

System Requirements for PRTG Network Monitor

Paessler AG offers licenses for PRTG Network Monitor that range from 100 sensors to an unrestricted number of sensors. The hardware required for the PRTG core server depends very much on the number of sensors you are running, as well as on a few additional key values such as the number of remote probes in use.

The summary below provides guidelines for the system requirements, as well as an indication of what we recommend and what we support. Due to technical limitations, the sensor limit is lower when you are running the core server in a virtual machine or in a cluster. For more details, please refer to Paessler's System Requirements for PRTG online, at www.paessler.com/prtg/requirements.

Recommended Setup for Most PRTG Users

We recommend that you run the PRTG core server as well as all remote probes

- directly on x64 PC/server hardware (not older than 2 years)
- under **Windows Server 2012 R2** having .NET Framework 4.0 or 4.5 installed.

There are many parameters that influence the performance and stability of PRTG, but for the vast majority of PRTG users the following sizing recommendations for the hardware of the PRTG server work fine.

Sensors per core server	User accounts	Remote probes	Recommended core server hardware	Disk space (1 year data retention)	Virtualization	PRTG cluster
up to 1,000 sensors (ca. 100 devices)	< 30	< 30	2 Cores, 3 GB RAM	250 GB	✓	✓
1000 - 2,500 sensors (ca. 250 devices)	< 30	< 30	3 Cores, 5 GB RAM	500 GB	✓	✓
2,500 - 5,000 sensors (ca. 500 devices)	< 20	< 30	5 Cores, 8 GB RAM	1 TB	✓	!
5,000 - 10,000 sensors (ca. 1,000 devices)	< 10	< 30	8 Cores, 16 GB RAM	2 TB	!	!
More than 10,000 sensors	Please set up additional PRTG servers and contact us at presales@paessler.com					

✓ = OK ! = not recommended ! = not supported



Note: Most PRTG users have 10 sensors per device on average. So, for example, a 1,000 sensors license is enough to monitor 100 devices in most cases.

If you exceed any of these recommendations, please contact us at presales@paessler.com. We will be happy to help you!

For more details about needed system resources, please see below:

PERFORMANCE CONSIDERATIONS

Most PRTG installations will never run into performance issues, but please note the following points that can affect performance:

- As a **“Rule of thumb”** we can say: Typical PRTG installations almost never run into performance issues when they stay under 5,000 sensors, under 30 remote probes, and under 30 user accounts. If your scenario is listed above go ahead and install PRTG.
- **Please use a physical machine. Yes, really!** There are several reasons why we recommend that you run PRTG (core server and remote probes) on real hardware, especially for thousands of sensors. Each sensor request will have to go through many virtualization layers, which costs performance and makes measurements less exact. In our experience, a physical machine simply works best for a thousand sensors and more. Our recommendation to use real hardware is valid for the PRTG core server and for remote probes. If you must run PRTG on a virtual machine, please stay below 5,000 sensors per virtual machine and consider running several PRTG core server instances instead
- **Halfed performance for each additional cluster node.** In a PRTG failover cluster, the monitoring load doubles with each cluster node. In a single failover cluster, please divide our recommended numbers from above in half. We recommend a single failover setup if you need fail-safe monitoring. This consists of two PRTG core servers, each working as a cluster node.
- When you use more than 5,000 sensors you should use 5 minutes intervals (instead of 1 minute) or longer.
- Some sensor types create much more load than others. For example, Ping and SNMP sensors create much less load than complex sensors like xFlow sensors, VMware sensors, Sensor Factory sensors, WMI sensors, or Syslog/Trap receiver sensors, to name just a few examples.
- We recommend that you stay below 30 active user accounts for each PRTG core server. You can work well with more users if these do not all use the UI at the same time (including public dashboards).
- Try to keep the usage of the following features down: Many quickly refreshed dashboards (“Maps”), frequent generation of huge sensor reports, heavy usage of packet sniffing, factory sensors and toplists, frequent automatically scheduled auto-discoveries for large network segments, constant queries of monitoring data via the API, among others.

STABILITY CONSIDERATIONS

Most PRTG installations will never run into stability issues, but please note the following points 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, may work but we have seen 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 probes as long as you have less than 100 sensors per probe.
- An internet connection is required for license activation (via HTTP or email).
- The quality of your network also plays an important role. When monitoring via 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.

SUPPORTED WINDOWS VERSIONS FOR CORE SERVER AND PROBES

The following Windows versions are officially supported for PRTG “Core Service” and “Probe Service”. We recommend 64-bit (x64) operating systems.

- Microsoft Windows Server 2012 R2* (**recommended**), Microsoft Windows Server 2012*
- Microsoft Windows 10**, 8.1, 8, 7
- Windows Server 2016*, Windows Server 2008 R2*
- Microsoft Windows Server 2008 (not recommended)
- Microsoft Windows Vista (not recommended)

* Windows Server 2012 in Core mode and the Minimal Server Interface are not officially supported.

** The PRTG Enterprise Console is not fully compatible with Windows 10.

SUPPORTED WINDOWS VERSIONS FOR CORE SERVER AND PROBES

PRTG Web Interface

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

- Google Chrome 49 or later (recommended)
- Mozilla Firefox 45 or later
- Microsoft Internet Explorer 11
- Other and older browsers may not be able to access to the WebUI at all

PRTG Windows App (Enterprise Console)

The PRTG Enterprise Console app runs under all supported Windows versions (see the list above) at screen resolutions of 1024x768 pixels or more.

Mobile Apps

We provide free apps for Android and iOS devices, as well as for Windows Phone. Please see Mobile Apps for smartphones and tablets and the corresponding app pages for detailed system requirements. For more information please visit: www.paessler.com/apps

REQUIREMENTS FOR MONITORED DEVICES

- **SNMP** monitoring: The monitored device(s) must be equipped with SNMP Version 1, 2c, or 3 (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 to the SNMP interface. For details, please see PRTG Manual: Monitoring via SNMP
- **Windows/WMI** monitoring: To use WMI (Windows Management Instrumentation) monitoring, you need a Windows network. Host PC and client PCs with Windows OS as given above are officially supported. Please do not use Windows Vista or Windows Server 2008 on hosts PCs for WMI monitoring, both have WMI performance issues. For details, please see PRTG Manual: Monitoring via WMI
- **NetFlow, IPFIX, sFlow, jFlow** monitoring: The device must be configured to send NetFlow (V5, V9, or IPFIX), sFlow (V5), jFlow (V5) data packets to the machine running a PRTG probe. For details, please see PRTG Manual: Monitoring Bandwidth via Flows
- **Packet Sniffing**: Only data packets passing 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. For details, please see PRTG Manual: Monitoring Bandwidth via Packet Sniffing

For more information please visit: www.paessler.com/manuals/prtg/sensor_technologies

ABOUT PAESSLER AG

Paessler AG's award winning PRTG Network Monitor is a powerful, affordable and easy-to-use Unified Monitoring solution. It is a highly flexible and generic software for monitoring IT infrastructure, already in use at enterprises and organizations of all sizes and industries. Over 150,000 IT administrators in more than 170 countries rely on PRTG and gain peace of mind, confidence and convenience. Founded in 1997 and based in Nuremberg, Germany, Paessler AG remains a privately held company that is recognized as both a member of the Cisco Solution Partner Program and a VMware Technology Alliance Partner.

Freeware and Free Trial versions of all products can be downloaded from www.paessler.com/prtg/download.

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