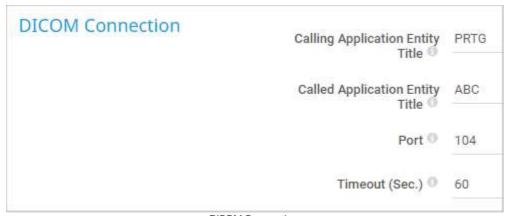


Setting	Description
	<ul> <li>i) It is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (&lt;&gt;).</li> <li>i) For performance reasons, it can take some minutes until you can filter for new tags that you added.</li> <li>The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:</li> <li>dicom</li> </ul>
Priority	<ul> <li>cecho</li> <li>ping</li> <li>Select a priority for the sensor. This setting determines the position of the</li> </ul>
1 Honey	sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (*কর্মকর্ম) to the highest priority (*****).

### **DICOM Connection**



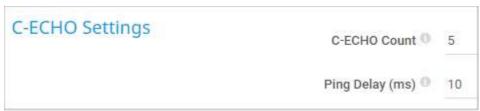
DICOM Connection

Setting	Description
Calling Application Entity Title	Enter the Application Entity Title (AET) of PRTG to initialize a DICOM connection.  ① The AET is case sensitive and does not support special characters.
Called Application Entity Title	Enter the AET of the target system to initialize a DICOM connection.  The AET is case sensitive and does not support special characters.



Setting	Description
Port	Enter the port of the DICOM interface to use for the connection.
Timeout (Sec.)	Enter a timeout in seconds for the request. Enter an integer. The maximum timeout value is 900 seconds (15 minutes).  (i) If the reply takes longer than this value, the sensor cancels the request and shows a corresponding error message.

### **C-ECHO Settings**



C-ECHO Settings

Setting	Description
C-ECHO Count	Enter the number of C-ECHO requests that the sensor sends in a row for one scanning interval. Enter an integer. The default value is 5.
Ping Delay (ms)	Enter the time in milliseconds (ms) the sensor waits between two C-ECHO requests. Enter an integer. The default value is 10.

### **Debug Options**



Debug Options

Setting	Description
Result Handling	Define what PRTG does with the sensor result:  Discard result: Do not store the sensor result.



Setting	Description
	Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].txt, Result of Sensor [ID].Data.txt, and Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.
	This option is not available when the sensor runs on the hosted probe of a PRTG Hosted Monitor instance.
	in a cluster, PRTG stores the result in the PRTG data directory of the master node.

# Sensor Display

Primary Channel	Downtime
Graph Type	Show channels independently (default)
	O Stack channels on top of each other
	100

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	You can set a different primary channel later by clicking F below a channel gauge on the sensor's Overview tab.
Graph Type	Define how different channels are shown for this sensor:
	Show channels independently (default): Show a graph for each channel.
	<ul> <li>Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.</li> <li>You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).</li> </ul>
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.



### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section <u>Inheritance of Settings</u>.

#### Scanning Interval

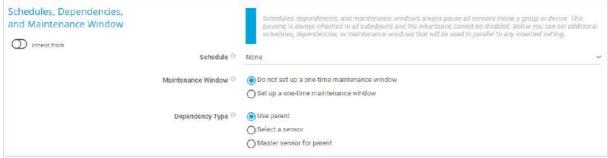


Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

#### Schedules, Dependencies, and Maintenance Window

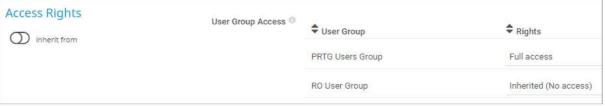
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.



Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

### Access Rights



Access Rights



For more information, see section Root Group Settings, section Access Rights.

### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.

Channel	Description
C-ECHO Response Avg.	The average response time of the C-ECHO request  This channel is the primary channel by default.
C-ECHO Response Max	The maximum response time of the C-ECHO request
C-ECHO Response Min	The minimum response time of the C-ECHO request
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status

### More

KNOWLEDGE BASE

Which .NET version does PRTG require?

https://kb.paessler.com/en/topic/60543

What security features does PRTG include?

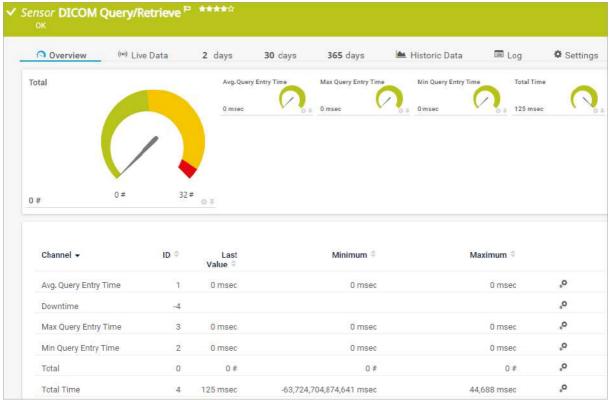
https://kb.paessler.com/en/topic/61108



## 7.8.33 DICOM Query/Retrieve Sensor

The DICOM Query/Retrieve sensor monitors the C-FIND capability of Digital Imaging and Communications in Medicine (DICOM) capable systems and devices. It sends a C-FIND request or Modality Worklist (MWL) query to the target device and counts all found items.

i You can specify search levels to only count specific items.



DICOM Query/Retrieve Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 1913.

#### Sensor in Other Languages

■ Dutch: DICOM Query/Retrieve

• French: Recherche / récupération (DICOM)

German: DICOM-Abfrage

■ Japanese: DICOM クエリ/取 得

Portuguese: Consulta/recuperação DICOM

• Russian: Запрос/получение DICOM

■ Simplified Chinese: DICOM 查询/检索

Spanish: Consulta/Recuperación DICOM



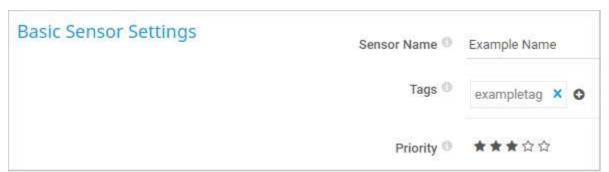
#### Remarks

- This sensor has a high performance impact. We recommend that you use no more than 200 of this sensor on each probe.
- This sensor requires 907 .NET 4.7.2 or later from Microsoft on the probe system.
- This sensor supports IPv6.

### **Detailed Requirements**

Requirement	Description
.NET 4.7.2 or later	This sensor requires .NET 4.7.2 or later to be installed on the probe system (on every cluster node, if on a cluster probe).  (i) If the framework is missing, you cannot create this sensor.
	For more information, see the Knowledge Base: Which .NET version does PRTG require?

### **Basic Sensor Settings**



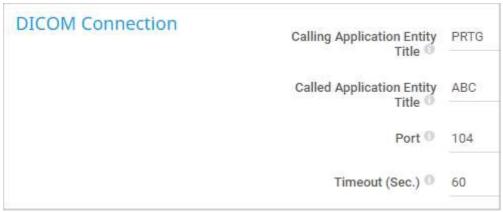
Basic Sensor Settings

Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the device tree, as well as in alarms, logs, notifications, reports, maps, libraries, and tickets.  i If the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
Parent Tags	The tags that the sensor inherits from its parent device, parent group, and parent probe.  This setting is for your information only. You cannot change it.



Setting	Description
Tags	Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.
	it is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>).
	(i) For performance reasons, it can take some minutes until you can filter for new tags that you added.
	The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:
	• dicom
	• query
	■ retrieve
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (*****).

### **DICOM Connection**



DICOM Connection

Setting	Description
Calling Application Entity Title	Enter the Application Entity Title (AET) of PRTG to initialize a DICOM connection.  (i) The AET is case sensitive and does not support special characters.
	i The AET is case sensitive and does not support special characters.



Setting	Description
Called Application Entity Title	Enter the AET of the target system to initialize a DICOM connection.  (i) The AET is case sensitive and does not support special characters.
Port	Enter the port of the DICOM interface to use for the connection.
Timeout (Sec.)	<ul> <li>Enter a timeout in seconds for the request. Enter an integer. The maximum timeout value is 900 seconds (15 minutes).</li> <li>i) If the reply takes longer than this value, the sensor cancels the request and shows a corresponding error message.</li> </ul>

## Query/Retrieve Settings



Query/Retrieve Settings

Setting	Description
C-FIND Level	<ul> <li>Define the search level of the C-FIND request:</li> <li>Patient: Retrieve data from the patient column via C-FIND. Enter a search key below.</li> <li>Study: Retrieve data from the study column via C-FIND. Enter a search key and a modality below.</li> <li>Series: Retrieve data from the series column via C-FIND. Enter a search key and a modality below.</li> <li>Worklist: Use an MWL query to retrieve data from the worklist. Enter a filter field, a filter string, and a channel field below.</li> </ul>
Search Key	This setting is only visible if you select Patient, Study, or Series above. Enter a key that you want to search for, for example, an instance Unique Identifier (UID), series UID, patient UID, or enter an asterisk (*) to search for all items. Enter a string.



Setting	Description
Modality	This setting is only visible if select Study or Series above. Enter a modality in short form that you want to search for, for example, CT, MRI, US, or enter an asterisk (*) to search for all modalities. Enter a string.
Filter Field	This setting is only visible if you select Worklist above. Define a field of the worklist that you want to filter for:  Station AET  Station Name  Modality
Filter String	This setting is only visible if you select Worklist above. Enter a string that you want to filter for, for example, a station name, station AET, modality, or an asterisk (*) to filter for all items. Enter a string.
Channel Field	This setting is only visible if you select Worklist above. Define which field you want to use to name the channels:  Station AET  Station Name  Modality

## **Debug Options**



Debug Options

Setting	Description
Result Handling	<ul> <li>Define what PRTG does with the sensor result:</li> <li>Discard result: Do not store the sensor result.</li> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].txt, Result of Sensor [ID].Data.txt, and Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.</li> </ul>



Setting	Description
	This option is not available when the sensor runs on the hosted probe of a PRTG Hosted Monitor instance.
	in a cluster, PRTG stores the result in the PRTG data directory of the master node.

## Sensor Display

Primary Channel	Downtime
Graph Type	Show channels independently (default)
	O Stack channels on top of each other

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	You can set a different primary channel later by clicking 4 below a channel gauge on the sensor's Overview tab.
Graph Type	Define how different channels are shown for this sensor:  Show channels independently (default): Show a graph for each channel.
	<ul> <li>Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.</li> <li>You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).</li> </ul>
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.



### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section <u>Inheritance of Settings</u>.

#### Scanning Interval



Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

#### Schedules, Dependencies, and Maintenance Window

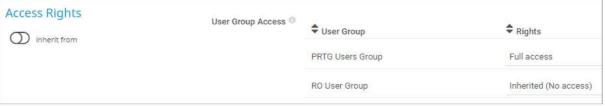
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.



Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

### Access Rights



Access Rights



For more information, see section Root Group Settings, section Access Rights.

### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.

Channel	Description
Avg. Query Entry Time	The average query entry time
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
Max Query Entry Time	The maximum query entry time
Min Query Entry Time	The minimum query entry time
Total	The total number of items found  This channel is the primary channel by default.
Total Time	The total time of the C-FIND request or MWL query

i The sensor also adds channels for the number of items in each field it finds.

#### More

KNOWLEDGE BASE

Which .NET version does PRTG require?

• <a href="https://kb.paessler.com/en/topic/60543">https://kb.paessler.com/en/topic/60543</a>

What security features does PRTG include?

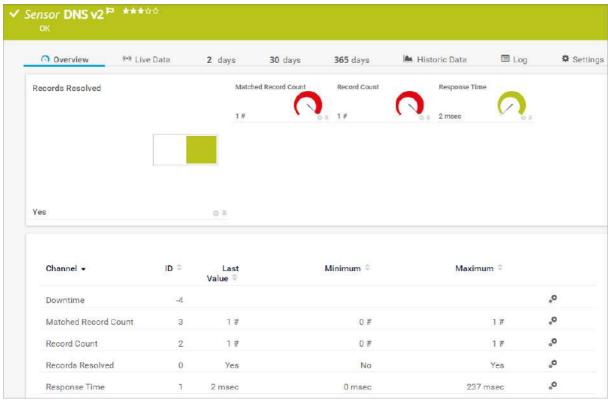
https://kb.paessler.com/en/topic/61108



### 7.8.34 DNS v2 Sensor

The DNS v2 sensor monitors a Domain Name System (DNS) server, resolves domain name records, and compares them to a filter.

(i) The sensor can show the Down status if the DNS server does not correctly resolve a specified domain name



DNS v2 Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 1921.

### Sensor in Other Languages

■ Dutch: DNS v2

■ French: DNS v2

■ German: DNS v2

Japanese: DNS v2

■ Portuguese: DNS v2

Russian: DNS v2

■ Simplified Chinese: DNS v2

■ Spanish: DNS v2



### Remarks

- This sensor supports IPv6.
- This sensor has a medium performance impact.
- This sensor uses <u>lookups</u> to determine the status values of one or more channels.

## **Basic Sensor Settings**



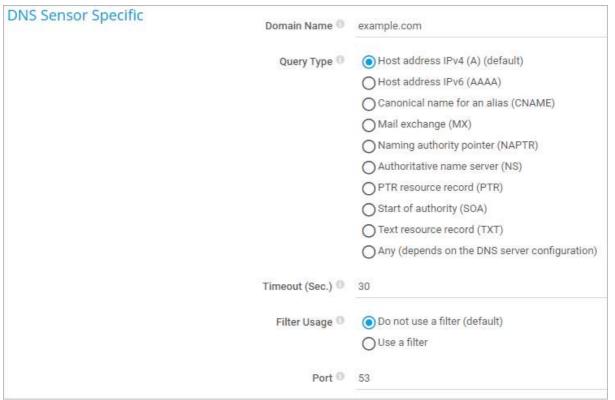
Basic Sensor Settings

Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the device tree, as well as in alarms, logs, notifications, reports, maps, libraries, and tickets.  (i) If the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
Parent Tags	The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .  (i) This setting is for your information only. You cannot change it.
Tags	Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.  i It is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>>).  i For performance reasons, it can take some minutes until you can filter for new tags that you added.  The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:  dns



Setting	Description
	■ dnssensor
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (******).

### **DNS Sensor Specific**



DNS Sensor Specific

Setting	Description
Domain Name	Enter the DNS name to resolve.  i If you use the query type PTR resource record (PTR), enter a proper reverse DNS representation of the IP address. For example, 1.0.0.127.in-addr.arpa.
Query Type	Select the query type that the sensor sends to the DNS server:  Host address IPv4 (A) (default)



Setting	Description	
	■ Host address IPv6 (AAAA)	
	<ul> <li>Canonical name for an alias (CNAME)</li> </ul>	
	■ Mail exchange (MX)	
	<ul> <li>Naming authority pointer (NAPTR)</li> </ul>	
	<ul><li>Authoritative name server (NS)</li></ul>	
	■ PTR resource record (PTR)	
	Start of authority (SOA)	
	■ Text resource record (TXT)	
	<ul> <li>Any (depends on the DNS server configuration)</li> </ul>	
Timeout (Sec.)	Enter a timeout in seconds for the request. Enter an integer. The maximum timeout value is 900 seconds (15 minutes).	
	if the reply takes longer than this value, the sensor cancels the request and shows a corresponding error message.	
	The timeout value must be shorter than the scanning interval of the sensor.	
Filter Usage	Define if the sensor checks for a specific filter value in the response.	
	<ul> <li>Do not use a filter (default): Do not check the response.</li> </ul>	
	<ul> <li>Use a filter: Use a filter to check the response. Define the filter value below.</li> </ul>	
Filter Value	This setting is only visible if you select Filter Usage above. Enter one or more filter values. For an A record, the filter value can be an IP address like 127.0.0.1, for example. The filter value can also contain a wildcard (*) to match any content, for example 127.*.1. You can specify multiple filter values by using a comma as separator, for example 172.217.*.1,172.217.*.2.	
Port	Enter the number of the port to which the sensor tries to connect. This must be the port on which the parent device answers queries. The default port is 53.	
	i We recommend that you use the default value.	
	The sensor connects to the IP address or the DNS name of the parent device.	



# Sensor Display

Sensor Display	Primary Channel Downtime	
	Graph Type	Show channels independently (default)
		Stack channels on top of each other

Sensor Display

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	You can set a different primary channel later by clicking    below a channel gauge on the sensor's Overview tab.
Graph Type	Define how different channels are shown for this sensor:  Show channels independently (default): Show a graph for each channel.  Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that
	visualizes the different components of your total traffic.  i You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

# **Debug Options**

Debug Options	Result Handling 9	Discard result
		O Store result

Debug Options

Setting	Description
Result Handling	Define what PRTG does with the sensor result:



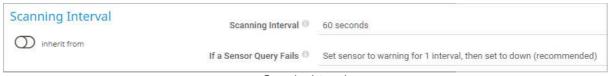
Setting	Description
	<ul> <li>Discard result: Do not store the sensor result.</li> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file name is Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites this file with each scanning interval.</li> <li>This option is not available when the sensor runs on the hosted probe of a PRTG Hosted Monitor instance.</li> <li>In a cluster, PRTG stores the result in the PRTG data directory of the master node.</li> </ul>

### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section <u>Inheritance of Settings</u>.

### Scanning Interval



Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

### Schedules, Dependencies, and Maintenance Window

(i) You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.

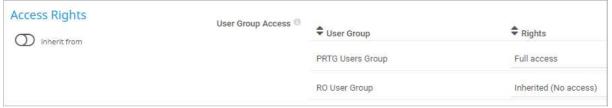




Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

### Access Rights

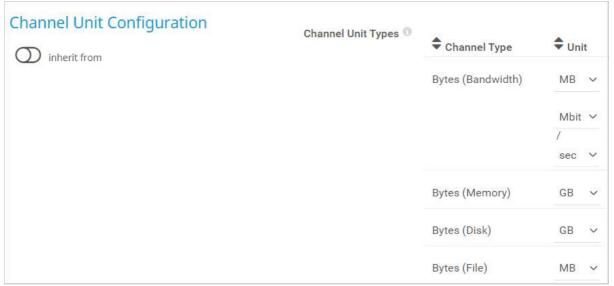


Access Rights

For more information, see section Root Group Settings, section Access Rights.

### **Channel Unit Configuration**

(i) Which channel units are available depends on the sensor type and the available parameters. If no configurable channels are available, this field shows No configurable channels.



Channel Unit Configuration

For more information, see section Root Group Settings, section Channel Unit Configuration.



### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.

Channel	Description
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
Matched Record Count	The number of matched records (if you use a filter)
Record Count	The number of records
Records Resolved	If records were resolved  Up status: Yes  Down status: No
Response Time	The response time  This channel is the primary channel by default.

### More



What security features does PRTG include?

https://kb.paessler.com/en/topic/61108



### 7.8.35 Docker Container Status Sensor

The Docker Container Status sensor monitors the status of a Docker container.



Docker Container Status Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 1929.

### Sensor in Other Languages

Dutch: Docker Container Status

French: État de conteneur Docker

German: Docker-Container-Zustand

■ Japanese: Docker コンテナーの状態

Portuguese: Status do contêiner Docker

• Russian: Статус контейнера Docker

■ Simplified Chinese: Docker 容器状态

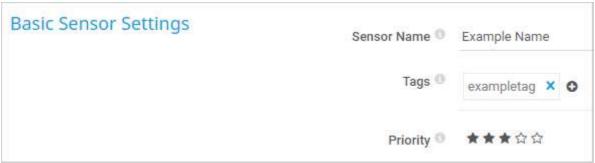
Spanish: Estado de contenedor Docker.



#### Remarks

- This sensor requires certificates and private keys to monitor Docker. For more information on how to create a Docker certificate, see the Knowledge Base: <u>How can I create private key and certificate for the Docker sensor?</u>
- This sensor requires that the parent device is the Docker machine on which the container that you
  want to monitor runs.
- This sensor requires an authentication with a certificate and a private key before you can add it. Provide Port (usually 2376), Private Key, and Certificate and click OK.
- This sensor only supports IPv4.
- This sensor has a low performance impact.
- This sensor uses <u>lookups</u> to determine the status values of one or more channels.

### **Basic Sensor Settings**



Basic Sensor Settings

Description
Enter a name to identify the sensor. By default, PRTG shows this name in the <u>device tree</u> , as well as in <u>alarms</u> , <u>logs</u> , <u>notifications</u> , <u>reports</u> , <u>maps</u> , <u>libraries</u> , and <u>tickets</u> .
if the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .
i This setting is for your information only. You cannot change it.
Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.



Setting	Description
	It is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>).
	For performance reasons, it can take some minutes until you can filter for new tags that you added.
	The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:
	<ul><li>docker</li><li>dockercontainer</li></ul>
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (*****) to the highest priority (*****).

### **Docker Credentials**

Docker Credentials	Port ®	2376
	Private Key 🕛	
	Certificate 0	

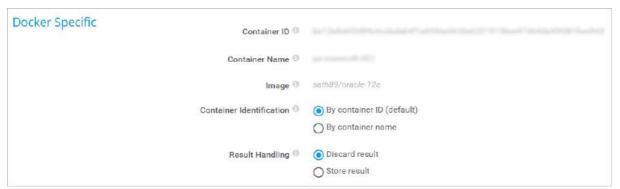
Docker Credentials

Description
Enter the number of the port to which this sensor connects. The default port on which Docker over Transport Layer Security (TLS) runs is 2376.
Provide the private key for the connection to Docker. If you have already created a key, you can use it here. Otherwise, create a certificate on Docker first.  Open the key with a text editor, copy everything that the file includes, and paste it here. Usually, the key starts withBEGIN RSA PRIVATE KEY and ends withEND RSA PRIVATE KEY



Setting	Description
	For more information on how to create a Docker certificate, see the Knowledge Base: <%  K How can I create private key and certificate for the Docker sensor ?%>
Certificate	Provide the certificate for the connection to Docker. If you have already created a certificate, you can use it here. Otherwise, create a certificate on Docker first.
	Open the certificate with a text editor, copy everything that the file includes, and paste it here. Usually, the certificate starts withBEGIN CERTIFICATE and ends withEND CERTIFICATE
	For more information on how to create a Docker certificate, see the Knowledge Base: <%  K How can I create private key and certificate for the Docker sensor ?%>

## **Docker Specific**



Docker Specific

Setting	Description
Container ID	The ID of the container that this sensor monitors.
Container Name	The name of the container that this sensor monitors.
Image	The name of the image that was used to create the Docker container that this sensor monitors.
Container Identification	Define how the sensor identifies the Docker container that it monitors:  By container ID (default): Use the ID of the Docker container for identification.



Setting	Description
	<ul> <li>By container name: Use the name of the Docker container for identification.</li> <li>Use this option if the IDs of your containers regularly change, for example, because of nightly deployments of your Docker containers.</li> </ul>
Result Handling	<ul> <li>Define what PRTG does with the sensor result:</li> <li>Discard result: Do not store the sensor result.</li> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].Data.txt, Result of Sensor [ID]_1.json, and Result of Sensor [ID]_2.json. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.</li> <li>This option is not available when the sensor runs on the hosted probe of a PRTG Hosted Monitor instance.</li> <li>In a cluster, PRTG stores the result in the PRTG data directory of the master node.</li> </ul>

# Sensor Display

Sensor Display	Primary Channel	Downtime
	Graph Type 🕕	Show channels independently (default)
		Stack channels on top of each other

Sensor Display

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.  ① You can set a different primary channel later by clicking below a channel gauge on the sensor's Overview tab.
Graph Type	Define how different channels are shown for this sensor:  Show channels independently (default): Show a graph for each channel.



Setting	Description
	<ul> <li>Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.</li> <li>You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).</li> </ul>
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section <u>Inheritance of Settings</u>.

### Scanning Interval



Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

### Schedules, Dependencies, and Maintenance Window

You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.

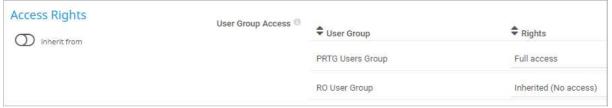




Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

### Access Rights

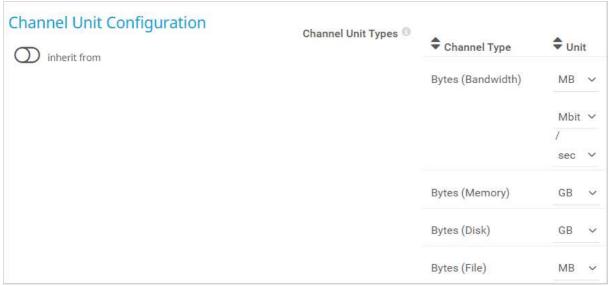


Access Rights

For more information, see section Root Group Settings, section Access Rights.

### **Channel Unit Configuration**

(i) Which channel units are available depends on the sensor type and the available parameters. If no configurable channels are available, this field shows No configurable channels.



Channel Unit Configuration

For more information, see section Root Group Settings, section Channel Unit Configuration.



## **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.

Channel	Description
Available Memory	The available memory
Available Memory %	The available memory (%)  This channel has default limits  Lower error limit: 5%  Lower warning limit: 10%
CPU Usage	The CPU usage
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
Eth0 Packets In	The number of ingoing packets
Eth0 Packets Out	The number of outgoing packets
Eth0 Traffic In	The incoming traffic
Eth0 Traffic Out	The outgoing traffic
Exit Code	The exit code
Status	The overall status  Up status: Create, Running  Warning status: Paused, Restarting  Down status: Exited  This channel is the primary channel by default.
Uptime	The uptime

### More

KNOWLEDGE BASE



How can I create private key and certificate for the Docker sensor?

https://kb.paessler.com/en/topic/67250

What security features does PRTG include?

https://kb.paessler.com/en/topic/61108



## 7.8.36 Enterprise Virtual Array Sensor

The Enterprise Virtual Array sensor monitors an HPE Storage Enterprise Virtual Array (EVA) via the sssu.exe from HPE P6000 Command View Software (previously known as HP Command View EVA Software).

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 36.

### Sensor in Other Languages

Dutch: Enterprise Virtual Array

• French: Enterprise Virtual Array

German: Enterprise Virtual Array

Japanese: Enterprise Virtual Array

Portuguese: Enterprise Virtual Array

Russian: Enterprise Virtual Array

Simplified Chinese: Enterprise Virtual Array

Spanish: Enterprise Virtual Array

#### Remarks

- This sensor has a high performance impact. We recommend that you use no more than 200 of this sensor on each probe.
- This sensor requires at the HPE P6000 Command View Software (previously known as HP Command View EVA Software) on the probe system, or the alternative described in the Knowledge Base: Do I really have to install the whole Command View on the probe to use the EVA sensor?
- This sensor requires that you explicitly specify the credentials for the EVA in the sensor settings.
- This sensor supports IPv6.
- This sensor uses <u>lookups</u> to determine the status values of one or more channels.
- You cannot add this sensor to the hosted probe of a PRTG Hosted Monitor instance. If you want to use this sensor, add it to a remote probe device.

#### **Detailed Requirements**

Requirement	Description
HPE P6000 Command View Software	This sensor requires the HPE P6000 Command View Software (previously known as HP Command View EVA Software) to be installed on the probe system.



Requirement	Description
	If you do not want to install the whole command view tool, you can use a different option. For more information, see the Knowledge Base: Do I really have to install the whole Command View on the probe to use the EVA sensor?

### Add Sensor

Setting	Description
Scanning Mode	Specify the depth of the meta-scan:  Basic mode: We recommend that you use this scanning mode. Various modules of your EVA are available for monitoring.  Detailed mode: PRTG scans for each disk of your EVA. It lists every disk in the module selection.

### **Basic Sensor Settings**



Basic Sensor Settings

Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the <u>device tree</u> , as well as in <u>alarms</u> , <u>logs</u> , <u>notifications</u> , <u>reports</u> , <u>maps</u> , <u>libraries</u> , and <u>tickets</u> .
	if the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
Parent Tags	The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .



Setting	Description
	This setting is for your information only. You cannot change it.
Tags	Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.
	it is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>).
	For performance reasons, it can take some minutes until you can filter for new tags that you added.
	The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:  • eva
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (******).

### **EVA Credentials**

Setting	Description
User Name	Enter the user name for the EVA.
Password	Enter the password for the EVA.

## **EVA Settings**

Setting	Description
Module	The module that this sensor monitors.  i You can edit this setting if, for example, you rename the module or move it to a different folder. This way, PRTG can find the module again and you do not lose the monitoring history.
System	The system of the module that this sensor monitors.



Setting	Description
Module Type	The type of the module that this sensor monitors.
Description	The description of the module that this sensor monitors.
Result Handling	<ul> <li>Define what PRTG does with the sensor result:</li> <li>Discard result: Do not store the sensor result.</li> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].txt and Result of Sensor [ID].Data.txt. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.</li> <li>In a cluster, PRTG stores the result in the PRTG data directory of the master node.</li> </ul>

# Sensor Display

Primary Channel	Downtime
Graph Type 🕛	Show channels independently (default)
	O Stack channels on top of each other
	100

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	i You can set a different primary channel later by clicking - below a channel gauge on the sensor's Overview tab.
Graph Type	<ul> <li>Define how different channels are shown for this sensor:</li> <li>Show channels independently (default): Show a graph for each channel.</li> <li>Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.</li> <li>You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).</li> </ul>



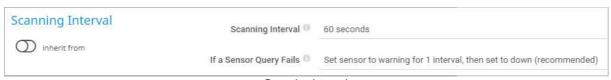
Setting	Description
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click wunder the corresponding setting name to disable the inheritance and to display its options.

For more information, see section <u>Inheritance of Settings</u>.

#### Scanning Interval

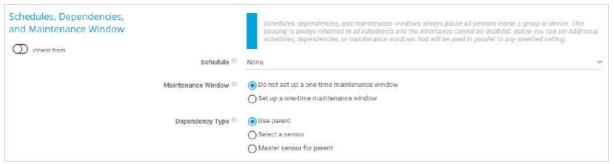


Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

#### Schedules, Dependencies, and Maintenance Window

(i) You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.

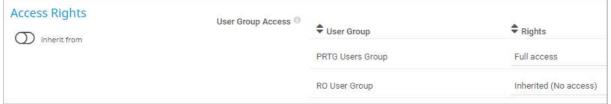


Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.



### Access Rights

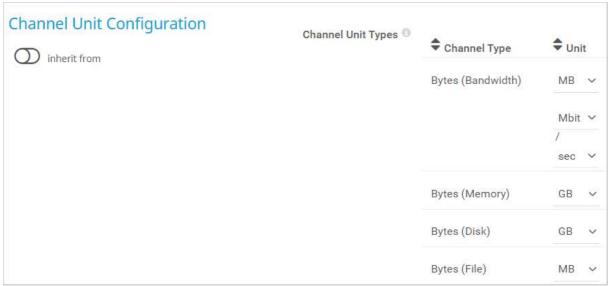


Access Rights

For more information, see section Root Group Settings, section Access Rights.

### **Channel Unit Configuration**

(i) Which channel units are available depends on the sensor type and the available parameters. If no configurable channels are available, this field shows No configurable channels.



Channel Unit Configuration

For more information, see section Root Group Settings, section Channel Unit Configuration.

#### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.

The sensor can show the status of several HPE EVA modules:

- System controllers
- Enclosures
- Disks
- Disk groups
- Folders



- Hosts
- Snapshots
- Data replication
- Cabinets
- If the devices have measuring tools for fans and temperature, the sensor displays corresponding data as well.

For these EVA components, this sensor can show the following:

- Operational status
- Predicted failures
- Accessible media
- Allocation in percent
- Availability for VRaids in bytes
- Exaggerated bytes
- Group host access
- Number of grouped and ungrouped disks
- Age of snapshots
- License status

#### More

## KNOWLEDGE BASE

Do I really have to install the whole Command View on the probe to use the EVA sensor?

https://kb.paessler.com/en/topic/55983

What security features does PRTG include?

https://kb.paessler.com/en/topic/61108

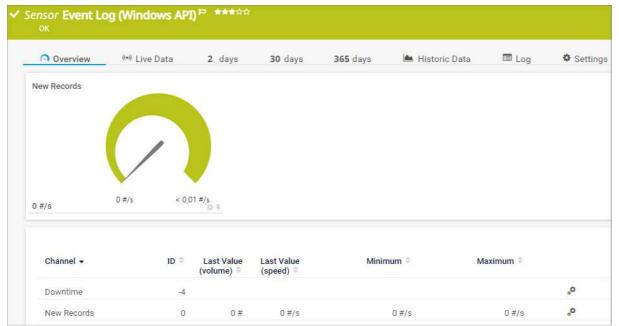


# 7.8.37 Event Log (Windows API) Sensor

### Important Notice

This sensor might not work anymore after Windows updates of June 2021. For more information, see the Knowledge Base: My Event Log (Windows API) sensors fail after installing Windows updates. What can I do?

The Event Log (Windows API) sensor monitors Event Log entries via the Windows application programming interface (API).



Event Log (Windows API) Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 946.

### Sensor in Other Languages

- Dutch: Event Log (Windows API)
- French: Journal des événements (API Windows)
- German: Ereignisprotokoll (Windows API)
- Japanese: イベントログ (Windows API)
- Portuguese: Log de eventos (Windows API)
- Russian: Журнал событий (API Windows)
- Simplified Chinese: 事件日志 (Windows API)
- Spanish: Registro de eventos (Windows API)



## Remarks

- This sensor has a very high performance impact. We recommend that you use no more than 50 of this sensor on each probe.
- This sensor supports IPv6.
- Knowledge Base: My Event Log (Windows API) sensors fail after installing Windows updates. What can I do?
- Knowledge Base: My Event Log sensor ignores changes in the event log. What can I do?
- Knowledge Base: How can I configure sensors using speed limits to keep the status for more than one interval?
- You cannot add this sensor to the hosted probe of a PRTG Hosted Monitor instance. If you want to use this sensor, add it to a remote probe device.

## **Basic Sensor Settings**



Basic Sensor Settings

Description
Enter a name to identify the sensor. By default, PRTG shows this name in the <u>device tree</u> , as well as in <u>alarms</u> , <u>logs</u> , <u>notifications</u> , <u>reports</u> , <u>maps</u> , <u>libraries</u> , and <u>tickets</u> .
if the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .
i This setting is for your information only. You cannot change it.
Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.



Setting	Description
	it is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>).
	For performance reasons, it can take some minutes until you can filter for new tags that you added.
	The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:  wmiapieventlogsensor
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (******).

# Windows API Event Log Specific

Windows API Event Log	Log File 🛈	<ul><li>Application</li></ul>
Specific		System
		Security
		O Directory Service
		O DNS Server
		O File Replication Service

Windows API Event Log Specific

Setting	Description
Log File	Specify the log file that this sensor monitors. The Windows event log provides several log files:  Application System Security Directory Service DNS Server File Replication Service



# Filter Event Log Entries

Filter Event Log Entries	
Event Type 9	Any
	O Error
	○ Warning
	O Information
	O Security Audit Success
	Security Audit Failure
Filter by Source	Off
	Oon
Filter by ID 0	Off
	Oon
Filter by Category	Off
	Oon
Filter by User	Off
	Oon
Filter by Computer	● Off
	Oon
Filter by Message	● Off
	Oon

Filter Event Log Entries

Setting	Description
Event Type	Specify the type of event that this sensor processes:  Any Error Warning Information Security Audit Success Security Audit Failure



Setting	Description
	i The sensor cannot process other event types.
Filter by Source	Filter all events for a certain event source:
	Off: Do not filter by event source.
	<ul> <li>On: Filter by event source.</li> <li>i) If you enable this option, this sensor only processes messages that match the value that you define below.</li> </ul>
Filter Type	This setting is only visible if you enable Filter by Source above. Select the filter type:
	Include filter: Include the specified value and disregard all other values.
	Exclude filter: Exclude the specified value and regard all other values.
Match String (Event Source)	This setting is only visible if you enable Filter by Source above. Enter an event source that you want to filter for. Depending on the kind of filter, the sensor either processes the event source (Include filter option) or it does not process it (Exclude filter option). Enter a string.
Filter by ID	Filter all events for a certain event ID:
	Off: Do not filter by event ID.
	<ul> <li>On: Filter by event ID.</li> <li>i) If you enable this option, this sensor only processes messages that match the value that you define below.</li> </ul>
Filter Type	This setting is only visible if ID filtering is On above. Select a filter type:
	Include filter: Include the specified value and disregard all other values.
	Exclude filter: Exclude the specified value and regard all other values.
Match Values (Event ID)	This setting is only visible if you enable Filter by ID above. Enter an event ID that you want to filter for. Depending on the kind of filter, the sensor either processes the event ID (Include filter option) or it does not process it (Exclude filter option).
	The Event Log (Windows API) supports more than one event ID. You can enter a comma-separated list of event IDs to filter for more than one ID. For example, 1100,4627,4747,4884,5050,6422.
Filter by Category	Filter all events for a certain event category:
	Off: Do not filter by event category.
	<ul> <li>On: Filter by event category.</li> <li>i) If you enable this option, this sensor only processes messages that match the value that you define below.</li> </ul>



Setting	Description
Filter Type	This setting is only visible if you enable Filter by Category above. Select a filter type:
	<ul> <li>Include filter: Include the specified value and disregard all other values.</li> <li>Exclude filter: Exclude the specified value and regard all other values.</li> </ul>
Match String (Event Category)	This setting is only visible if you enable Filter by Category above. Enter a category that you want to filter for. Depending on the kind of filter, the sensor either processes the event category (Include filter option) or it does not process it (Exclude filter option). Enter a string.
Filter by User	Filter all received events for a certain event user:  Off: Do not filter by event user.
	<ul> <li>On: Filter by event user.</li> <li>i) If you enable this option, this sensor only processes messages that match the value that you define below.</li> </ul>
Filter Type	This setting is only visible if you enable Filter by User above. Select a filter type:
	<ul> <li>Include filter: Include the specified value and disregard all other values.</li> <li>Exclude filter: Exclude the specified value and regard all other values.</li> </ul>
Match String (Event User)	This setting is only visible if you enable Filter by User above. Enter a user name that you want to filter for. Depending on the kind of filter, the sensor either processes the event user (Include filter option) or it does not process it (Exclude filter option). Enter a string.
Filter by Computer	Filter all received events for a certain event computer:
	Off: Do not filter by event computer.
	<ul> <li>On: Filter by event computer.</li> <li>i) If you enable this option, this sensor only processes messages that match the value that you define below.</li> </ul>
Filter Type	This setting is only visible if you enable Filter by Computer above. Select a filter type:
	<ul> <li>Include filter: Include the specified value and disregard all other values.</li> <li>Exclude filter: Exclude the specified value and regard all other values.</li> </ul>
Match String (Event Computer)	This setting is only visible if you enable Filter by Computer above. Enter a computer name that you want to filter for. Depending on the kind of filter, the sensor either processes the event computer (Include filter option) or it does not process it (Exclude filter option). Enter a string.



Setting	Description
Filter by Message	<ul> <li>Filter all received events for a certain event message:</li> <li>Off: Do not filter by event message.</li> <li>On: Filter by event message.</li> <li>If you enable this option, this sensor only processes messages that match the value that you define below.</li> </ul>
Filter Type	This setting is only visible if you enable Filter by Message above. Select a filter type:  Include filter: Include the specified value and disregard all other values.  Exclude filter: Exclude the specified value and regard all other values.
Match String (Event Message)	This setting is only visible if message filtering is On above. Enter a message that you want to filter for. Depending on the kind of filter, the sensor either processes the event message (Include filter option) or it does not process it (Exclude filter option). Enter a string.
	This sensor only checks the last line of the event message for the entered string. This matches the <data> section of the XML that you can see on the Details tab in the Event Viewer. If you want to check the entire event message, use the WMI Event Log sensor.</data>
	You must use the percent sign (%) as wildcard for any or no character if you want to check if the string is part of the last line of the event message. Otherwise, the whole last line of the event message must match the string.

# Sensor Display

Sensor Display	Primary Channel Downtime	
	Graph Type 🕔	Show channels independently (default)
		O Stack channels on top of each other

Setting	Description	
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.	
	You can set a different primary channel later by clicking    ■ below a channel gauge on the sensor's Overview tab.	



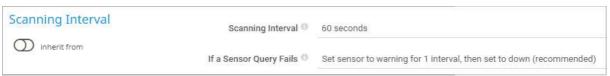
Setting	Description
Graph Type	Define how different channels are shown for this sensor:  Show channels independently (default): Show a graph for each channel.
	<ul> <li>Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.</li> <li>You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).</li> </ul>
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

## Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section <u>Inheritance of Settings</u>.

### Scanning Interval



Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

### Schedules, Dependencies, and Maintenance Window

You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.

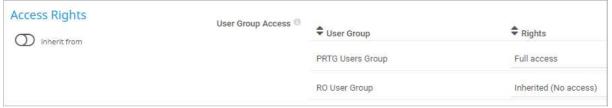




Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

## Access Rights



Access Rights

For more information, see section Root Group Settings, section Access Rights.

### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.

Channel	Description
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
New Records	The number of new records  This channel is the primary channel by default.

#### More

KNOWLEDGE BASE

My Event Log (Windows API) sensors fail after installing Windows updates. What can I do?

https://kb.paessler.com/en/topic/89751



My Event Log sensor ignores changes in the event log. What can I do?

https://kb.paessler.com/en/topic/59803

How can I configure sensors using speed limits to keep the status for more than one interval?

https://kb.paessler.com/en/topic/73212

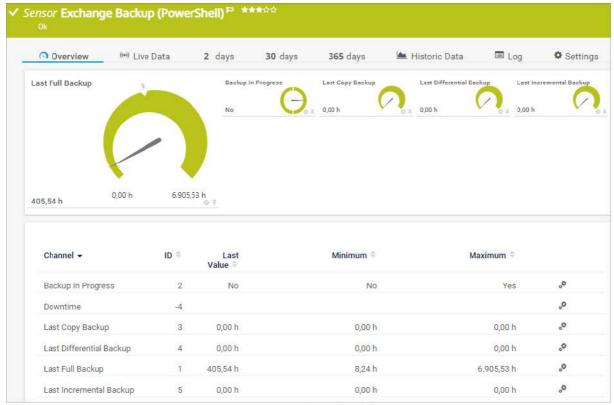
What security features does PRTG include?

https://kb.paessler.com/en/topic/61108



# 7.8.38 Exchange Backup (PowerShell) Sensor

The Exchange Backup (PowerShell) sensor monitors backups of an Exchange server via Remote PowerShell.



Exchange Backup (Pow erShell) Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 1953.

### Sensor in Other Languages

- Dutch: Exchange Backup (PowerShell)
- French: Exchange sauvegarde (PowerShell)
- German: Exchange-Sicherung (PowerShell)
- Japanese: Exchange バックアップ(PowerShell)
- Portuguese: Backup Exchange (PowerShell)
- Russian: Резервная копия Exchange (PowerShell)
- Simplified Chinese: Exchange 备份 (PowerShell)
- Spanish: Copia de seguridad Exchange (PowerShell)

### Remarks

This sensor has a high performance impact. We recommend that you use no more than 200 of this sensor on each probe.



- This sensor requires [949] Exchange user account permissions.
- This sensor requires [949] Remote PowerShell and Remote Exchange Management Shell on the target system and PowerShell on the probe system.
- This sensor requires 949 .NET 4.7.2 or later from Microsoft on the probe system.
- This sensor requires that the parent device is the Exchange server (as of version 2010) that hosts the database that you want to monitor.
- This sensor <u>requires</u> credentials for Windows systems in the settings of the parent device.
- This sensor requires 50 the fully qualified domain name (FQDN) of the Exchange server in the settings of the parent device.
- This sensor only supports IPv4.
- This sensor uses <u>lookups</u> to determine the status values of one or more channels.
- Knowledge Base: Where can I find more information about PowerShell sensors?
- You cannot add this sensor to the hosted probe of a PRTG Hosted Monitor instance. If you want to use this sensor, add it to a remote probe device.

## **Detailed Requirements**

Requirement	Description
Exchange user account permissions	This sensor requires a user account that must be either in the Exchange management role group View-Only Organization Management or be in a group with the following assigned management roles:  Monitoring View-Only Configuration View-Only Recipients
Remote PowerShell and Remote Exchange Management Shell	This sensor uses PowerShell commands. This sensor requires that Remote PowerShell and Remote Exchange Management Shell are enabled on the target systems that you want to monitor. Also make sure you have at least PowerShell 2.0 installed on the probe system.  (i) In larger environments, the default memory limit for the remote shell might be insufficient. This might result in the error message The WSMan provider host process did not return a proper response. In this case, increase the memory limit for Remote PowerShell.  For more information, see the Knowledge Base: How do I enable and use remote commands in Windows PowerShell? and How can I increase memory for Remote PowerShell?
.NET 4.7.2 or later	This sensor requires .NET 4.7.2 or later to be installed on the probe system (on every cluster node, if on a cluster probe).  i If the framework is missing, you cannot create this sensor.



Requirement	Description
	For more information, see the Knowledge Base: Which .NET version does PRTG require?
FQDN	To connect to Exchange servers, this sensor requires the FQDN. In the device settings of the Exchange server, provide the FQDN instead of the IP address.
	For more information, see the Knowledge Base: I have problems with the PowerShell Exchange sensors, what can I do?

# **Basic Sensor Settings**



Basic Sensor Settings

Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the device tree, as well as in alarms, logs, notifications, reports, maps, libraries, and tickets.  (i) If the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
Parent Tags	The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .  i This setting is for your information only. You cannot change it.
Tags	Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.  (i) It is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>).



Setting	Description
	For performance reasons, it can take some minutes until you can filter for new tags that you added.
	The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:
	• exchange
	• powershell
	■ backup
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (******).

# Sensor Settings



Sensor Settings

Setting	Description
Database	The name of the database that this sensor monitors.
Result Handling	<ul> <li>Define what PRTG does with the sensor result:</li> <li>Discard result: Do not store the sensor result.</li> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].txt, Result of Sensor [ID].Data.txt, and Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.</li> <li>In a cluster, PRTG stores the result in the PRTG data directory of the master node.</li> </ul>



# Sensor Display

Sensor Display	Primary Channel	Downtime
	Graph Type	Show channels independently (default)
		O Stack channels on top of each other

Sensor Display

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	(i) You can set a different primary channel later by clicking A below a channel gauge on the sensor's Overview tab.
Graph Type	<ul> <li>Define how different channels are shown for this sensor:</li> <li>Show channels independently (default): Show a graph for each channel.</li> <li>Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.</li> <li>You cannot use this option in combination with manual Vertical</li> </ul>
0. 111.	Axis Scaling (available in the <u>channel settings</u> ).
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

# Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section Inheritance of Settings.



### Scanning Interval



Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

### Schedules, Dependencies, and Maintenance Window

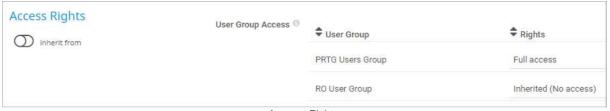
(i) You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.



Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

## Access Rights



Access Rights

For more information, see section Root Group Settings, section Access Rights.

### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.



Channel	Description
Backup In Progress	If a backup is running  • Up status: No, Yes
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
Last Copy Backup	The time since the last copy backup
Last Differential Backup	The time since the last differential backup
Last Full Backup	The time since the last full backup  (i) This channel is the primary channel by default.
Last Incremental Backup	The time since the last incremental backup

#### More

## KNOWLEDGE BASE

Where can I find more information about PowerShell sensors?

https://kb.paessler.com/en/topic/62451

How do I enable and use remote commands in Windows PowerShell?

https://kb.paessler.com/en/topic/44453

How can I increase memory for Remote PowerShell?

https://kb.paessler.com/en/topic/61922

I have problems with the PowerShell Exchange sensors, what can I do?

https://kb.paessler.com/en/topic/54353

Which .NET version does PRTG require?

https://kb.paessler.com/en/topic/60543

What security features does PRTG include?

https://kb.paessler.com/en/topic/61108

My PowerShell sensor returns an error message. What can I do?

https://kb.paessler.com/en/topic/59473

I get the error "WinRM cannot process the request" when I try to use a PowerShell sensor

https://kb.paessler.com/en/topic/59745



# 7.8.39 Exchange Database (PowerShell) Sensor

The Exchange Database (PowerShell) sensor monitors database information of an Exchange server via Remote PowerShell.



Exchange Database (Pow erShell) Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List of 1.

### Sensor in Other Languages

- Dutch: Exchange Database (PowerShell)
- French: Exchange base de données (PowerShell)
- German: Exchange-Datenbank (PowerShell)
- Japanese: Exchange データベース( PowerShell)
- Portuguese: Banco de dados Exchange (PowerShell)
- Russian: База данных Exchange (PowerShell)
- Simplified Chinese: Exchange 数据库 (PowerShell)
- Spanish: Base de datos Exchange (PowerShell)

#### Remarks

- This sensor has a high performance impact. We recommend that you use no more than 200 of this sensor on each probe.
- This sensor requires [956] Exchange user account permissions.



- This sensor requires | Sensor Remote PowerShell and Remote Exchange Management Shell on the target system and PowerShell on the probe system.
- This sensor requires 956 .NET 4.7.2 or later from Microsoft on the probe system.
- This sensor requires that the parent device is the Exchange server (as of version 2010) that hosts the database that you want to monitor.
- This sensor requires credentials for Windows systems in the settings of the parent device.
- This sensor requires [957] the fully qualified domain name (FQDN) of the Exchange server in the settings of the parent device.
- This sensor only supports IPv4.
- Knowledge Base: Where can I find more information about PowerShell sensors?
- Knowledge Base: How can I monitor additional values of Exchange databases?
- You cannot add this sensor to the hosted probe of a PRTG Hosted Monitor instance. If you want to use this sensor, add it to a remote probe device.

## **Detailed Requirements**

Requirement	Description
Exchange user account permissions	This sensor requires a user account that must be either in the Exchange management role group View-Only Organization Management or be in a group with the following assigned management roles:  Monitoring View-Only Configuration View-Only Recipients
Remote PowerShell and Remote Exchange Management Shell	This sensor uses PowerShell commands. This sensor requires that Remote PowerShell and Remote Exchange Management Shell are enabled on the target systems that you want to monitor. Also make sure you have at least PowerShell 2.0 installed on the probe system.  i In larger environments, the default memory limit for the remote shell might be insufficient. This might result in the error message The WSMan provider host process did not return a proper response. In this case, increase the memory limit for Remote PowerShell.
	For more information, see the Knowledge Base: How do I enable and use remote commands in Windows PowerShell? and How can I increase memory for Remote PowerShell?
.NET 4.7.2 or later	This sensor requires .NET 4.7.2 or later to be installed on the probe system (on every cluster node, if on a cluster probe).  i) If the framework is missing, you cannot create this sensor.  For more information, see the Knowledge Base: Which .NET version does PRTG require?



Requirement	Description
FQDN	To connect to Exchange servers, this sensor requires the FQDN. In the device settings of the Exchange server, provide the FQDN instead of the IP address.
	For more information, see the Knowledge Base: I have problems with the PowerShell Exchange sensors, what can I do?

# Basic Sensor Settings



Basic Sensor Settings

Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the device tree, as well as in alarms, logs, notifications, reports, maps, libraries, and tickets.  (i) If the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
Parent Tags	The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .  (i) This setting is for your information only. You cannot change it.
Tags	Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.  i It is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>>).  i For performance reasons, it can take some minutes until you can filter for new tags that you added.



Setting	Description
	The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:  • exchange  • powershell  • database
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (*****).

# Sensor Settings

Sensor Settings	Database 🖲	Mailbox Database
	AutoRemount Database ①	O Try to remount
		Do not try to remount, report the current reading
	Result Handling (9)	Discard result
		O Store result

Sensor Settings

Setting	Description
Database	The name of the database that this sensor monitors.
AutoRemount Database	Define if you want the sensor to try to automatically remount the database if it is unmounted:  Try to remount  Do not try to remount, report the current reading
Result Handling	Define what PRTG does with the sensor result:  Discard result: Do not store the sensor result.  Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].txt, Result of Sensor [ID].Data.txt, and Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.



Setting	Description
	in a cluster, PRTG stores the result in the PRTG data directory of the master node.

# Sensor Display

Sensor Display	Primary Channel	Downtime
	Graph Type 🕕	Show channels independently (default)
		O Stack channels on top of each other

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	You can set a different primary channel later by clicking    ■ below a channel gauge on the sensor's Overview tab.
Graph Type	Define how different channels are shown for this sensor:  Show channels independently (default): Show a graph for each channel  Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that
	visualizes the different components of your total traffic.  i You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

# Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.



For more information, see section <u>Inheritance of Settings</u>.

### Scanning Interval



Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

## Schedules, Dependencies, and Maintenance Window

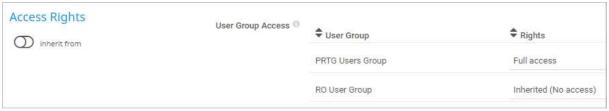
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.



Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

## Access Rights



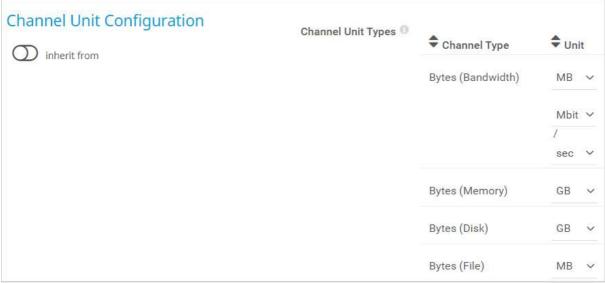
Access Rights

For more information, see section Root Group Settings, section Access Rights.

## **Channel Unit Configuration**

(i) Which channel units are available depends on the sensor type and the available parameters. If no configurable channels are available, this field shows No configurable channels.





Channel Unit Configuration

For more information, see section Root Group Settings, section Channel Unit Configuration.

### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.

Channel	Description
Database Size	The size of the database  This channel is the primary channel by default.
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
ls Valid	If the database is recognized as valid  Up status: Yes  Down status: Critical Issue, Major Issue, Non Recoverable
Mounted	If the database is mounted  Up status: Yes  Down status: No



#### More

## KNOWLEDGE BASE

Where can I find more information about PowerShell sensors?

https://kb.paessler.com/en/topic/62451

How can I monitor additional values of Exchange databases?

https://kb.paessler.com/en/topic/63229

How do I enable and use remote commands in Windows PowerShell?

https://kb.paessler.com/en/topic/44453

How can I increase memory for Remote PowerShell?

https://kb.paessler.com/en/topic/61922

I have problems with the PowerShell Exchange sensors, what can I do?

https://kb.paessler.com/en/topic/54353

Which .NET version does PRTG require?

https://kb.paessler.com/en/topic/60543

What security features does PRTG include?

https://kb.paessler.com/en/topic/61108

My PowerShell sensor returns an error message. What can I do?

https://kb.paessler.com/en/topic/59473

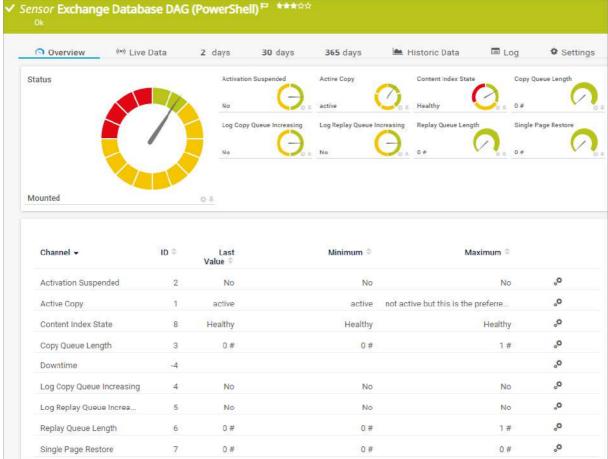
I get the error "WinRM cannot process the request" when I try to use a PowerShell sensor

https://kb.paessler.com/en/topic/59745



# 7.8.40 Exchange Database DAG (PowerShell) Sensor

The Exchange Database DAG (PowerShell) sensor monitors the Database Availability Group (DAG) status of a database on an Exchange server via Remote PowerShell.



Exchange Database DAG (Pow erShell) Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List | 600 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1

#### Sensor in Other Languages

- Dutch: Exchange Database DAG (PowerShell)
- French: Exchange base de données DAG (PowerShell)
- German: Exchange-Datenbank DAG (PowerShell)
- Japanese: Exchange データベース DAG( PowerShell)
- Portuguese: Banco de dados DAG Exchange (PowerShell)
- Russian: DAG базы данных Exchange (PowerShell)
- Simplified Chinese: Exchange 数据库 DAG (PowerShell)
- Spanish: Base de datos DAG Exchange (PowerShell)



#### Remarks

- This sensor has a high performance impact. We recommend that you use no more than 200 of this sensor on each probe.
- This sensor requires 964 Exchange user account permissions.
- This sensor requires that the Exchange server is part of a valid DAG. For more information, see the Knowledge Base: Why doesn't PRTG show available databases when adding the Exchange Database DAG (PowerShell) sensor?
- This sensor requires Remote PowerShell and Remote Exchange Management Shell on the target system and PowerShell on the probe system.
- This sensor requires | 965 | .NET 4.7.2 or later from Microsoft on the probe system.
- This sensor requires that the parent device is the Exchange server (as of version 2010) that hosts the database that you want to monitor.
- This sensor requires credentials for Windows systems in the settings of the parent device.
- This sensor requires the fully qualified domain name (FQDN) of the Exchange server in the settings of the parent device.
- This sensor only supports IPv4.
- This sensor uses <u>lookups</u> to determine the status values of one or more channels.
- Make sure that the Exchange database is mounted on the target device. Otherwise, you might not be able to properly add the sensor.
- Knowledge Base: Where can I find more information about PowerShell sensors?
- Knowledge Base: How can I monitor additional values of Exchange databases?
- You cannot add this sensor to the hosted probe of a PRTG Hosted Monitor instance. If you want to use this sensor, add it to a remote probe device.

### **Detailed Requirements**

Requirement	Description
Exchange user account permissions	This sensor requires a user account that must be either in the Exchange management role group View-Only Organization Management or be in a group with the following assigned management roles:
	Monitoring
	View-Only Configuration
	■ View-Only Recipients
Remote PowerShell and Remote Exchange Management Shell	This sensor uses PowerShell commands. This sensor requires that Remote PowerShell and Remote Exchange Management Shell are enabled on the target systems that you want to monitor. Also make sure you have at least PowerShell 2.0 installed on the probe system.



Requirement	Description
	in larger environments, the default memory limit for the remote shell might be insufficient. This might result in the error message The WSMan provider host process did not return a proper response. In this case, increase the memory limit for Remote PowerShell.
	For more information, see the Knowledge Base: How do I enable and use remote commands in Windows PowerShell? and How can I increase memory for Remote PowerShell?
.NET 4.7.2 or later	This sensor requires .NET 4.7.2 or later to be installed on the probe system (on every cluster node, if on a cluster probe).
	i If the framework is missing, you cannot create this sensor.
	For more information, see the Knowledge Base: Which .NET version does PRTG require?
FQDN	To connect to Exchange servers, this sensor requires the FQDN. In the device settings of the Exchange server, provide the FQDN instead of the IP address.
	For more information, see the Knowledge Base: I have problems with the PowerShell Exchange sensors, what can I do?

# Basic Sensor Settings



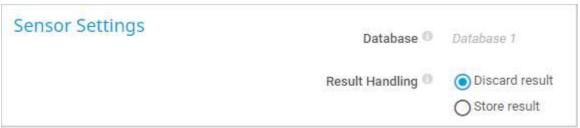
Basic Sensor Settings

Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the device tree, as well as in alarms, logs, notifications, reports, maps, libraries, and tickets.
	if the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?



Setting	Description
Parent Tags	The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .  i This setting is for your information only. You cannot change it.
Tags	Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.  ill it is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>>).  ill For performance reasons, it can take some minutes until you can filter for new tags that you added.  The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:  exchange  powershell  database
	• dag
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (*****).

# Sensor Settings



Sensor Settings

Setting	Description
Database	The name of the database that this sensor monitors.



Setting	Description
Result Handling	<ul> <li>Define what PRTG does with the sensor result:</li> <li>Discard result: Do not store the sensor result.</li> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].txt, Result of Sensor [ID].Data.txt, and Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.</li> <li>In a cluster, PRTG stores the result in the PRTG data directory of the master node.</li> </ul>

# Sensor Display

Primary Channel	Downtime
Graph Type 🕛	Show channels independently (default)
	O Stack channels on top of each other

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	You can set a different primary channel later by clicking    ■ below a channel gauge on the sensor's Overview tab.
Graph Type	Define how different channels are shown for this sensor:
	<ul> <li>Show channels independently (default): Show a graph for each channel</li> </ul>
	<ul> <li>Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.</li> <li>You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).</li> </ul>
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.



### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section <u>Inheritance of Settings</u>.

### Scanning Interval



Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

### Schedules, Dependencies, and Maintenance Window

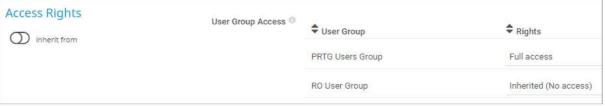
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.



Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

## Access Rights



Access Rights



For more information, see section Root Group Settings, section Access Rights.

### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.

Channel	Description
Activation Suspended	If the activation is suspended
	■ Up status: No
	<ul> <li>Warning status: Yes</li> </ul>
Active Copy	The copy status
	■ Up status: Active, Not Active
	<ul> <li>Warning status: Active But Not On The Preferred Server, Could Not Read Activation Preference, Not Active But This Is The Preferred Server</li> </ul>
Content Index State	The content index status
	<ul> <li>Up status: Healthy, Not Supported In 2019</li> </ul>
	Warning status: Crawling
	Down status: Error
Copy Queue Length	The number of items in the copy queue
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
Log Copy Queue	If the log copy queue is increasing
Increasing	■ Up status: No
	■ Warning status: Yes
Log Replay Queue	If the log replay queue is increasing
Increasing	Up status: No
	■ Warning status: Yes
Replay Queue Length	The number of items in the replay queue
Single Page Restore	The number of single page restores



Channel	Description
Status	<ul> <li>The overall DAG status</li> <li>Up status: Healthy, Mounted</li> <li>Warning status: Disconnected and Healthy, Disconnected and Resynchronizing, Dismounting, Initializing, Mounting, Resynchronizing, Seeding, SeedingSource, SinglePageRestore, Suspended</li> <li>Down status: Dismounted, Failed, Failed and Suspended, Service Down</li> <li>This channel is the primary channel by default.</li> </ul>

### More



Why doesn't PRTG show available databases when adding the Exchange Database DAG (PowerShell) sensor?

https://kb.paessler.com/en/topic/82242

Where can I find more information about PowerShell sensors?

https://kb.paessler.com/en/topic/62451

How can I monitor additional values of Exchange databases?

https://kb.paessler.com/en/topic/63229

How do I enable and use remote commands in Windows PowerShell?

https://kb.paessler.com/en/topic/44453

How can I increase memory for Remote PowerShell?

https://kb.paessler.com/en/topic/61922

I have problems with the PowerShell Exchange sensors, what can I do?

https://kb.paessler.com/en/topic/54353

Which .NET version does PRTG require?

https://kb.paessler.com/en/topic/60543

What security features does PRTG include?

https://kb.paessler.com/en/topic/61108

My PowerShell sensor returns an error message. What can I do?

https://kb.paessler.com/en/topic/59473

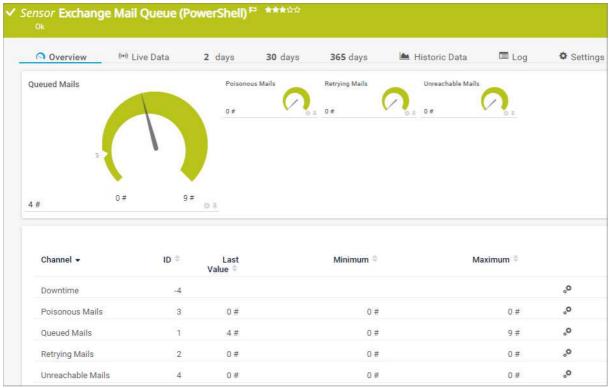
I get the error "WinRM cannot process the request" when I try to use a PowerShell sensor

https://kb.paessler.com/en/topic/59745



# 7.8.41 Exchange Mail Queue (PowerShell) Sensor

The Exchange Mail Queue (PowerShell) sensor monitors the number of items in the outgoing mail queue of an Exchange server via Remote PowerShell.



Exchange Mail Queue (Pow erShell) Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 1976.

### Sensor in Other Languages

- Dutch: Exchange Mail Wachtrij (PowerShell)
- French: Exchange file d'attente de messagerie (PowerShell)
- German: Exchange-Nachrichtenwarteschlange (PowerShell)
- Japanese: Exchange Mail ‡¬¬( PowerShell)
- Portuguese: Fila de e-mails Exchange (PowerShell)
- Russian: Очередь почтовых сообщений Exchange (PowerShell)
- Simplified Chinese: Exchange 邮件队列 (PowerShell)
- Spanish: Cola de correo Exchange (PowerShell)

### Remarks

- This sensor has a high performance impact. We recommend that you use no more than 200 of this sensor on each probe.
- This sensor requires [972] Exchange user account permissions.



- This sensor requires [972] Remote PowerShell and Remote Exchange Management Shell on the target system and PowerShell on the probe system.
- This sensor requires [972] .NET 4.7.2 or later from Microsoft on the probe system.
- This sensor requires that the parent device is the Exchange server (as of version 2010) that hosts the database that you want to monitor.
- This sensor <u>requires</u> credentials for Windows systems in the settings of the parent device. The user name for access to the Windows system must be in the same domain as the Exchange server or a domain that the Exchange server trusts.
- This sensor requires [973] the fully qualified domain name (FQDN) of the Exchange server in the settings of the parent device.
- This sensor only supports Kerberos authentication.
- This sensor only supports IPv4.
- Knowledge Base: Where can I find more information about PowerShell sensors?
- Knowledge Base: What types of Exchange transport queues are there?
- You cannot add this sensor to the hosted probe of a PRTG Hosted Monitor instance. If you want to use this sensor, add it to a remote probe device.

### **Detailed Requirements**

Requirement	Description
Exchange user account permissions	This sensor requires a user account that must be either in the Exchange management role group View-Only Organization Management or be in a group with the following assigned management roles:  Monitoring View-Only Configuration View-Only Recipients
Remote PowerShell and Remote Exchange Management Shell	This sensor uses PowerShell commands. This sensor requires that Remote PowerShell and Remote Exchange Management Shell are enabled on the target systems that you want to monitor. Also make sure you have at least PowerShell 2.0 installed on the probe system.
	in larger environments, the default memory limit for the remote shell might be insufficient. This might result in the error message The WSMan provider host process did not return a proper response. In this case, increase the memory limit for Remote PowerShell.
	For more information, see the Knowledge Base: How do I enable and use remote commands in Windows PowerShell? and How can I increase memory for Remote PowerShell?
.NET 4.7.2 or later	This sensor requires .NET 4.7.2 or later to be installed on the probe system (on every cluster node, if on a cluster probe).



Requirement	Description	
	If the framework is missing, you cannot create this sensor. For more information, see the Knowledge Base: Which .NET version does PRTG require?	
FQDN	To connect to Exchange servers, this sensor requires the FQDN. In the device settings of the Exchange server, provide the FQDN instead of the IP address.	
	For more information, see the Knowledge Base: I have problems with the PowerShell Exchange sensors, what can I do?	

### **Basic Sensor Settings**



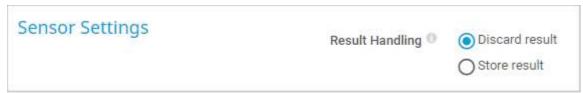
Basic Sensor Settings

Description
Enter a name to identify the sensor. By default, PRTG shows this name in the <u>device tree</u> , as well as in <u>alarms</u> , <u>logs</u> , <u>notifications</u> , <u>reports</u> , <u>maps</u> , <u>libraries</u> , and <u>tickets</u> .
if the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .
This setting is for your information only. You cannot change it.
Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.



Setting	Description	
	<ul> <li>i) It is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (&lt;&gt;).</li> <li>i) For performance reasons, it can take some minutes until you can filter for new tags that you added.</li> <li>The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:         <ul> <li>exchange</li> <li>powershell</li> <li>mailqueue</li> </ul> </li> </ul>	
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (******).	

## Sensor Settings



Sensor Settings

Setting	Description
Result Handling	<ul> <li>Define what PRTG does with the sensor result:</li> <li>Discard result: Do not store the sensor result.</li> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].txt, Result of Sensor [ID].Data.txt, and Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.</li> <li>In a cluster, PRTG stores the result in the PRTG data directory of the master node.</li> </ul>



### Sensor Display

owntime
Show channels independently (default)
Stack channels on top of each other
)

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	You can set a different primary channel later by clicking
Graph Type	Define how different channels are shown for this sensor:
	Show channels independently (default): Show a graph for each channel.
	Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.
	You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section Inheritance of Settings.



### Scanning Interval



Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

#### Schedules, Dependencies, and Maintenance Window

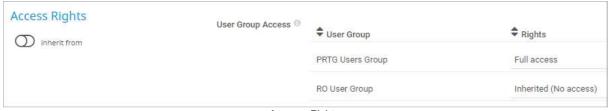
(i) You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.



Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

#### Access Rights



Access Rights

For more information, see section Root Group Settings, section Access Rights.

#### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.



Channel	Description
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
Poisonous Mails	The number of poisonous mails
Queued Mails	The number of queued mails  This channel is the primary channel by default.
Retrying Mails	The number of retrying mails
Unreachable Mails	The number of unreachable mails

#### More

### KNOWLEDGE BASE

Where can I find more information about PowerShell sensors?

https://kb.paessler.com/en/topic/62451

What types of Exchange transport queues are there?

https://kb.paessler.com/en/topic/55413

How do I enable and use remote commands in Windows PowerShell?

https://kb.paessler.com/en/topic/44453

How can I increase memory for Remote PowerShell?

https://kb.paessler.com/en/topic/61922

I have problems with the PowerShell Exchange sensors, what can I do?

https://kb.paessler.com/en/topic/54353

Which .NET version does PRTG require?

https://kb.paessler.com/en/topic/60543

What security features does PRTG include?

https://kb.paessler.com/en/topic/61108

My PowerShell sensor returns an error message. What can I do?

https://kb.paessler.com/en/topic/59473

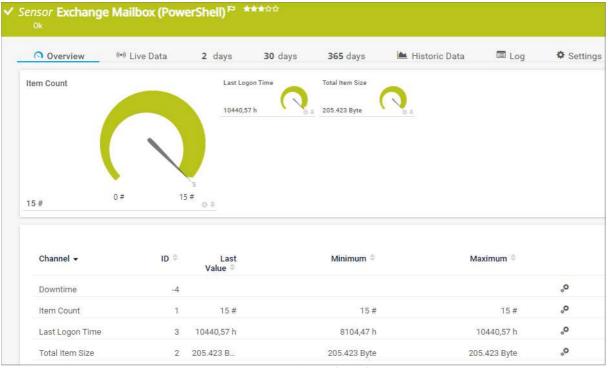
I get the error "WinRM cannot process the request" when I try to use a PowerShell sensor

https://kb.paessler.com/en/topic/59745



### 7.8.42 Exchange Mailbox (PowerShell) Sensor

The Exchange Mailbox (PowerShell) sensor monitors mailboxes of an Exchange server via Remote PowerShell.



Exchange Mailbox (PowerShell) Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 1983.

#### Sensor in Other Languages

- Dutch: Exchange Postbus (PowerShell)
- French: Exchange boîte aux lettres (PowerShell)
- German: Exchange-Postfach (PowerShell)
- Japanese: Exchange Mailbox( PowerShell)
- Portuguese: Caixa de correio Exchange (PowerShell)
- Russian: Почтовый ящик Exchange (PowerShell)
- Simplified Chinese: Exchange 邮箱 (PowerShell)
- Spanish: Buzón Exchange (PowerShell)

#### Remarks

- This sensor has a high performance impact. We recommend that you use no more than 200 of this sensor on each probe.
- This sensor requires elevated rights for the user of this sensor on the Exchange system. It is not sufficient to have administrative rights. For more information, see the Knowledge Base: <a href="Lhave problems">Lhave problems</a> with the PowerShell Exchange sensors, what can I do? (solution (2) in the reply).



- This sensor requires [979] Remote PowerShell and Remote Exchange Management Shell on the target system and PowerShell on the probe system.
- This sensor requires 979 .NET 4.7.2 or later from Microsoft on the probe system.
- This sensor requires that the parent device is the Exchange server (as of version 2010) that hosts the database that you want to monitor.
- This sensor <u>requires</u> credentials for Windows systems in the settings of the parent device.
- This sensor requires [979] the fully qualified domain name (FQDN) of the Exchange server in the settings of the parent device.
- This sensor only supports IPv4.
- Knowledge Base: Where can I find more information about PowerShell sensors?
- You cannot add this sensor to the hosted probe of a PRTG Hosted Monitor instance. If you want to use this sensor, add it to a remote probe device.

#### **Detailed Requirements**

Requirement	Description	
Remote PowerShell and Remote Exchange Management Shell	This sensor uses PowerShell commands. This sensor requires that Remote PowerShell and Remote Exchange Management Shell are enabled on the target systems that you want to monitor. Also make sure you have at least PowerShell 2.0 installed on the probe system.	
	In larger environments, the default memory limit for the remote shell might be insufficient. This might result in the error message The WSMan provider host process did not return a proper response. In this case, increase the memory limit for Remote PowerShell.	
	For more information, see the Knowledge Base: How do I enable and use remote commands in Windows PowerShell? and How can I increase memory for Remote PowerShell?	
.NET 4.7.2 or later	This sensor requires .NET 4.7.2 or later to be installed on the probe system (on every cluster node, if on a cluster probe).  (i) If the framework is missing, you cannot create this sensor.	
	For more information, see the Knowledge Base: Which .NET version does PRTG require?	
FQDN	To connect to Exchange servers, this sensor requires the FQDN. In the device settings of the Exchange server, provide the FQDN instead of the IP address.	
	For more information, see the Knowledge Base: Lhave problems with the PowerShell Exchange sensors, what can I do?	



### **Basic Sensor Settings**

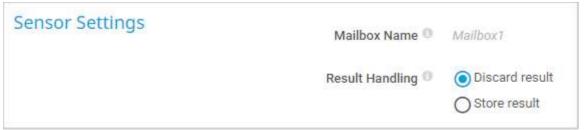


Basic Sensor Settings

Setting	Description	
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the device tree, as well as in alarms, logs, notifications, reports, maps, libraries, and tickets.  (i) If the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?	
Parent Tags	The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .  (i) This setting is for your information only. You cannot change it.	
Tags	Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.  i It is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>).  For performance reasons, it can take some minutes until you can filter for new tags that you added.  The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:  exchange  powershell  mailbox	
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (*****).	



### Sensor Settings



Sensor Settings

Setting	Description
Mailbox Name	The name of the mailbox that this sensor monitors.
Result Handling	<ul> <li>Define what PRTG does with the sensor result:</li> <li>Discard result: Do not store the sensor result.</li> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].txt, Result of Sensor [ID].Data.txt, and Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.</li> <li>In a cluster, PRTG stores the result in the PRTG data directory of the master node.</li> </ul>

## Sensor Display

Sensor Display	Primary Channel	Downtime
	Graph Type	Show channels independently (default)
		O Stack channels on top of each other

Sensor Display

Setting	Description	
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.	
	i You can set a different primary channel later by clicking F below a channel gauge on the sensor's Overview tab.	



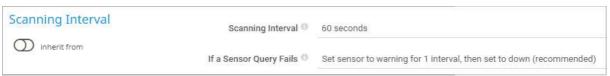
Setting	Description
Graph Type	Define how different channels are shown for this sensor:  Show channels independently (default): Show a graph for each channel.
	<ul> <li>Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.</li> <li>You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).</li> </ul>
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section <u>Inheritance of Settings</u>.

#### Scanning Interval



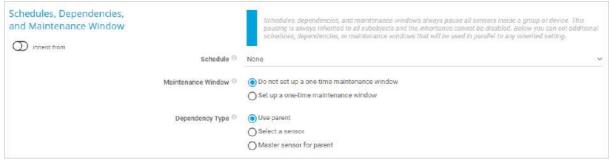
Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

#### Schedules, Dependencies, and Maintenance Window

You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.

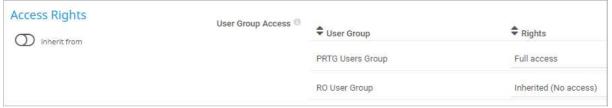




Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

### Access Rights



Access Rights

For more information, see section Root Group Settings, section Access Rights.

#### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.

Channel	Description
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
Item Count	The number of items  (i) This channel is the primary channel by default.
Last Logon Time	The time since the last mailbox login
Total Item Size	The total size of items



#### More

### KNOWLEDGE BASE

I have problems with the PowerShell Exchange sensors, what can I do?

https://kb.paessler.com/en/topic/54353

Where can I find more information about PowerShell sensors?

https://kb.paessler.com/en/topic/62451

How do I enable and use remote commands in Windows PowerShell?

https://kb.paessler.com/en/topic/44453

How can I increase memory for Remote PowerShell?

https://kb.paessler.com/en/topic/61922

Which .NET version does PRTG require?

• <a href="https://kb.paessler.com/en/topic/60543">https://kb.paessler.com/en/topic/60543</a>

What security features does PRTG include?

https://kb.paessler.com/en/topic/61108

My PowerShell sensor returns an error message. What can I do?

https://kb.paessler.com/en/topic/59473

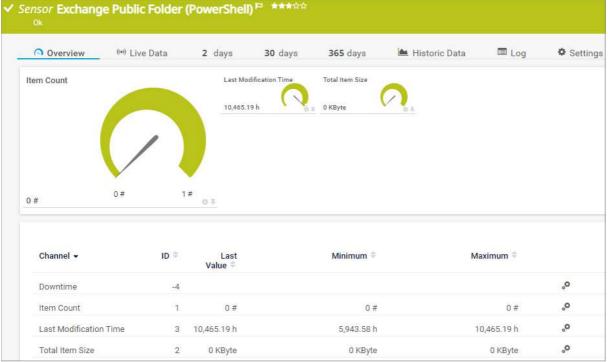
I get the error "WinRM cannot process the request" when I try to use a PowerShell sensor

https://kb.paessler.com/en/topic/59745



### 7.8.43 Exchange Public Folder (PowerShell) Sensor

The Exchange Public Folder (PowerShell) sensor monitors the public folders and subfolders of an Exchange server via Remote PowerShell.



Exchange Public Folder (PowerShell) Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List ...

#### Sensor in Other Languages

- Dutch: Exchange Openbare Map (PowerShell)
- French: Exchange dossier public (PowerShell)
- German: Exchange Öffentlicher Ordner (PowerShell)
- Japanese: Exchange パブリックフォルダー(PowerShell)
- Portuguese: Pasta pública Exchange (PowerShell)
- Russian: Общая папка Exchange (PowerShell)
- Simplified Chinese: Exchange 公共文件夹 (PowerShell)
- Spanish: Carpeta pública Exchange (PowerShell)

#### Remarks

- This sensor has a high performance impact. We recommend that you use no more than 200 of this sensor on each probe.
- This sensor requires [986] Exchange user account permissions.



- This sensor requires Remote PowerShell and Remote Exchange Management Shell on the target system and PowerShell on the probe system.
- This sensor requires .NET 4.7.2 or later from Microsoft on the probe system.
- This sensor requires that the parent device is the Exchange server (as of version 2010) that hosts the database that you want to monitor.
- This sensor requires credentials for Windows systems in the settings of the parent device.
- This sensor requires 1987 the fully qualified domain name (FQDN) of the Exchange server in the settings of the parent device.
- This sensor only supports IPv4.
- Knowledge Base: Where can I find more information about PowerShell sensors?
- You cannot add this sensor to the hosted probe of a PRTG Hosted Monitor instance. If you want to use this sensor, add it to a remote probe device.

#### **Detailed Requirements**

Requirement	Description
Exchange user account permissions	This sensor requires a user account that must be either in the Exchange management role group View-Only Organization Management or be in a group with the following assigned management roles:  Monitoring View-Only Configuration View-Only Recipients
Remote PowerShell and Remote Exchange Management Shell	This sensor uses PowerShell commands. This sensor requires that Remote PowerShell and Remote Exchange Management Shell are enabled on the target systems that you want to monitor. Also make sure you have at least PowerShell 2.0 installed on the probe system.  i In larger environments, the default memory limit for the remote shell might be insufficient. This might result in the error message The WSMan provider host process did not return a proper response. In this
	case, increase the memory limit for Remote PowerShell.  For more information, see the Knowledge Base: How do I enable and use remote commands in Windows PowerShell? and How can I increase memory for Remote PowerShell?
.NET 4.7.2 or later	This sensor requires .NET 4.7.2 or later to be installed on the probe system (on every cluster node, if on a cluster probe).  i) If the framework is missing, you cannot create this sensor.  For more information, see the Knowledge Base: Which .NET version does PRTG require?



Requirement	Description
FQDN	To connect to Exchange servers, this sensor requires the FQDN. In the device settings of the Exchange server, provide the FQDN instead of the IP address.
	For more information, see the Knowledge Base: I have problems with the PowerShell Exchange sensors, what can I do?

## Basic Sensor Settings



Basic Sensor Settings

Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the device tree, as well as in alarms, logs, notifications, reports, maps, libraries, and tickets.  (i) If the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
Parent Tags	The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .  (i) This setting is for your information only. You cannot change it.
Tags	Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.  i It is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>).  i For performance reasons, it can take some minutes until you can filter for new tags that you added.



Setting	Description
	The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:  - exchange - powershell - publicfolder
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (*****).

## Sensor Settings



Sensor Settings

Setting	Description
Public Folder	The name of the public folder that this sensor monitors.
Result Handling	<ul> <li>Define what PRTG does with the sensor result:</li> <li>Discard result: Do not store the sensor result.</li> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file names are Result of Sensor [ID].txt, Result of Sensor [ID].Data.txt, and Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.</li> <li>In a cluster, PRTG stores the result in the PRTG data directory of the master node.</li> </ul>



### Sensor Display

owntime
Show channels independently (default)
Stack channels on top of each other
)

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	You can set a different primary channel later by clicking
Graph Type	Define how different channels are shown for this sensor:
	Show channels independently (default): Show a graph for each channel.
	Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.
	You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section Inheritance of Settings.



### Scanning Interval



Scanning Interval

For more information, see section Root Group Settings, section Scanning Interval.

#### Schedules, Dependencies, and Maintenance Window

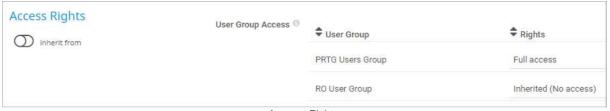
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects' settings.



Schedules, Dependencies, and Maintenance Window

For more information, see section Root Group Settings, section Schedules, Dependencies, and Maintenance Window.

#### Access Rights



Access Rights

For more information, see section Root Group Settings, section Access Rights.

#### **Channel List**

(i) Which channels the sensor actually shows might depend on the target device, the available components, and the sensor setup.



Channel	Description
Downtime	In the channel table on the Overview tab, this channel never shows any values. PRTG uses this channel in graphs and reports to show the amount of time in which the sensor was in the Down status
Item Count	The number of items  (i) This channel is the primary channel by default.
Last Modification Time	The time since the last access
Total Item Size	The total size of items

#### More



Where can I find more information about PowerShell sensors?

https://kb.paessler.com/en/topic/62451

How do I enable and use remote commands in Windows PowerShell?

https://kb.paessler.com/en/topic/44453

How can I increase memory for Remote PowerShell?

https://kb.paessler.com/en/topic/61922

I have problems with the PowerShell Exchange sensors, what can I do?

https://kb.paessler.com/en/topic/54353

Which .NET version does PRTG require?

https://kb.paessler.com/en/topic/60543

What security features does PRTG include?

https://kb.paessler.com/en/topic/61108

My PowerShell sensor returns an error message. What can I do?

https://kb.paessler.com/en/topic/59473

I get the error "WinRM cannot process the request" when I try to use a PowerShell sensor

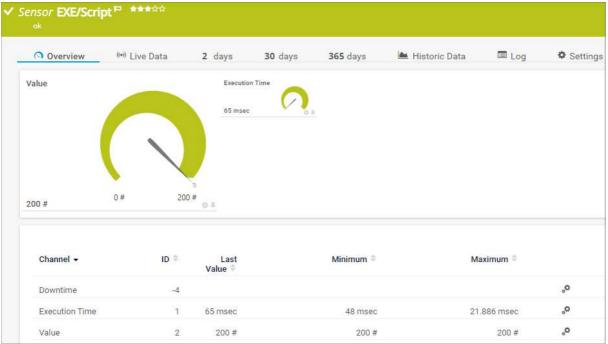
https://kb.paessler.com/en/topic/59745



### 7.8.44 EXE/Script Sensor

The EXE/Script sensor runs an executable file (.exe) or a script (batch file, VBScript, PowerShell) on the probe system. This option is available as part of the PRTG API.

(i) If you want to execute a custom Windows Management Instrumentation Query Language (WQL) script, use the WMI Custom [2875] sensor.



EXE/Script Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 1002.

#### Sensor in Other Languages

Dutch: EXE/Script

• French: Script/EXE

German: Programm/Skript

■ Japanese: EXE/スクリプト

Portuguese: EXE/Script

■ Russian: EXE/скрипт

■ Simplified Chinese: EXE/脚本

Spanish: EXE/Script

#### Remarks

• This sensor requires system and PowerShell is enabled on the target system and PowerShell 3.0 on both the probe system and the target system.



- The sensor requires the executable or script file to be stored on the probe system. In a cluster, copy the file to every cluster node.
- This sensor requires 933 .NET 4.7.2 or later from Microsoft on the probe system.
- We recommend Windows Server 2012 R2 on the probe system for best performance of this sensor.
- This sensor supports IPv6.
- This sensor has a low performance impact.
- Knowledge Base: What is the Mutex Name in the EXE/Script sensor settings?
- Knowledge Base: How can I test if parameters are correctly transmitted to my script when using an EXE/Script sensor?
- Knowledge Base: How can I show special characters with EXE/Script sensors?
- Knowledge Base: Why do I have to store SQL sensor queries and custom scripts in files on the probe computer?
- You cannot add this sensor to the hosted probe of a PRTG Hosted Monitor instance. If you want to use this sensor, add it to a remote probe device.

### **Detailed Requirements**

Requirement	Description
Remote PowerShell	This sensor uses PowerShell commands. This sensor requires that Remote PowerShell access is enabled on the target system. Also make sure that you have at least PowerShell 3.0 installed on both the probe system and the target system.
	if you receive an error message regarding issues with the WinRM connection, make sure that remote commands have been enabled in PowerShell. For more information, see the Knowledge Base: How do I enable and use remote commands in Windows PowerShell?
.NET 4.7.2 or later	This sensor requires .NET 4.7.2 or later to be installed on the probe system (on every cluster node, if on a cluster probe).
	ilf the framework is missing, you cannot create this sensor.
	For more information, see the Knowledge Base: Which .NET version does PRTG require?



### Add Sensor

Setting	Description
Channel Name	<ul> <li>Enter a name for the channel. Enter a string. This is for display purposes only.</li> <li>You can change this value later in the <u>channel settings</u> of this sensor.</li> </ul>
Unit String	<ul> <li>Enter the unit for the values that this sensor returns. Enter a string. PRTG uses the unit string for display purposes and shows it in graphs, data tables, and gauges.</li> <li>You can change this value later in the <u>channel settings</u> of this sensor.</li> </ul>

## Basic Sensor Settings



Basic Sensor Settings

Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the <u>device tree</u> , as well as in <u>alarms</u> , <u>logs</u> , <u>notifications</u> , <u>reports</u> , <u>maps</u> , <u>libraries</u> , and <u>tickets</u> .
	if the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons. For more information, see the Knowledge Base: What security features does PRTG include?
Parent Tags	The <u>tags</u> that the sensor <u>inherits</u> from its parent <u>device</u> , parent <u>group</u> , and parent <u>probe</u> .
	i This setting is for your information only. You cannot change it.



Setting	Description
Tags	Enter one or more tags. Confirm each tag with the Spacebar key, a comma, or the Enter key. You can use tags to group objects and use tag-filtered views later on. Tags are not case-sensitive. Tags are automatically inherited.
	it is not possible to enter tags with a leading plus (+) or minus (-) sign, nor tags with parentheses (()) or angle brackets (<>).
	For performance reasons, it can take some minutes until you can filter for new tags that you added.
	The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor:  • exesensor
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (*****).

## Credentials for Script Sensors

Click oto interrupt the inheritance.



Credentials for Script Sensors

Setting	Description
Placeholder 1 Description	Enter a description for Placeholder 1, for example information about the purpose or content of the placeholder.
Placeholder 1	Enter a value for the placeholder. PRTG inserts the value for the script execution if you add %scriptplaceholder1 in the argument list. PRTG does not display the value in the sensor log or the sensor's settings.
Placeholder 2 Description	Enter a description for Placeholder 2, for example information about the purpose or content of the placeholder.



Setting	Description	
Placeholder 2	Enter a value for the placeholder. PRTG inserts the value for the script execution if you add %scriptplaceholder2 in the argument list. PRTG does not display the value in the sensor log or the sensor's settings.	
Placeholder 3 Description	Enter a description for Placeholder 3, for example information about the purpose or content of the placeholder.	
Placeholder 3	Enter a value for the placeholder. PRTG inserts the value for the script execution if you add %scriptplaceholder3 in the argument list. PRTG does not display the value in the sensor log or the sensor's settings.	
Placeholder 4 Description	Enter a description for Placeholder 4, for example information about the purpose or content of the placeholder.	
Placeholder 4	Enter a value for the placeholder. PRTG inserts the value for the script execution if you add %scriptplaceholder4 in the argument list. PRTG does not display the value in the sensor log or the sensor's settings.	
Placeholder 5 Description	Enter a description for Placeholder 5, for example information about the purpose or content of the placeholder.	
Placeholder 5	Enter a value for the placeholder. PRTG inserts the value for the script execution if you add <u>%scriptplaceholder5</u> in the argument list. PRTG does not display the value in the sensor log or the sensor's settings.	



# Sensor Settings

Sensor Settings	Note: The EXE file has to run on the computer where the parent probe is installed, not on the parent device. The working directory for EXE files is the probe directory. vbs files, .ps1 files, or other script files may use different working directories.
EXE/Script ®	Demo Batchfile - Returns 200.bat
Parameters ①	
Environment ①	Default environment
	Set placeholders as environment values
Security Context	Use security context of PRTG probe service
	O Use Windows credentials of parent device
Mutex Name ①	
Timeout (Sec.) (0	60
Value Type ①	Integer
If Value Changes ®	Ignore (default)
	O Trigger 'change' notification
Result Handling ®	Discard result
	O Store result
	O Store result in case of error

Sensor Settings

Setting	Description
EXE/Script	Select an executable file from the list. The sensor executes it with every scanning interval.
	The list contains all files in the corresponding \Custom Sensors\EXE subfolder of the <a href="PRTG">PRTG program directory</a> on the probe system. For a file to appear in this list, store the file ending in .bat, .cmd, .exe, .ps1, or .vbs into this subfolder.
	To show the expected sensor values and states, your files must use the correct format for the returned values (in this case, value:message to standard output). The exit code of the file determines the sensor status.
	i If you use a PowerShell script (.ps1) and if the PowerShell Security Enhancement experimental feature is enabled, scripts that use the write-host cmdlet to provide their output to PRTG do not work. Use the write-output cmdlet instead.
	ilf you use custom sensors on the <u>cluster probe</u> , copy your files to every cluster node.
	For detailed information on how to create custom sensors and for the return format, see section <a href="Custom Sensors">Custom Sensors</a> .
	You cannot change this value after sensor creation.



Setting	Description
Parameters	If your executable or script file catches command-line parameters, you can define them here. You can use placeholders as well. Enter a string or leave the field empty.
	For a full list of all placeholders, see section <u>Custom Sensors</u> .
	You need to escape special characters and whitespaces in your parameters and surround them with double quotation marks ("). See section Escape Special Characters and Whitespaces in Parameters (992) for details.
Environment	Select whether PRTG command-line parameters are also available as environment parameters:
	<ul> <li>Default environment: Do not provide values of PRTG placeholders in the environment. Select this secure option if you are not sure.</li> </ul>
	Set placeholders as environment values: From within your executable or script, the values of the PRTG command-line parameters are available via environment variables. For example, you can then read and use the current host value of the parent device from within your script. This option can pose a security risk because credentials are provided in several variables as well.
	For a full list of all available variables, see section <u>Custom Sensors</u> .
Security Context	Define the Windows user account that the sensor uses to run the executable or script file:
	<ul> <li>Use security context of PRTG probe service: Run the file under the same Windows user account that the probe system runs under. By default, this is the Windows system user account.</li> </ul>
	<ul> <li>Use Windows credentials of parent device: Use the Windows user account in the <u>parent device settings</u>.</li> </ul>
Mutex Name	Define a mutual exclusion (mutex) name for the process. Enter a string or leave the field empty.
	i PRTG executes all EXE/Script sensors that have the same mutex serially, not simultaneously. This is useful if you use a lot of sensors and you want to avoid high resource usage caused by simultaneously running processes.
	See the Knowledge Base: What is the Mutex Name in the EXE/Script sensor settings?
Timeout (Sec.)	Enter a timeout in seconds for the request. Enter an integer. The maximum timeout value is 900 seconds (15 minutes).
	if the reply takes longer than this value, the sensor cancels the request and shows a corresponding error message.



Setting	Description
Value Type	Define the type of the values that your executable or script file returns:
	<ul> <li>Integer: An integer is expected as return value. If the script returns a float, PRTG displays the value 0.</li> </ul>
	<ul> <li>Float: A float is expected as return value, with a dot (.) between the predecimal position and the decimal places.</li> <li>The sensor also displays integers unless they produce a buffer overflow.</li> </ul>
	<ul> <li>Counter: Your script returns an integer that increases. PRTG shows the difference between the values of two sensor scans.</li> <li>A counter must return an integer. It does not support float values.</li> </ul>
	The sensor does not support string values.
	(i) You cannot change this value after sensor creation.
If Value Changes	Define what the sensor does when its value changes:
	■ Ignore (default): Do nothing.
	<ul> <li>Trigger 'change' notification: Send an internal message that indicates a change.</li> <li>In combination with a <u>change trigger</u>, you can use this to <u>trigger a notification</u> if a change occurs.</li> </ul>
Result Handling	Define what the sensor does with the result that the executable file gives back:
	Discard result: Do not store the sensor result.
	<ul> <li>Store result: Store the last sensor result in the \Logs\sensors subfolder of the <u>PRTG data directory</u> on the probe system. The file names are Result of Sensor [ID].txt and Result of Sensor [ID].Data.txt. This setting is for debugging purposes. PRTG overwrites these files with each scanning interval.</li> </ul>
	<ul> <li>Store result in case of error: Store the last sensor result only if the sensor shows the Down status.</li> </ul>
	i Enable this option if you do not want failures to be overwritten by a following success of the script.
	in a cluster, PRTG stores the result in the PRTG data directory of the master node.



### Sensor Display

Primary Channel	Downtime
Graph Type 🕙	Show channels independently (default)
	Stack channels on top of each other
	18 22

Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor.
	(i) You can set a different primary channel later by clicking A below a channel gauge on the sensor's Overview tab.
Graph Type	Define how different channels are shown for this sensor:  Show channels independently (default): Show a graph for each channel.
	<ul> <li>Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic.</li> <li>You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).</li> </ul>
Stack Unit	This setting is only visible if you enable Stack channels on top of each other as Graph Type. Select a unit from the list. All channels with this unit are stacked on top of each other. By default, you cannot exclude single channels from stacking if they use the selected unit. However, there is an advanced procedure to do so.

### Inherited Settings

By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the <u>root group settings</u> if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display its options.

For more information, see section Inheritance of Settings.