Word.
- Following operation system parameters should be configured:

- Language for Non-Unicode programs - “Latvia”
- Decimal separator – „,”
- Date format – „dd.mm.yyyy.”
- Operating system for workstation:

Horizon products can only be installed on Microsoft systems.

The table contains Microsoft systems on which Visma Enterprise provides the operation of their programmes. To ensure stable operation of the system, we suggest choosing one that is in the main support period.

Version	Microsoft				Horizon	
	Start date of the life cycle	End date of main support	End date of the extended support	Suggested service packs or upgrade level	May be used with version	Last useable version/date
Windows 8.1	13.11.2013	09.01.2018	10.01.2023	-	3.240.400	10.01.2023
Windows 10	29.07.2015			-	3.465.465	

Excel add-on is supported for MS Excel (Office) 2013, 2016, 2019 or 365.

#### Requirements for devices for usage of Visma HoP

- Supported browsers: Microsoft Internet Explorer 11, Microsoft Edge (latest version), Chrome (latest version), Firefox (latest version), Safari (latest version).
- Screen resolution:
  - Large screens (above 1200px) - optimal usage, all functions available
  - Medium screens (768-1200px) - non-essential functions or some visual elements might not be available
  - Small screens (under 768px) - only the most essential functions available

### 3 Microsoft SQL server (not applicable for Cloud customers)

#### 3.1 Server recommendations

When planning the infrastructure, not only the technical requirements, but also the past and future amount of data, number of users, scenarios of use and the amount of data to be processed in them, as well as the configuration of individual systems and infrastructure must be taken into account.

Company characteristics				
	Small company	Medium company	Medium company in trade	Large company
Number of users	7	20	70	300
Salary employees (payslips)	10	500	1 200	40 000
Customers	500	2 000	5 000	50 000
Nomenclatures	2 000	20 000	70 000	100 000
Documents	600	4 000	16 000	90 000
Bookings	1 500	10 000	40 000	200 000

Server component recommendations <sup>1</sup>				
	Small company	Medium company	Medium company in trade	Large company
DMS	Free: Express edition	Standard edition	Standard edition	Standard edition
Processor <sup>2</sup>	Intel i5, i7	Intel Xeon	Intel Xeon	2x Intel Xeon E5
Memory	6 Gb	24 Gb	64-128 Gb	128-256 Gb
Disk configuration <sup>3</sup>	RAID 1	RAID 1	RAID 10, external disk arrays <sup>4</sup>	External disk arrays <sup>4</sup> , RAID 10, Temp db on certain disks
Hard drives	HDD, SSD	SSD	SSD	SSD Recommended by the hardware manufacturer
Security copy	USB storage space, remote storage	USB storage space, remote storage	Tape machine, remote storage	Tape machine, backup server, remote storage

<sup>1</sup>In the recommendations it is noted that for DMS placement a separate physical server will be used; it is not suggested to place other Horizon components (FTG Server, HoP products) on this server. Virtualisation may be used, a virtual server that divides equal and undivided power with other virtual machines.

<sup>2</sup>A CPU with a larger clock cycle frequency and a smaller number of cores, which is important if licensing is used on the cores.

<sup>3</sup>It is suggested to use separate disks for database files.

<sup>4</sup>When using the disk array, it is important that they ensure the required performance (response time <5 ms).

**3.2 Microsoft SQL supported versions**

Information included in the tables will help to decide which DMS to use for a new installation or to plan the transition to a newer DMS version in advance. Make sure that the DMS used has the latest service pack (SP) or patchset installed.

When choosing a version, we recommend the one that is on a general support period, as it will provide the optimal operation of the Visma Enterprise software.

Additional information:  
<http://support.microsoft.com/gp/lifepolicy>

Microsoft SQL

Press release	Microsoft				Horizon	
	Start date of the life cycle	End date of main support	End date of the extended support	Recommended service pack level	May be used with version	Last useable version/date
2012	20.05.2012	11.07.2017	12.07.2022	SP4	3.230.385	12.07.2022.
2014	05.06.2014	09.07.2019	09.07.2024	SP3	3.280.436	09.07.2024.
2016	01.06.2016	13.07.2021	14.07.2026	SP2	3.485.485	14.07.2026.
2017 <sup>1</sup>	29.09.2017.	11.10.2022.	11.10.2027.		3.505.505	11.10.2027.
2019 <sup>1</sup>	04.11.20193	07.01.2025.	08.01.2030.		3.550.550	08.01.2030.

<sup>1</sup> Only on Windows.



### Suggestions for MS SQL licence choice

There are two licencing options for MS SQL:

- on number of users;
- on cores (minimum number of licensable cores: 4).

Licence price for 30 users is approximately the same as price fo 4 cores. Therefore, if the number of users is 30 or more, it is better to choose licencing by cores. Expected number of users can be calculated by adding the number of Horizon workstations and number of Visma HoP self-service users.

Additional information: [SQL Server—Pricing and Licensing](#)

If Windows server (Standard or Enterprise) is used as OS, server client cal is needed for every Horizon and Visma HoP self-service user, who will need to connect to MS SQL on this server.

Additional information: [Windows Server 2019 Licensing & Pricing](#)

## 4 Application server

Application server – a server on which Horizon software products (HoP, Horizon server with the REST interface, Horizon server for automatic operations, Web self-service, Online shop and others) can be set up.

Depending on the use, multiple application servers can be used in parallel. Optimal technical requirements on the table below.

Usage Scenario	Atsevišķs aplikāciju serveris	Procesor	Memory	Free disc space
HoP self-service <sup>1</sup>	HoP application server	8x vCPU	14Gb	50Gb
	Horizon server with REST interface	4x vCPU	24Gb	50Gb
Web self-service	Horizon web server (IIS)	2x vCPU	12Gb	50Gb
Other usage scenarios	Horizon server with REST interface <sup>2</sup> (For other Visma product, partner solutions and integrations with third part solutions), Horizon server for automatic tasks	2x vCPU	12Gb	50Gb

<sup>1</sup>Optimal requirements for 300 simultaneously active HoP users (for example, 300 are at the same time are applying for vacation). If the number of simultaneously active HoP users exceeds 300, it is necessary to monitor usage of memory capacity, increase it and, if necessary, request additional information from Visma.

<sup>2</sup>If the amount of demands is high, it is necessary to monitor usage of memory capacity, increase it and, if necessary, request additional information from Visma.

Following operation system parameters should be configured:

- Language for Non-Unicode programs - “Latvia”
- Decimal separator – „,”
- Date format – „dd.mm.yyyy.”

Operating system support:

Version	Microsoft				Horizon	
	Start date of the life cycle	End date of main support	End date of the extended support	Suggested service packs or upgrade level	May be used with version	Last useable version/date
Windows Server 2012	30.10.2012	09.01.2018	10.01.2023		3.240.400	10.01.20230
Windows Server 2016	15.10.2016	11.01.2022	11.01.2027	-	3.490.490	11.01.2027.
Windows Server 2019	13.11.2018.	09.01.2024.	09.01.2029.	-	3.530.530	09.01.2029.

<sup>1</sup>HoP installation is supported on Microsoft Server 2019, 2016 and 2012 R2 (Microsoft .NET Framework 4.5.2 must be installed) operating systems

**If you have any questions, please, write to [visma@visma.lv](mailto:visma@visma.lv)**