System requirements

for Paessler PRTG







Content

System requirements for Paessier PRIG	3
Recommended setup for most PRTG users	3
Recommended setup for probes	5
Recommended setup for PRTG extensions	7
Running PRTG in virtual environments	10
More considerations and requirements	11
Minimum requirements for special use cases	11
Minimum requirements for remote probes (only special, low-resource use cases)	13
Performance considerations	13
Stability considerations	15
Supported Windows versions for the PRTG core server and remote probes	15
User interfaces of PRTG	16
Requirements for monitored devices	17
Need further assistance? Planning an installation with thousands of sensors?	18



System requirements for Paessler PRTG

Recommended setup for most PRTG users

There are many parameters that influence the user experience of PRTG, but for the majority of PRTG users, the following sizing recommendations for the hardware of the PRTG core server work fine.

We recommend that you run your PRTG core server installation:

- directly on x64 server hardware or in a properly configured virtual environment (for more information, see section <u>Running PRTG in</u> <u>virtual environments</u>).
- on Windows Server 2022, Windows Server 2019, Windows Server 2016, Windows 11, or Windows 10.

Note: <u>.NET Framework 4.7.2</u> or later must be installed on the core server system. For new PRTG core server installations, we recommend .NET Framework 4.8.



PRTG core server installa- tion recommen- dations	Up to 500	Up to 1,000	Up to 2,500	Up to 5,000	Up to 10,000	> 10,000
CPU cores	4	6	8	8	10-12*	
RAM	4 GB	6 GB	8 GB	12 GB	16 GB	We
Disk	100 GB	500 GB	750 GB	1,000 GB	1,500 GB	recommend that you set up additional PRTG core server installations or contact the Paessler Presales team for more information on scaling.
Concurrently active administrator sessions	< 30	< 30	< 20	< 20	< 15	
Number of remote probes	< 30	< 30	< 30	< 60	< 80	
Virtualization	~	~	~	~	\ **	
Cluster	~	~	~	~	***	_
Recommended license size	PRTG 500	PRTG 1000	PRTG 2500	PRTG 5000	PRTG 10000	PRTG Enter- prise Monitor

 $[\]checkmark$ = OK \checkmark = OK \checkmark = not recommended

Note: Most PRTG users have 10 sensors per device on average. In most cases, a license size of 1,000 sensors is therefore enough to monitor about 100 devices, for example. If you exceed any of these recommendations, please contact the <u>Paessler Presales team</u>.

^{✓ =} not officially supported: please contact the <u>Paessler Presales team</u>.

^{*} If you use more than 10 CPU cores, you might need to apply a CPU-splitting configuration in the Windows registry.

^{**} For more information, see section Running PRTG in virtual environments.

^{***} Not officially supported: please contact the <u>Paessler Presales team</u>.



Recommended setup for probes

Classic remote probe

We recommend that you run classic remote probes:

- directly on compatible x86 hardware or in a properly configured virtual environment (for more information, see section <u>Running</u> <u>PRTG in virtual environments</u>).
- on Windows Server 2022, Windows Server 2019, Windows Server 2016, or Windows 11 and Windows 10.

Note: <u>.NET Framework 4.7.2</u> or later must be installed on the probe system. For new installations, we recommend .NET Framework 4.8.

Classic remote probe recommendations	Up to 200 sensors	Up to 2,000 sensors	Up to 5,000 sensors
CPU cores	2	4	6 GB
RAM	2 GB	4 GB	6 GB
Disk space*	40 GB	40 GB	40 GB

^{*} A classic remote probe system does not have any special disk requirements (< 1 GB). In general, we recommend at least 40 GB.

For more than 5,000 sensors: We recommend that you set up additional PRTG core server installations or contact the <u>Paessler Presales team</u> for more information on scaling.



Multi-platform probe

We recommend that you run multi-platform probes:

- directly on compatible x86 hardware or in a properly configured virtual environment (for more information, see section <u>Running</u> <u>PRTG in virtual environments</u>).
- on Ubuntu Linux, Debian Linux, RHEL/CentOS, or Rasperry PI OS.

Multi-plat- form probe recommendations	Up to 200 sensors	Up to 2,000 sensors	Up to 5,000 sensors
CPU cores	2	4	6
RAM	1 GB	2 GB	2 GB
Disk space*	8 GB	8 GB	8 GB

^{*} The required disk space will vary depending on which operating system you use. For concrete examples of hardware and architecture setups, see the manual: Multi-Platform Probe for PRTG.

For more than 5,000 sensors: We recommend that you set up additional PRTG core server installations or contact the <u>Paessler Presales team</u> for more information on scaling.



Recommended setup for PRTG extensions

PRTG OPC UA Server

We recommend that you run PRTG OPC UA Server:

- directly on compatible x86 hardware or in a properly configured virtual environment (for more information, see section <u>Running</u> <u>PRTG in virtual environments</u>).
- on Windows Server 2022, Windows Server 2019, Windows Server 2016, Windows 11, or Windows 10.

PRTG OPC UA Server recommendations	Minimum	Recommended
CPU cores	2	4
RAM	2 GB	4 GB
Disk space	40 GB	40 GB



PRTG SLA Reporter, PRTG Data Exporter, and PRTG Database Observer

We recommend that you run PRTG Data Exporter, and PRTG Database Observer:

- directly on compatible x86 hardware or in a properly configured virtual environment (for more information, see section <u>Running</u> <u>PRTG in virtual environments</u>).
- on Windows Server 2022, Windows Server 2019, Windows Server 2016.

Note: <u>.NET Framework 4.7.2</u> or later must be installed on the core server system. For new PRTG core server installations, we recommend .NET Framework 4.8

PRTG extension recommendations	PRTG SLA Reporter	PRTG Data Exporter	PRTG Database Observer
CPU cores	4	4	4
RAM	8 GB	8 GB	8 GB
Disk space*	Dependent on the number of SLAs	Dependent on the amount of exported data	150 MB**

^{*} The required disk space depends on the amount of exported data. For an example on how to calculate the required disk space of your setup, see the respective manual.

^{**} If you also install a Microsoft Exchange Express instance, the required disk space is 3 GB.



PRTG Data Hub

We recommend that you run PRTG Data Hub:

- directly on compatible hardware or in a properly configured virtual environment (for more information, see section <u>Running PRTG in</u> <u>virtual environments</u>).
- on Linux Debian 12 or Ubuntu 24.04. OS

Note: PRTG Data Hub is currently only available for Linux environments. The configuration is set using a YAML file.

PRTG Data Hub recommendations	Minimum	Recommended
CPU cores	2	2
RAM	512 MB	512 MB
Disk space	50 MB	50 MB



Running PRTG in virtual environments

PRTG is an all-in-one monitoring solution with lots of different components that all rely on the performance and the stability of the system on which the PRTG core server runs. Here, virtual environments add even more layers of complexity. This needs to be considered when you want to set up your PRTG core server installation in a way that you can achieve the same level of performance as on a physical server.

Most PRTG core server installations from 500 to 5,000 sensors do not need any specific optimization regarding your virtual infrastructure.

If you run larger installations of PRTG with more than 5,000 sensors, please follow the instructions in our Best Practice Guide: Running large installations of PRTG in a virtual environment.

Note: Particularly for virtual systems, make sure that you have a unique Windows security identifier per system.



More considerations and requirements

Minimum requirements for special use cases

If you run PRTG with a limited use case, for example, if you only use Ping sensors and SNMP v1 or v2c sensors with long scanning intervals, your installation can work fine with lower system requirements. We have seen PRTG installations that work well with the following minimum requirements.

Note: Keep in mind that you might encounter performance issues with certain sensor types or when you set short scanning intervals.

Note: The recommendations for the hardware architecture, the operating system, and the software requirements that we previously specified apply here as well.



Sensors per PRTG core server installation	Up to 500	Up to 1,000	Up to 2,500	Up to 5,000	Up to 10,000	> 10,000
CPU cores	2	4	6	6	8	
RAM	2 GB	4 GB	6 GB	8 GB	12 GB	We recommend
Disk	60 GB	250 GB	500 GB	750 GB	1 TB	that you set up additional
Concurrently active administrator sessions	< 10	< 10	< 10	< 10	< 10	PRTG core server installations or contact the Paessler Presales team for more information on scaling.
Number of remote probes	< 10	< 10	< 10	< 10	< 10	
Virtualization	~	~	~	~	*	
Cluster	~	~	~	V	~	
Recommended license size	PRTG 500	PRTG 1000	PRTG 2500	PRTG 5000	PRTG 10000	PRTG Enter- prise Monitor

^{✓ =} OK
✓ = OK
✓ = not recommended

✓ = not officially supported: please contact the <u>Paessler Presales team</u>.

^{*} For more information, see **Running PRTG in virtual environments**.



Minimum requirements for remote probes (only special, low-resource use cases)

Sensors per remote probe	CPU cores	RAM	Disk space*	
Up to 200	1	2 GB	40 GB	
200 - 2,000	2	2 GB	40 GB	
2,000 - 5,000	4	2 GB	40 GB	
> 5,000	We recommend that you set up additional remote probes or contact the <u>Paessler Presales team</u> for more information on scaling.			

^{*} A remote probe system does not have any special disk requirements (< 1 GB).

Performance considerations

Please note the following aspects that can affect performance:

- As a rule of thumb, we can say that typical PRTG installations almost never run into performance issues when they stay below 5,000 sensors, below 30 remote probes, and below 30 user accounts.
- In a cluster, the monitoring load doubles with each cluster node.
 The performance is accordingly divided in half with each additional cluster node. Therefore, in a single failover cluster setup that consists of two PRTG core servers that each work as a cluster node, please divide our recommended numbers from above in half.



- When you have more than 5,000 sensors, you should set 5-minute scanning intervals or longer instead of using 1-minute scaning intervals.
- Some sensor types create much more load than others. For example, Ping and SNMP sensors create much less load than complex sensors like flow (NetFlow, jFlow, sFlow, IPFIX) sensors, VMware sensors, Sensor Factory sensors, WMI sensors, or Syslog/SNMP Trap Receiver sensors, to name just a few examples.
- Try to use sensors with less than 50 channels. Note that sensors
 with more than 50 channels are not officially supported and can
 have a high impact on system performance.
- We recommend that you stay below 30 active user accounts for each PRTG core server. You can have more users if these do not all use the PRTG web interface at the same time (including public dashboards or 'Maps').
- Try to keep the usage of the following features down: many quickly refreshed dashboards (or 'Maps'), frequently generated, huge sensor reports, heavy usage of packet sniffing, Sensor Factory sensors and Toplists, frequent automatically scheduled auto-discoveries for large network segments, and constant queries of monitoring data via the application programming interface (API).
- Load balancing is possible using remote probes. To distribute load, you can set up multiple remote probes on different computers. For more information, see the PRTG Manual: Remote Probes and Multiple Probes and watch the video tutorial Distributed Monitoring with PRTG.



Stability considerations

Please note the following aspects that can affect the stability of PRTG:

- Remote probes require a stable network connection between the PRTG core server and the remote probe. Unstable connections, for example via 3G or via satellite, might work. However, there have been situations where stable monitoring was not possible.
- Our general recommendation is to stay below 30 remote probes on one PRTG core server. PRTG still scales well up to 60 remote probes as long as you have less than 100 sensors per probe.
- The quality of your network also plays an important role. When
 monitoring via the User Datagram Protocol (UDP), for example,
 a high packet loss rate can lead to frequent timeouts. Remote
 probes that connect via unstable WAN connections can lead to
 delays as well.

Note: An internet connection is required for the license activation via HTTP or email.

Supported Windows versions for the PRTG core server and remote probes

The following Windows versions are officially supported for the PRTG core server service and the PRTG probe service. We recommend 64-bit (x64) operating systems.

- Microsoft Windows Server 2022
- Microsoft Windows Server 2019



- Microsoft Windows Server 2016
- Microsoft Windows 11
- Microsoft Windows 10

Note: Windows Servers in Core mode or Minimal Server Interface are not officially supported.

User interfaces of PRTG

PRTG web interface

The following browsers (in order of performance and reliability) are officially supported for the web browser based primary user interface of PRTG at a screen resolution of 1024x768 pixels (more is recommended):

- Google Chrome 75 or later (recommended)
- Mozilla Firefox 67 or later
- Microsoft Edge 79 or later
- · Safari 11 or iOS (Safari) 11 or later

Note: Other browsers and older browsers might not be able to access the PRTG web interface at all.

PRTG apps for Android and iOS

We provide free apps for <u>Android and iOS</u> devices. For detailed system requirements, see <u>PRTG app download</u>.



PRTG MultiBoard

PRTG MultiBoard runs under all supported Windows and Mac versions. Supported systems are:

- Windows Server 2022/2019/2016
- Windows 11/10
- macOS 10.13+

Requirements for monitored devices

- Monitoring via the Simple Network Protocol (SNMP): The monitored devices must be equipped with SNMP v1, v2c, or v3, and an SNMP-compatible software must be installed on the device. SNMP must be enabled on the device and the machine running PRTG must be allowed to access the SNMP interface.
- Monitoring via Windows Management Instrumentation (WMI):
 To use WMI monitoring, you need a Windows network. Host computers and client computers with Windows operating systems as specified above are officially supported. Do not use Windows Vista or Windows Server 2008 on host computers for WMI monitoring because both have WMI performance issues.
- Flow-based monitoring (NetFlow, jFlow, sFlow, IPFIX): The device must be configured to send NetFlow (v5, v9, or IPFIX), sFlow (v5), or jFlow (v5) data packets to the probe system.
- Monitoring via packet sniffing: Only data packets that pass the network card of the local machine can be analyzed. Switches with so-called 'monitoring ports' are necessary for network-wide monitoring in switched networks.



Need further assistance? Planning an installation with thousands of sensors?

Our Presales team is happy to assist you! Please write to presales@paessler.com. If possible, describe your monitoring requirements in detail so that we can find the best person to help you. For larger installations, see PRTG Enterprise Monitor.



About Paessler

Paessler believes monitoring plays a vital part in reducing human-kind's consumption of resources. Monitoring data helps its customers save resources, from optimizing their IT, OT and IoT infrastructures to reducing energy consumption or emissions – for our future and our environment. That is why Paessler offers monitoring solutions for businesses across all industries and all sizes, from SMB to large enterprises. Paessler works with renowned partners, and together they tackle the monitoring challenges of an ever-changing world.

Since 1997, when Paessler first introduced PRTG Network Monitor, it has combined its in-depth monitoring knowledge with an innovative spirit. Today, more than 500,000 users in over 170 countries rely on PRTG and other Paessler solutions to monitor their complex IT, OT and IoT infrastructures. Paessler's products empower its customers to monitor everything, and thus help them optimize their resources.

Monitoring for every industry







DATA CENTER MONITORING



HEALTHCARE MONITORING



EDUCATION MONITORING



GOVERNMENT MONITORING