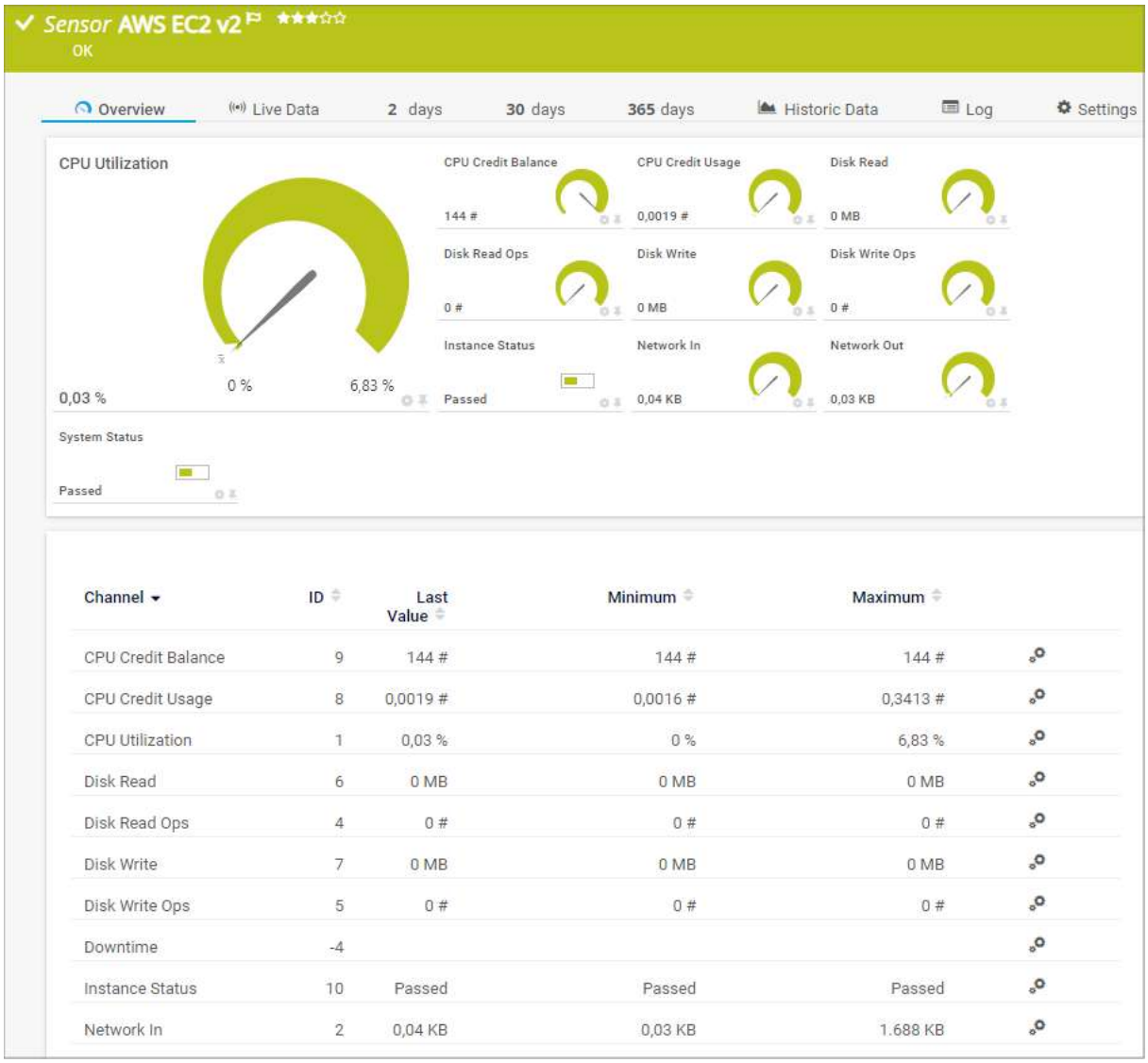
7.8.6 AWS EC2 v2 Sensor

The AWS EC2 v2 sensor monitors the performance of an Amazon Web Services (AWS) Elastic Compute Cloud (EC2) instance by reading its data from Amazon CloudWatch via the AWS API.

ⓘ If you use the same Identity and Access Management (IAM) policy that you use for this sensor, you must update it. For more information, see the Knowledge Base: How do I set permissions for the Amazon Web Services (AWS) API key to use certain sensors in PRTG?



Channel	ID	Last Value	Minimum	Maximum
CPU Credit Balance	9	144 #	144 #	144 #
CPU Credit Usage	8	0,0019 #	0,0016 #	0,3413 #
CPU Utilization	1	0,03 %	0 %	6,83 %
Disk Read	6	0 MB	0 MB	0 MB
Disk Read Ops	4	0 #	0 #	0 #
Disk Write	7	0 MB	0 MB	0 MB
Disk Write Ops	5	0 #	0 #	0 #
Downtime	-4			
Instance Status	10	Passed	Passed	Passed
Network In	2	0,04 KB	0,03 KB	1.688 KB

AWS EC2 v2 Sensor

- For a list of metrics that this sensor supports, see section Supported Metrics 707.
- For a list of dimensions that this sensor supports, see section Supported Dimensions 708.
- For a list of regions that this sensor supports, see section List of Supported AWS Regions and Their Codes.
- For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 708.

Sensor in Other Languages

- Dutch: AWS EC2 v2
- French: AWS EC2 v2
- German: AWS EC2 v2
- Japanese: AWS EC2 v2
- Portuguese: AWS EC2 v2
- Russian: AWS EC2 v2
- Simplified Chinese: AWS EC2 v2
- Spanish: AWS EC2 v2

Remarks

- This sensor requires 702 permissions for the AWS API key.
- This sensor requires credentials for AWS in settings that are higher in the object hierarchy.
- This sensor supports IPv6.
- This sensor has a low performance impact.
- This sensor uses lookups to determine the status values of one or more channels.
- Amazon can charge you based on the number of API calls that the sensor sends to the Amazon servers. For more information, see Amazon CloudWatch Pricing – Amazon Web Services (AWS).
- It can take up to several minutes before objects appear in the Add Sensor dialog.

Detailed Requirements

Requirement	Description
Permissions for the AWS API key	This sensor requires sufficient rights to query data from the AWS API For more information, see the Knowledge Base: How do I set permissions for the Amazon Web Services (AWS) API key to use certain sensors in PRTG?

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?
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.
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: ▪ aws ▪ cloudwatch ▪ cloudwatchsensor ▪ ec2

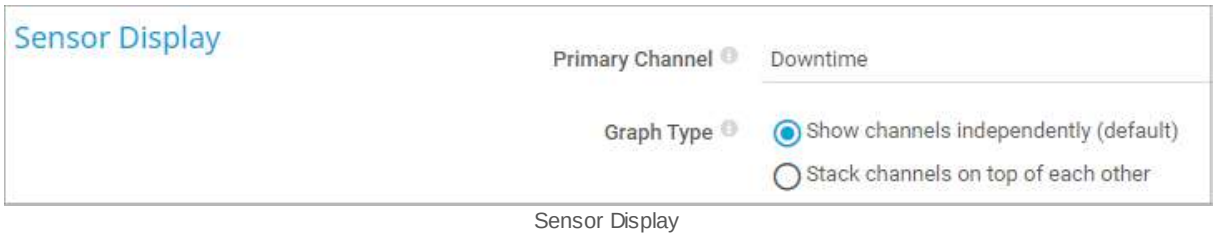
Setting	Description
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (★☆☆☆☆) to the highest priority (★★★★★).

AWS EC2 Specific

AWS EC2 Specific

Setting	Description
ID	The ID of the AWS EC2 instance that this sensor monitors.
Name	The name of the AWS EC2 instance that this sensor monitors.
Region	The region in which the AWS EC2 instance runs. For a list of regions that this sensor supports, see section List of Supported AWS Regions and Their Codes.

Sensor Display



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. ⓘ 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

Setting	Description
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 name is Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites this file 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.

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 root group settings 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.

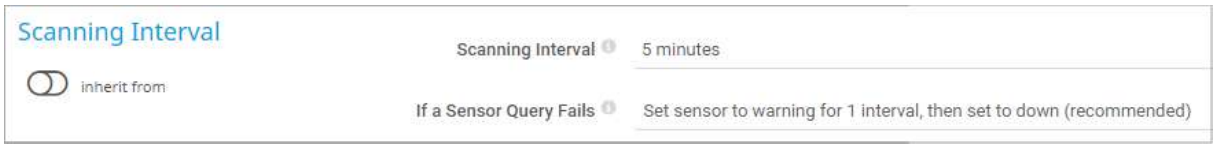
For more information, see section Inheritance of Settings.

Scanning Interval

This sensor has a fixed minimum scanning interval for performance reasons. You cannot use a shorter scanning interval. Consequently, shorter scanning intervals in the Monitoring settings are not available for this sensor.

The minimum scanning interval of this sensor is 5 minutes.

The recommended scanning interval of this sensor is 5 minutes.

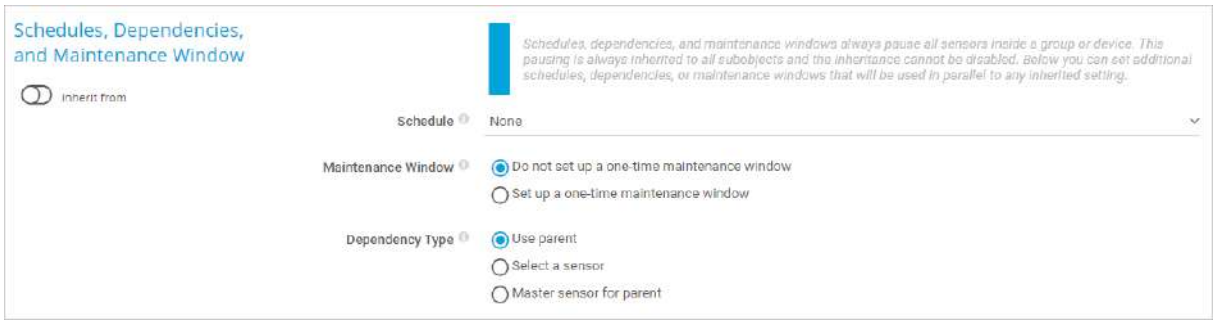


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

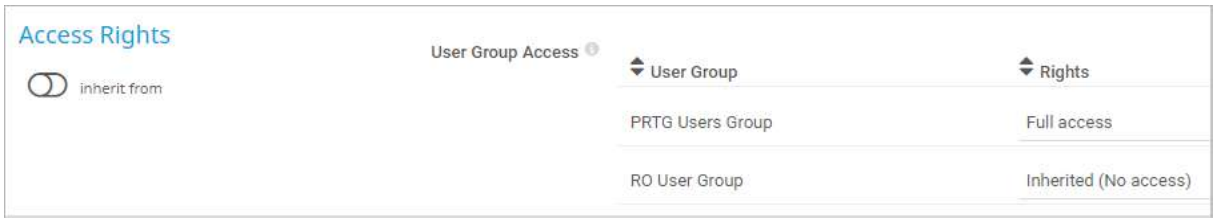
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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



Schedules, Dependencies, and Maintenance Window

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

Access Rights

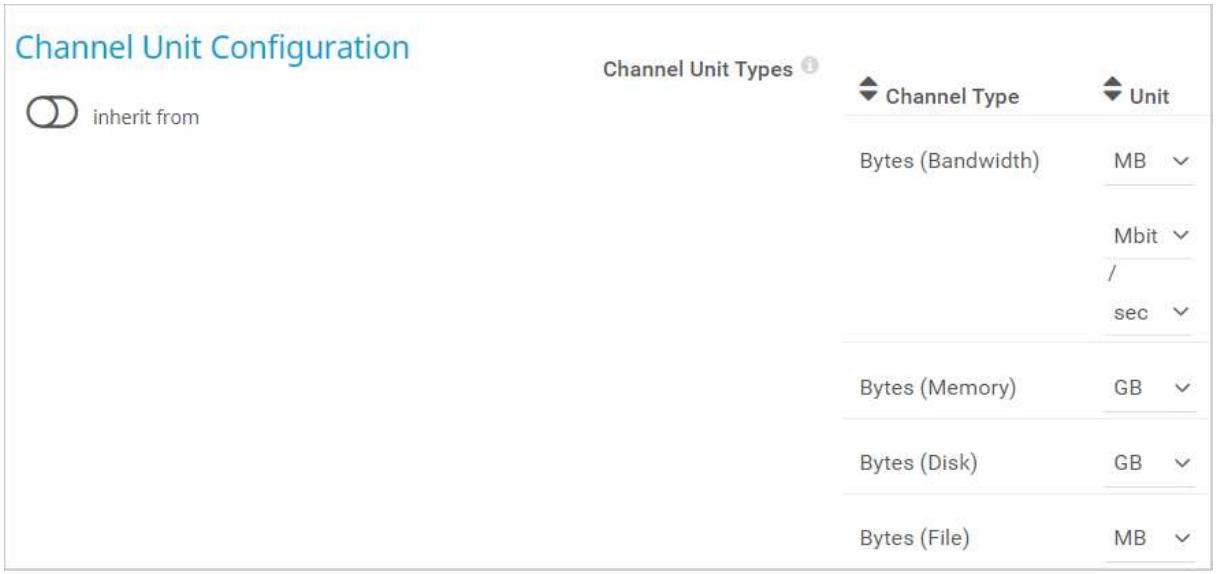


Access Rights

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

Channel Unit Configuration

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.

Supported Metrics

The AWS EC2 v2 sensor supports the following metrics:

- CPUCreditBalance (Average)
- CPUCreditUsage (Average)
- CPUUtilization (Average)
- DiskReadBytes (Average)
- DiskReadOps (Average)
- DiskWriteBytes (Average)
- DiskWriteOps (Average)

- NetworkIn (Average)
- NetworkOut (Average)
- StatusCheckFailed (Average)
- StatusCheckFailed_Instance (Average)
- StatusCheckFailed_System (Average)

Supported Dimensions

The AWS EC2 v2 sensor supports the following dimensions:

- Instance

Channel List

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

Channel	Description
CPU Credit Balance	The CPU credit balance
CPU Credit Usage	The CPU credit usage
CPU Utilization	The CPU usage ⓘ This channel is the primary channel by default.
Disk Read	The disk read speed
Disk Read Ops	The number of disk read operations
Disk Write	The disk write speed
Disk Write Ops	The number of disk write operations
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
Instance Status	The AWS EC2 instance status ▪ Up status: Passed ▪ Down status: Failed
Network In	The incoming network load

Channel	Description
Network Out	The outgoing network load
System Status	The AWS EC2 system status ▪ Up status: Passed ▪ Down status: Failed

More

KNOWLEDGE BASE

How do I set permissions for the Amazon Web Services (AWS) API key to use certain sensors in PRTG?

- https://kb.paessler.com/en/topic/38083

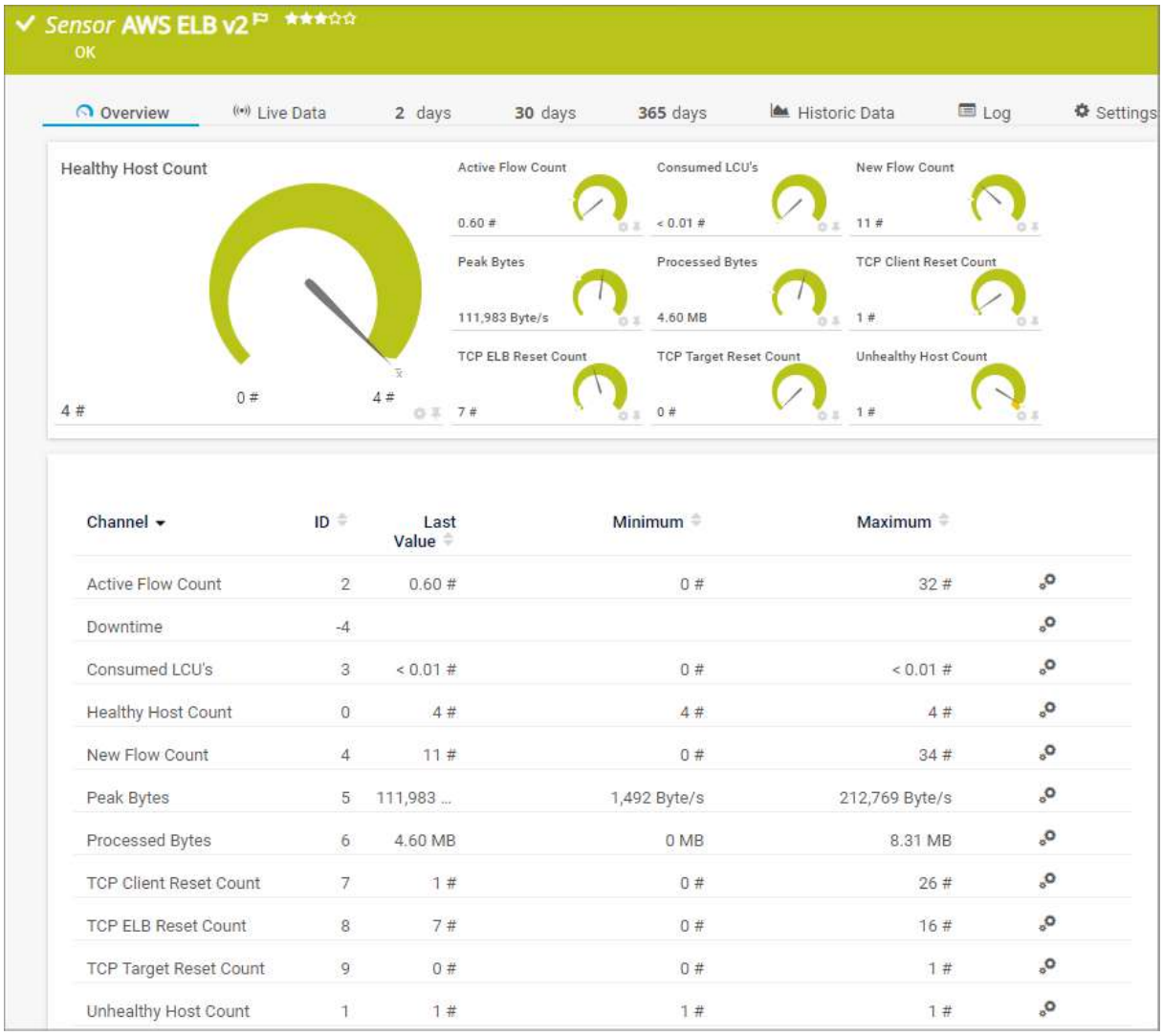
What security features does PRTG include?

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

7.8.7 AWS ELB v2 Sensor

The AWS ELB v2 sensor monitors the performance of an Amazon Web Services (AWS) Elastic Load Balancing (ELB) load balancer by reading its data from Amazon CloudWatch via the AWS API.

ⓘ If you use the same Identity and Access Management (IAM) policy that you use for this sensor, you must update it. For more information, see the Knowledge Base: How do I set permissions for the Amazon Web Services (AWS) API key to use certain sensors in PRTG?



Channel	ID	Last Value	Minimum	Maximum
Active Flow Count	2	0.60 #	0 #	32 #
Downtime	-4			
Consumed LCU's	3	< 0.01 #	0 #	< 0.01 #
Healthy Host Count	0	4 #	4 #	4 #
New Flow Count	4	11 #	0 #	34 #
Peak Bytes	5	111,983 ...	1,492 Byte/s	212,769 Byte/s
Processed Bytes	6	4.60 MB	0 MB	8.31 MB
TCP Client Reset Count	7	1 #	0 #	26 #
TCP ELB Reset Count	8	7 #	0 #	16 #
TCP Target Reset Count	9	0 #	0 #	1 #
Unhealthy Host Count	1	1 #	1 #	1 #

AWS ELB v2 Sensor

- For a list of metrics that this sensor supports, see section Supported Metrics 716.
- For a list of dimensions that this sensor supports, see section Supported Dimensions 717.
- For a list of regions that this sensor supports, see section List of Supported AWS Regions and Their Codes.
- For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 717.

Sensor in Other Languages

- Dutch: AWS ELB v2
- French: AWS ELB v2
- German: AWS ELB v2
- Japanese: AWS ELB v2
- Portuguese: AWS ELB v2
- Russian: AWS ELB v2
- Simplified Chinese: AWS ELB v2
- Spanish: AWS ELB v2

Remarks

- This sensor requires 711 permissions for the AWS API key.
- This sensor requires credentials for AWS in settings that are higher in the object hierarchy.
- This sensor supports Application Load Balancer and Network Load Balancer.
- This sensor supports IPv6.
- This sensor has a low performance impact.
- Amazon can charge you based on the number of API calls that the sensor sends to the Amazon servers. For more information, see Amazon CloudWatch Pricing – Amazon Web Services (AWS).
- It can take up to several minutes before objects appear in the Add Sensor dialog.

Detailed Requirements

Requirement	Description
Permissions for the AWS API key	This sensor requires sufficient rights to query data from the AWS API For more information, see the Knowledge Base: How do I set permissions for the Amazon Web Services (AWS) API key to use certain sensors in PRTG?

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?
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.
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: ▪ aws ▪ cloudwatch ▪ elb ▪ cloudwatchelb

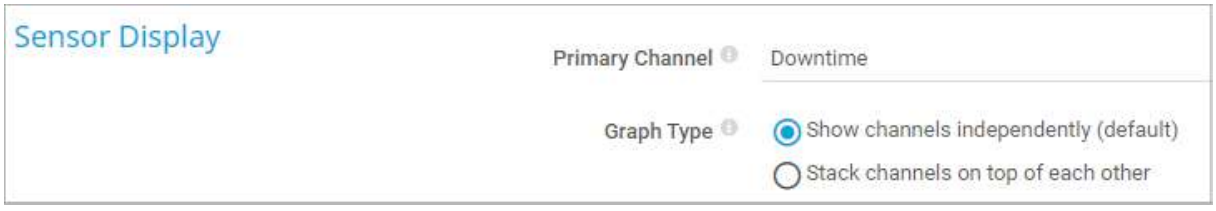
Setting	Description
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (★☆☆☆☆) to the highest priority (★★★★★).

AWS ELB Specific

AWS ELB Specific

Setting	Description
ID	The ID of the AWS ELB load balancer that this sensor monitors.
Name	The name of the AWS ELB load balancer that this sensor monitors.
Type	The type of the AWS ELB load balancer that this sensor monitors.
Region	The region in which the AWS ELB load balancer runs. For a list of regions that this sensor supports, see section List of Supported AWS Regions and Their Codes.

Sensor Display



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. ⓘ 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

Setting	Description
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 name is Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites this file 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.

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 root group settings 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.

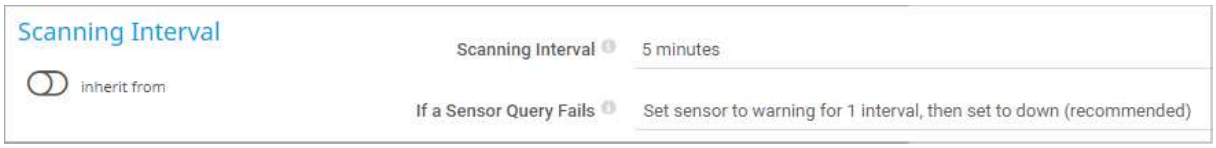
For more information, see section Inheritance of Settings.

Scanning Interval

This sensor has a fixed minimum scanning interval for performance reasons. You cannot use a shorter scanning interval. Consequently, shorter scanning intervals in the Monitoring settings are not available for this sensor.

The minimum scanning interval of this sensor is 1 minute.

The recommended scanning interval of this sensor is 5 minutes.

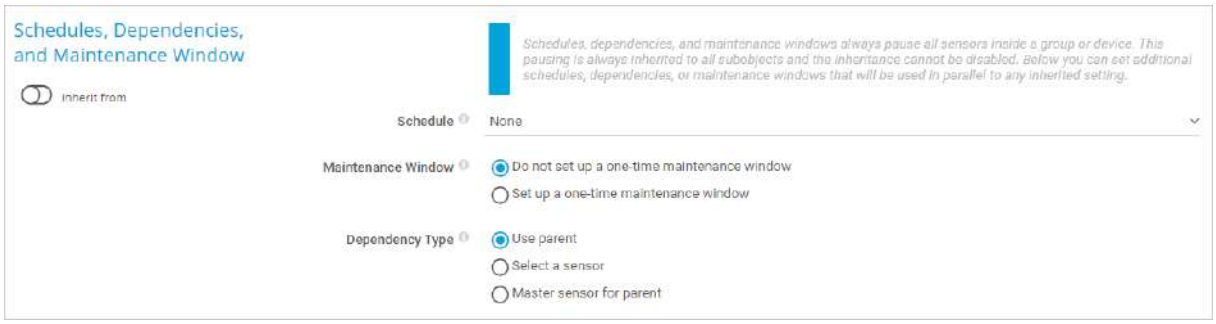


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

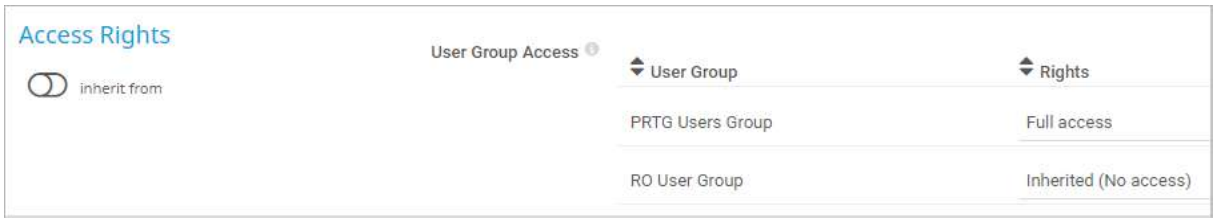
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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



Schedules, Dependencies, and Maintenance Window

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

Access Rights

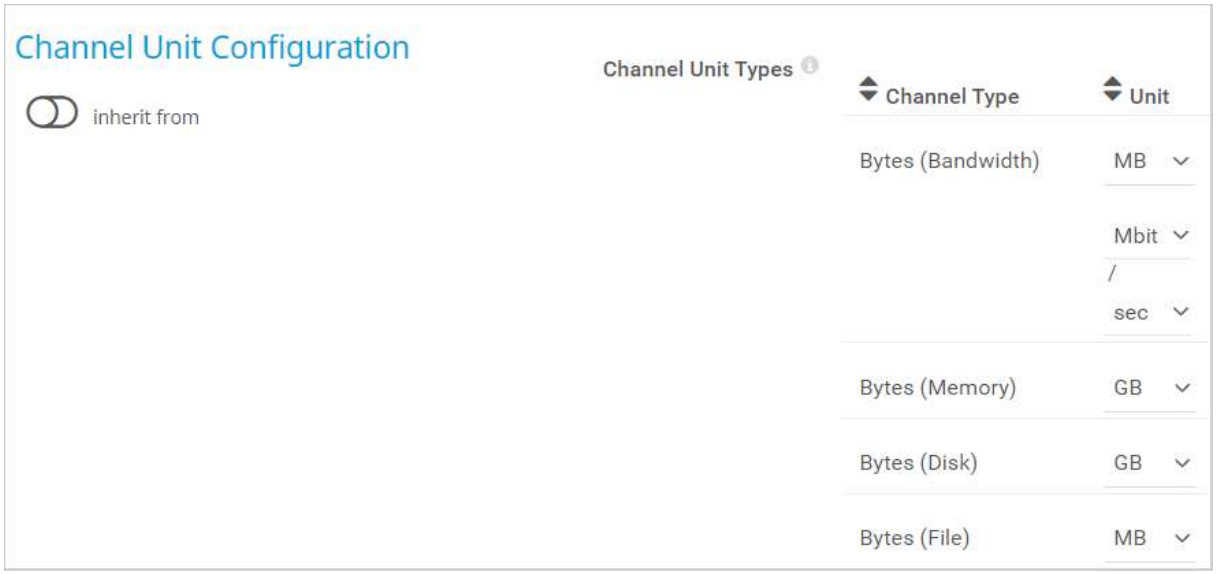


Access Rights

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

Channel Unit Configuration

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.

Supported Metrics

The AWS ELB v2 sensor supports the following metrics:

- ActiveConnectionCount (Sum)
- ActiveFlowCount (Average)
- ConsumedLCUs (Sum)
- HealthyHostCount (Minimum)
- HTTPCode_ELB_4XX_Count (Sum)
- HTTPCode_ELB_5XX_Count (Sum)
- HTTPCode_Target_4XX_Count (Sum)

- HTTPCode_Target_5XX_Count (Sum)
- NewConnectionCount (Sum)
- NewFlowCount (Sum)
- PeakBytesPerSecond (Maximum)
- RuleEvaluations (Sum)
- TargetConnectionErrorCount (Sum)
- TargetResponseTime (Average)
- TCP_Client_Reset_Count (Sum)
- TCP_ELB_Reset_Count (Sum)
- TCP_Target_Reset_Count (Sum)
- UnhealthyHostCount (Maximum)

Supported Dimensions

The AWS ELB v2 sensor supports the following dimensions:

- Load Balancer

Channel List

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

Channel	Description
Active Connection Count	The number of concurrent active TCP connections
Active Flow Count	The number of concurrent flows
Consumed LCU's	The number of LCU used by the load balancer
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
ELB 4XX Count	The number of HTTP 4XX client error codes
ELB 5XX Count	The number of HTTP 5XX server error codes
Healthy Host Count	The number of targets that are considered healthy
New Connection Count	The number of new TCP connections

Channel	Description
New Flow Count	The number of new flows
Peak Bytes	The highest average throughput
Processed Bytes	The number of bytes processed
Rule Evaluations	The number of rules processed
Target 4XX Count	The number of HTTP response codes generated by the targets
Target 5XX Count	The number of HTTP response codes generated by the targets
Target Connection Error Count	The number of connections that were not successfully established
Target Response Time	The response time of the target
TCP Client Reset Count	The number of RST packets sent from a client to a target
TCP ELB Reset Count	The number of RST packets generated by the load balancer
TCP Target Reset Count	The number of RST packets sent from a target to a client
Unhealthy Host Count	The number of targets that are considered unhealthy

More

KNOWLEDGE BASE

How do I set permissions for the Amazon Web Services (AWS) API key to use certain sensors in PRTG?

- https://kb.paessler.com/en/topic/38083

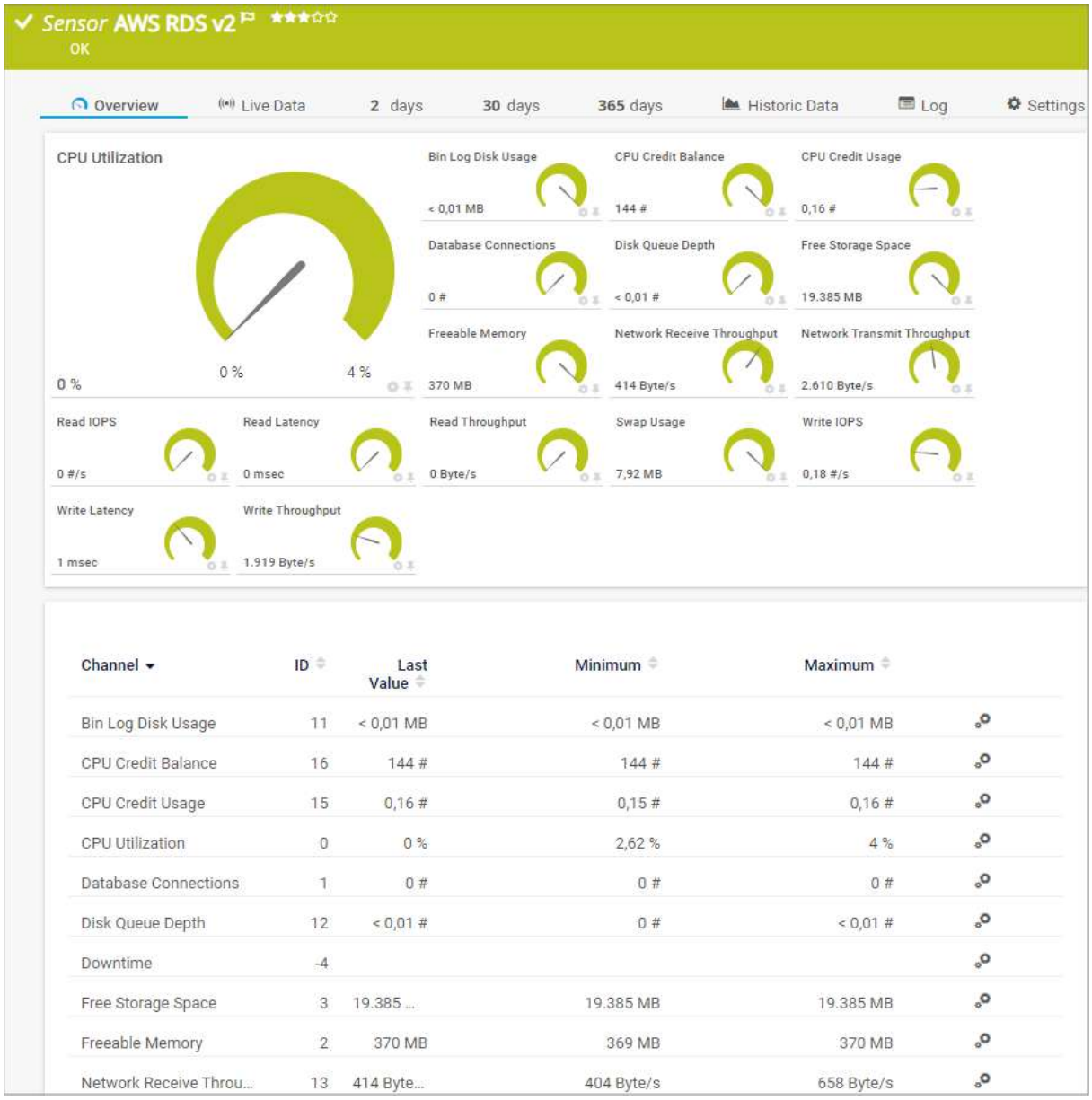
What security features does PRTG include?

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

7.8.8 AWS RDS v2 Sensor

The AWS RDS v2 sensor monitors the performance of a Amazon Web Services (AWS) Relational Database Service (RDS) database by reading its data from Amazon CloudWatch via the AWS API.

ⓘ If you use the same Identity and Access Management (IAM) policy that you use for this sensor, you must update it. For more information, see the Knowledge Base: How do I set permissions for the Amazon Web Services (AWS) API key to use certain sensors in PRTG?



AWS RDS v2 Sensor

- For a list of metrics that this sensor supports, see section Supported Metrics 725.
- For a list of dimensions that this sensor supports, see section Supported Dimensions 726.
- For a list of regions that this sensor supports, see section List of Supported AWS Regions and Their Codes.

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 726.

Sensor in Other Languages

- Dutch: AWS RDS v2
- French: AWS RDS v2
- German: AWS RDS v2
- Japanese: AWS RDS v2
- Portuguese: AWS RDS v2
- Russian: AWS RDS v2
- Simplified Chinese: AWS RDS v2
- Spanish: AWS RDS v2

Remarks

- This sensor requires 720 permissions for the AWS API key.
- This sensor requires credentials for AWS in settings that are higher in the object hierarchy.
- This sensor supports IPv6.
- This sensor has a low performance impact.
- Amazon can charge you based on the number of API calls that the sensor sends to the Amazon servers. For more information, see Amazon CloudWatch Pricing – Amazon Web Services (AWS).
- It can take up to several minutes before objects appear in the Add Sensor dialog.

Detailed Requirements

Requirement	Description
Permissions for the AWS API key	This sensor requires sufficient rights to query data from the AWS API For more information, see the Knowledge Base: How do I set permissions for the Amazon Web Services (AWS) API key to use certain sensors in PRTG?

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?
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.
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: ▪ aws ▪ cloudwatch ▪ rds ▪ cloudwatchsensor

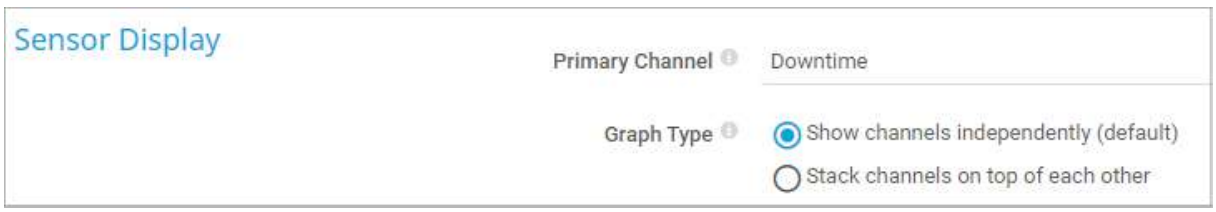
Setting	Description
Priority	Select a priority for the sensor. This setting determines the position of the sensor in lists. The highest priority is at the top of a list. Choose from the lowest priority (★☆☆☆☆) to the highest priority (★★★★★).

AWS RDS Specific

AWS RDS Specific

Setting	Description
Database Identifier	The database identifier of the AWS RDS database that this sensor monitors.
Engine	The engine family name of the AWS RDS database that this sensor monitors.
Region	The region in which the AWS RDS instance runs. For a list of regions that this sensor supports, see section List of Supported AWS Regions and Their Codes.

Sensor Display



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. ⓘ 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

Setting	Description
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 name is Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites this file 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.

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 root group settings 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.

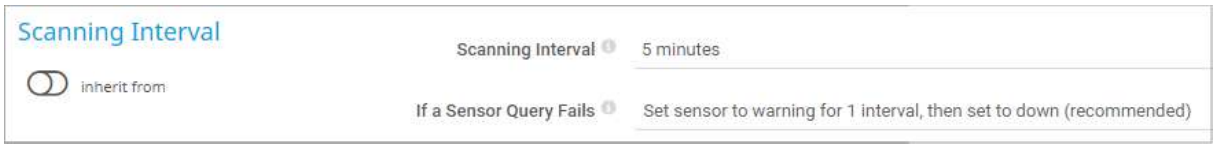
For more information, see section Inheritance of Settings.

Scanning Interval

This sensor has a fixed minimum scanning interval for performance reasons. You cannot use a shorter scanning interval. Consequently, shorter scanning intervals in the Monitoring settings are not available for this sensor.

The minimum scanning interval of this sensor is 5 minutes.

The recommended scanning interval of this sensor is 5 minutes.

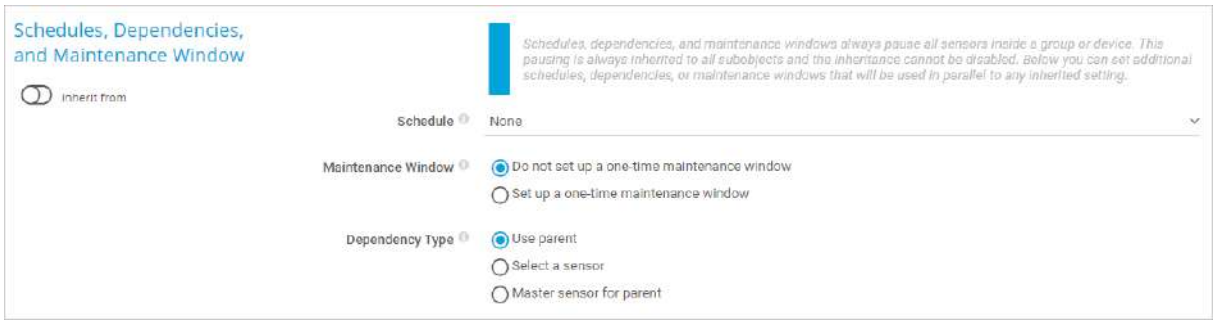


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

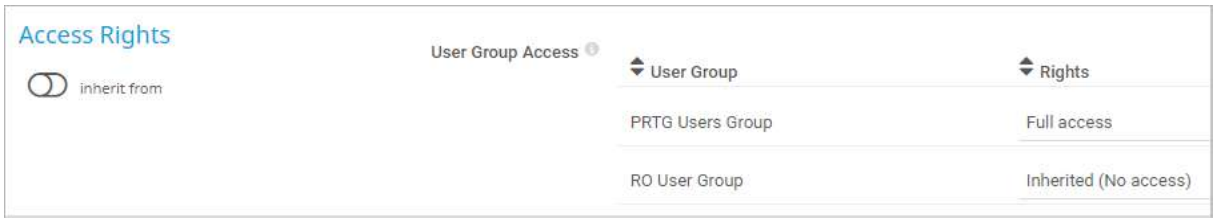
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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



Schedules, Dependencies, and Maintenance Window

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

Access Rights

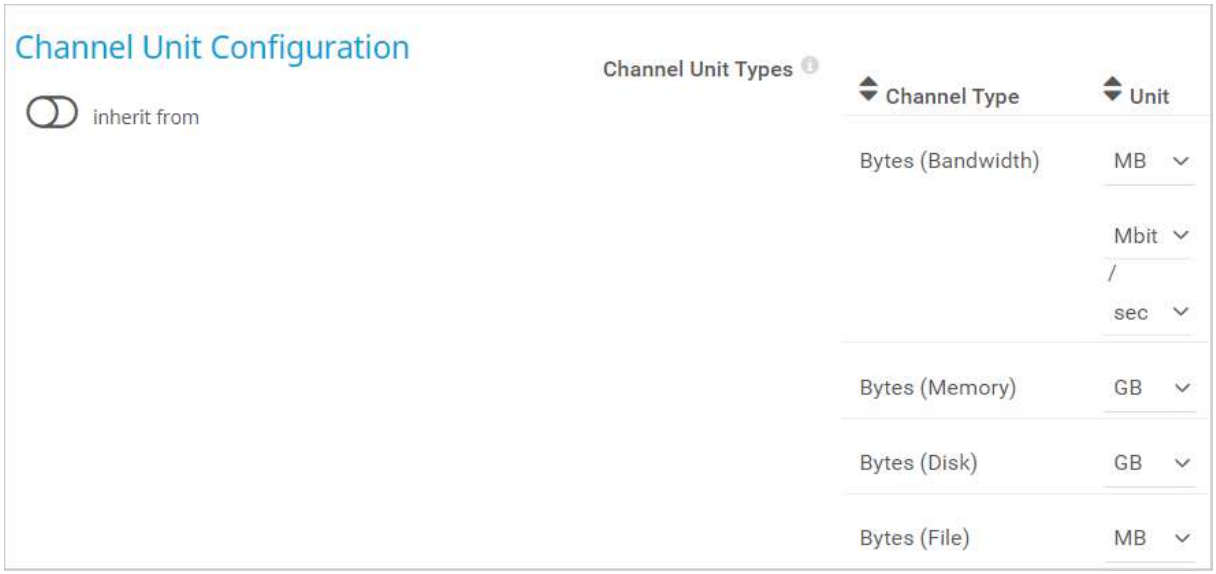


Access Rights

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

Channel Unit Configuration

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.

Supported Metrics

The AWS RDS v2 sensor supports the following metrics:

- BinLogDiskUsage (MB)
- CPUUtilization (Average)
- CPUCreditUsage (Average)
- CPUCreditBalance (Average)
- DatabaseConnections (Count)
- DiskQueueDepth (Count)
- FreeableMemory (MB)

- FreeStorageSpace (MB)
- NetworkReceiveThroughput (Byte/Second)
- NetworkTransmitThroughput (Byte/Second)
- ReadIOPS (Count/Second)
- ReadLatency (Milliseconds)
- ReadThroughput (Byte/Second)
- ReplicaLag (Milliseconds)
- SwapUsage (MB)
- WriteIOPS (Count/Second)
- WriteLatency (Milliseconds)
- WriteThroughput (Byte/Second)

Supported Dimensions

The AWS RDS v2 sensor supports the following dimensions:

- DBInstanceIdentifier

Channel List

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

Channel	Description
Bin Log Disk Usage	The bin log disk usage
CPU Credit Balance	The CPU credit balance
CPU Credit Usage	The CPU credit usage
CPU Utilization	The CPU usage ⓘ This channel is the primary channel by default.
Database Connections	The percentage of database connections in use
Disk Queue Depth	The number of outstanding read and write requests waiting to access the disk
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

Channel	Description
Free Storage Space	The amount of available storage space
Freeable Memory	The freeable memory
Network Receive Throughput	The incoming (receive) network traffic
Network Transmit Throughput	The outgoing (transmit) network traffic
Read IOPS	The average number of disk read IOPS
Read Latency	The read latency
Read Throughput	The average number of bytes read from disk
Replica Lag	The amount of time a read replica DB instance lags behind the source DB instance
Swap Usage	The swap usage
Write IOPS	The average number of disk write IOPS
Write Latency	The average amount of time taken per disk read and write operation
Write Throughput	The number of disk write operations

More

KNOWLEDGE BASE

How do I set permissions for the Amazon Web Services (AWS) API key to use certain sensors in PRTG?

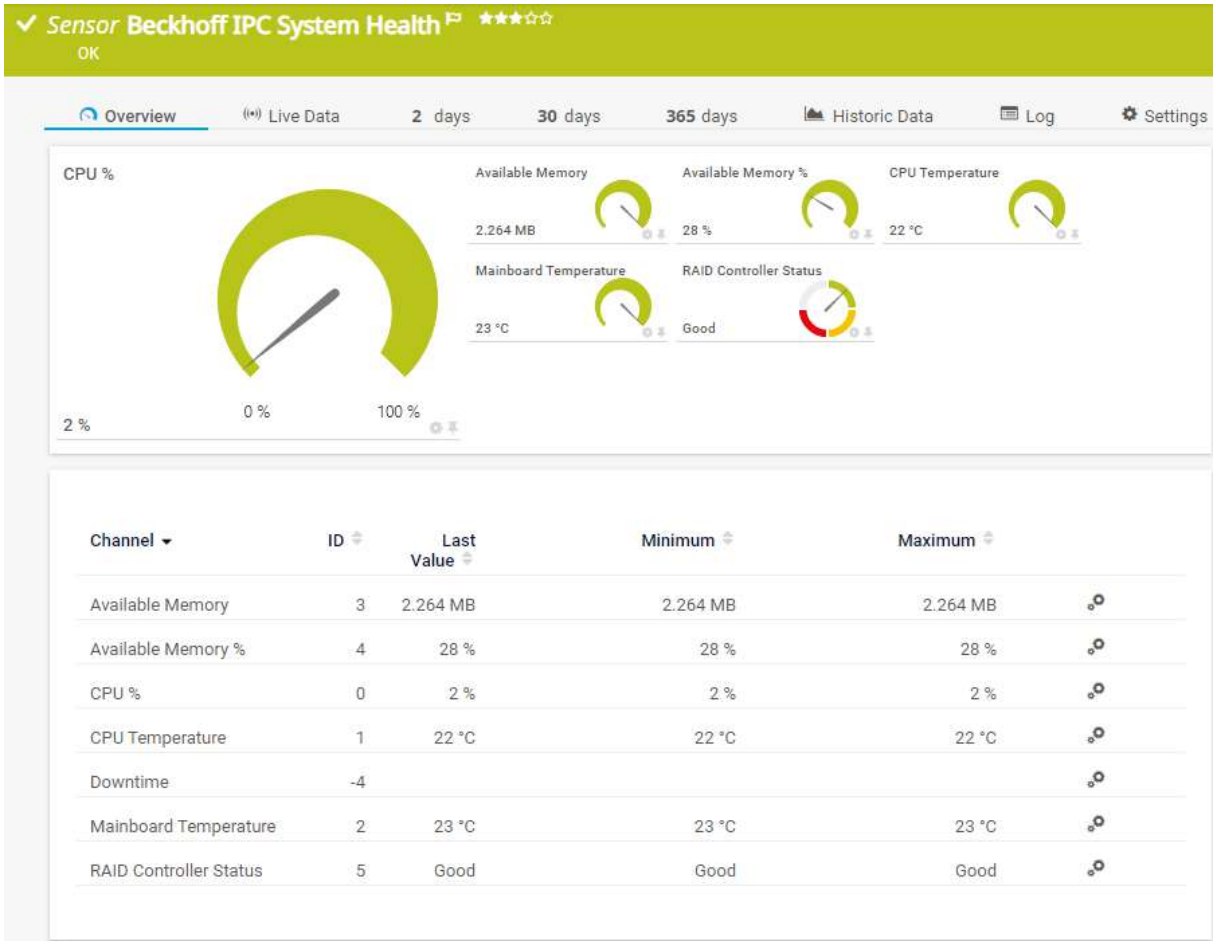
- https://kb.paessler.com/en/topic/38083

What security features does PRTG include?

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

7.8.9 Beckhoff IPC System Health Sensor

The Beckhoff IPC System Health sensor monitors the system health of a Beckhoff Industrial PC (IPC) via OPC Unified Architecture (OPC UA).



Beckhoff IPC System Health Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 733.

Sensor in Other Languages

- Dutch: Beckhoff IPC System Health
- French: Beckhoff IPC System Health
- German: Beckhoff IPC Systemzustand
- Japanese: Beckhoff IPC System Health
- Portuguese: Beckhoff IPC System Health
- Russian: Beckhoff IPC System Health
- Simplified Chinese: Beckhoff IPC System Health
- Spanish: Salud del sistema Beckhoff IPC

Remarks

- This sensor requires a valid port for the connection to the OPC UA server and credentials for OPC UA in the settings of the parent device.
- This sensor only supports IPv4.
- This sensor has a low performance impact.
- This sensor uses lookups to determine the status values of one or more channels.

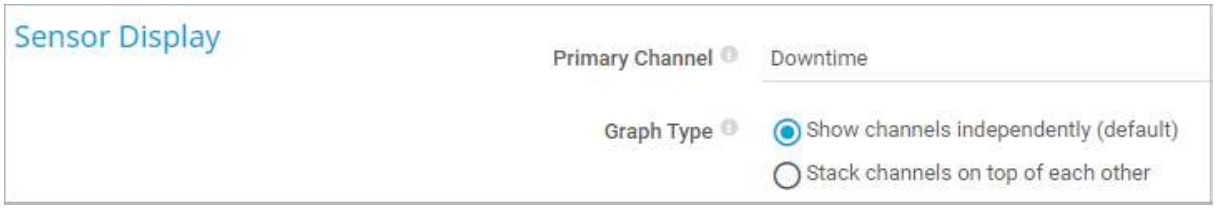
Basic Sensor Settings

Basic Sensor Settings

Setting	Description
Sensor Name	Enter a name to identify the sensor.
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.
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: ▪ opcua

Setting	Description
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 (★★★★★).

Sensor Display



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. ⓘ 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

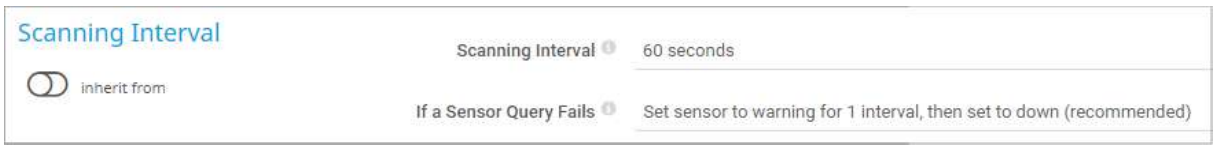
Setting	Description
Result Handling	Define what PRTG does with the sensor result: ▪ Discard result: Do not store the sensor result. ▪ Store result: Store the last sensor result in the \Logs\sensors subfolder of the PRTG data directory on the probe system. The file name is Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites this file 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.

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 root group settings 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

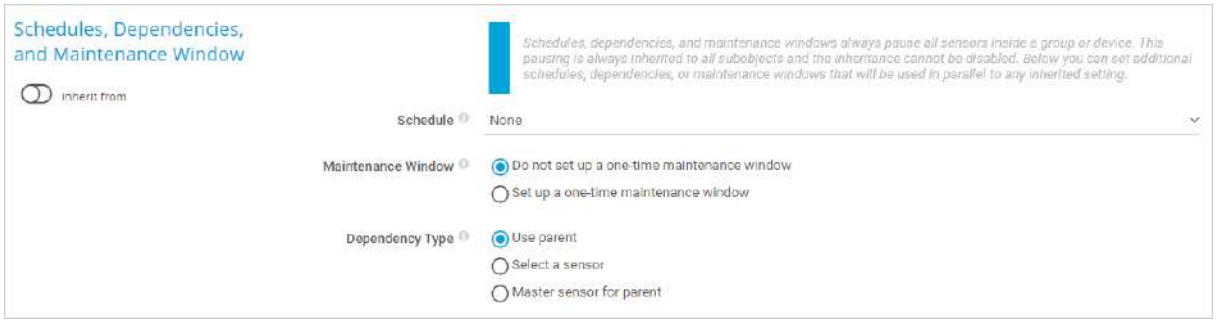


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

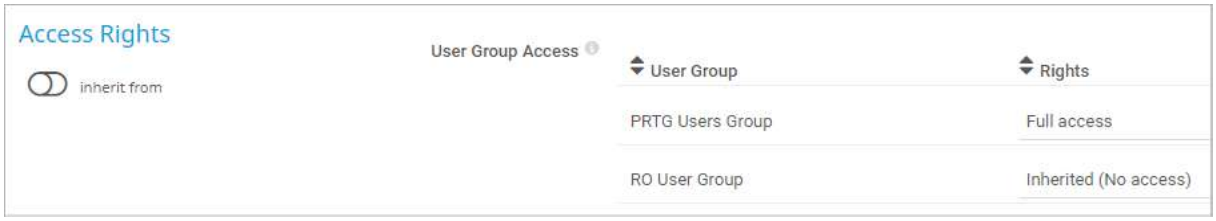
ⓘ You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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



Schedules, Dependencies, and Maintenance Window

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

Access Rights

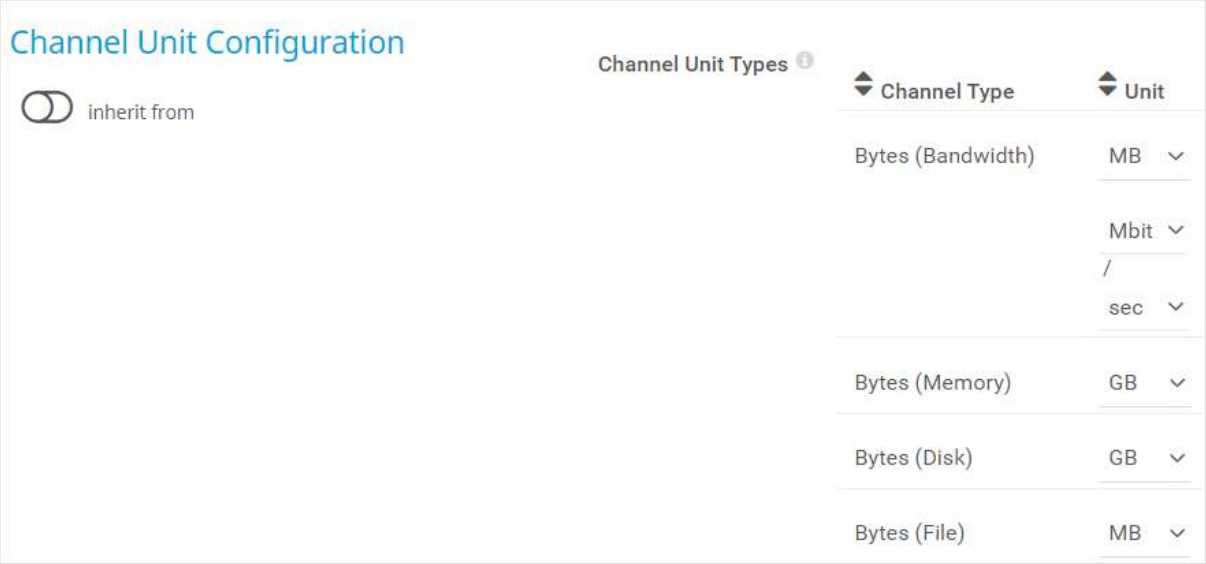


Access Rights

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

Channel Unit Configuration

ⓘ 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

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 (%)
CPU %	The CPU load (%)
CPU Temperature	The CPU temperature
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
Mainboard Temperature	The mainboard temperature
RAID Controller Status	The RAID controller status ▪ Up status: Good ▪ Warning status: Offline ▪ Down status: Failed

Channel	Description
	▪ Unknown status: Power Off

More

KNOWLEDGE BASE

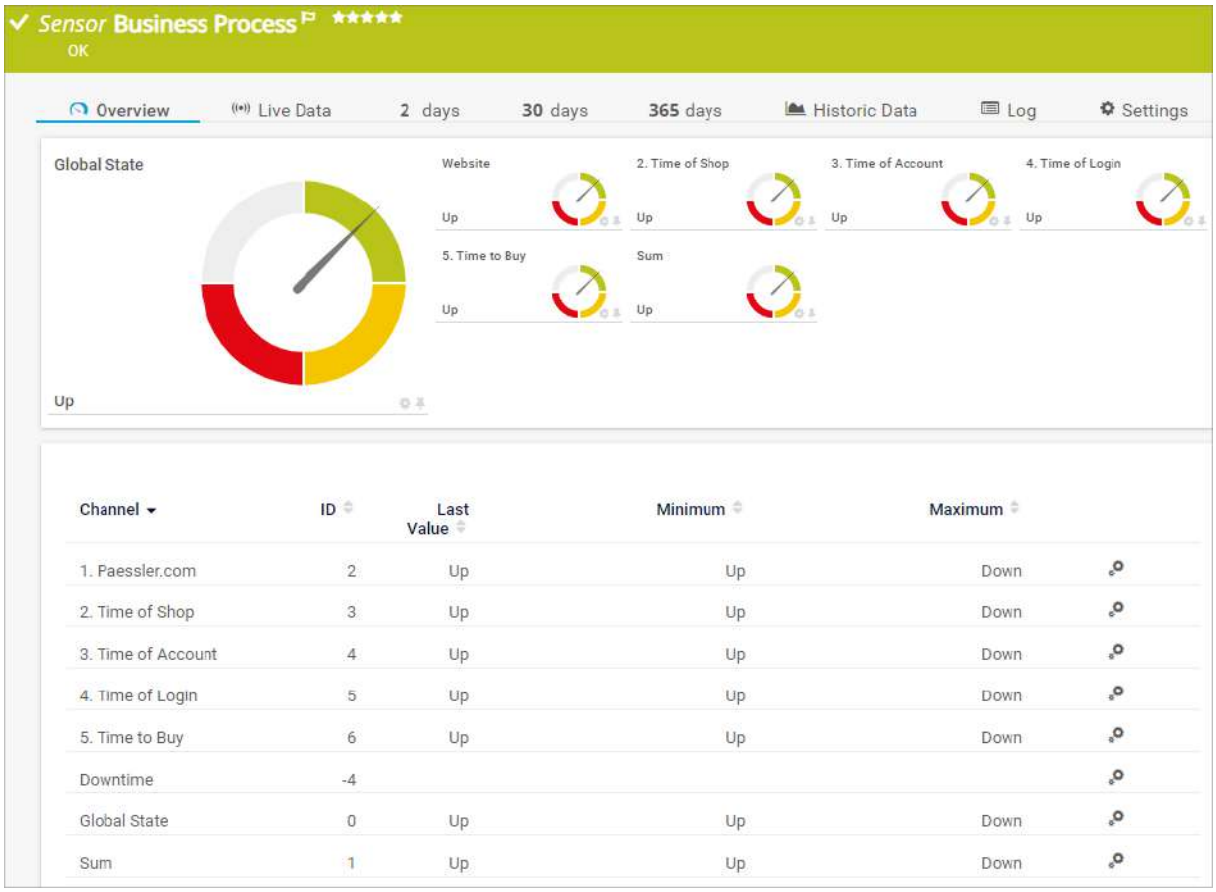
What security features does PRTG include?

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

7.8.10 Business Process Sensor

The Business Process sensor gives you a summarized status of entire business processes while monitoring several process components. This means that you can create a customized sensor with channels based on data from other sensors ("source sensors") that are specific to your network.

If you want to process values from other sensors and you want to perform calculations with these values, for example, use the Sensor Factory 1968 sensor.



Business Process Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 743.

Sensor in Other Languages

- Dutch: Bedrijfs Proces
- French: Processus métier
- German: Business Process
- Japanese: ビジネスプロセス
- Portuguese: Processo empresarial
- Russian: Бизнес-процесс
- Simplified Chinese: 业务进程

- Spanish: Proceso empresarial

Remarks

- This sensor does not officially support more than 50 channels.
- This sensor supports IPv6.
- This sensor has a medium performance impact.
- This sensor uses lookups to determine the status values of one or more channels.
- Knowledge Base: How does the Business Process sensor calculate summarized sensor states?

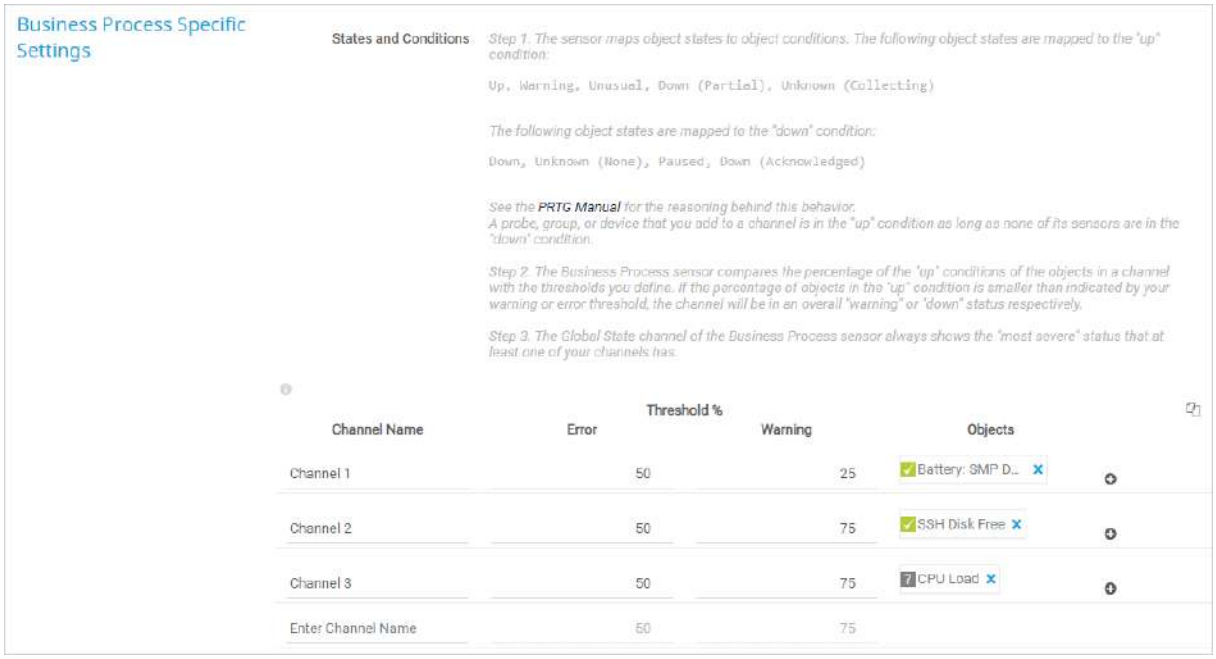
Basic Sensor Settings

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?
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.
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.

Setting	Description
	The sensor has the following default tags that are automatically predefined in the sensor's settings when you add the sensor: ▪ factorysensor ▪ businessprocesssensor
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 (★★★★★).

Business Process Specific Settings



Business Process Specific Settings

Setting	Description
Channel Name	Enter a name for the channel.. To add a new channel to the sensor, click the Enter Channel Name field, enter a name for the channel, and confirm with the Enter or Tab key. ⓘ It might take several sensor scans until new channel names or changes to channel names become visible.
Error Threshold %	Set a percentage limit to define when the channel displays the Down status. Enter an integer. The default value is 50%.

Setting	Description
	ⓘ This value depends on how many objects you feed into a Business Process channel. If the percentage of source objects in the "up" condition is less than the error threshold defines, the channel and the Global State channel of the Business Process sensor show the Down status. PRTG maps the following sensor states to the "up" condition ▲ for a Business Process channel: ▪ Up ▪ Warning ▪ Unusual ▪ Down (Partial) PRTG maps all other sensor states to the "down" condition ▼ (see Up and Down Conditions 739). For example, if you define 4 source sensors for a channel, an error threshold of 50% means that 3 source sensors must be in the "down" condition to set this channel to the Down status. So, 50% means that more than half of the source sensors must not be in the "up" condition to set the sensor to the Down status. ■ For more information, an illustration of the business process mechanisms, and some use cases for the Business Process sensor, see the table below 739 and the Knowledge Base: How can I use the Business Process sensor?
Warning Threshold %	Set a percentage limit to define when the channel displays the Warning status. Enter an integer. The default value is 75%. ⓘ This value depends on how many objects you feed into a Business Process channel. If the percentage of source objects in the "up" condition is less than the threshold defines, the channel and the Global State channel of the Business Process sensor show the Warning status. PRTG maps the following sensor states to the "up" condition ▲ for a Business Process channel: ▪ Up ▪ Warning ▪ Unusual ▪ Down (Partial) PRTG maps all other sensor states to the "down" condition ▼ (see Up and Down Conditions 739).

Setting	Description
	For example, if you define 4 source sensors for a channel, a warning threshold of 75% means that all 4 source sensors must be in the "down" condition to set this channel to the Warning status. So, 75% means that more than three out of four of the source sensors must not be in the "up" condition to set the sensor to the Warning status. For more information, an illustration of the business process mechanisms, and some use cases for the Business Process sensor, see the table below 739 and the Knowledge Base: How can I use the Business Process sensor?
Objects	Enter the objects that you want to have in a channel by clicking ⊕. This way, you can select the desired objects from the device tree with the object selector. You can also start to type the object's ID, name, or a tag. PRTG then suggests the possible objects. You can add sensors, devices, groups, and probes to a channel. Each object you add is weighted equally, no matter if it is a single sensor or a device with many sensors. To give more weight to a specific object, add it several times. For example, add the object twice to give double weight to it, add it three times to give it triple weight. ⓘ A probe, group, or device is in the "up" condition ▲ as long as it does not contain any sensors in the "down" condition ▼.

Up and Down Conditions

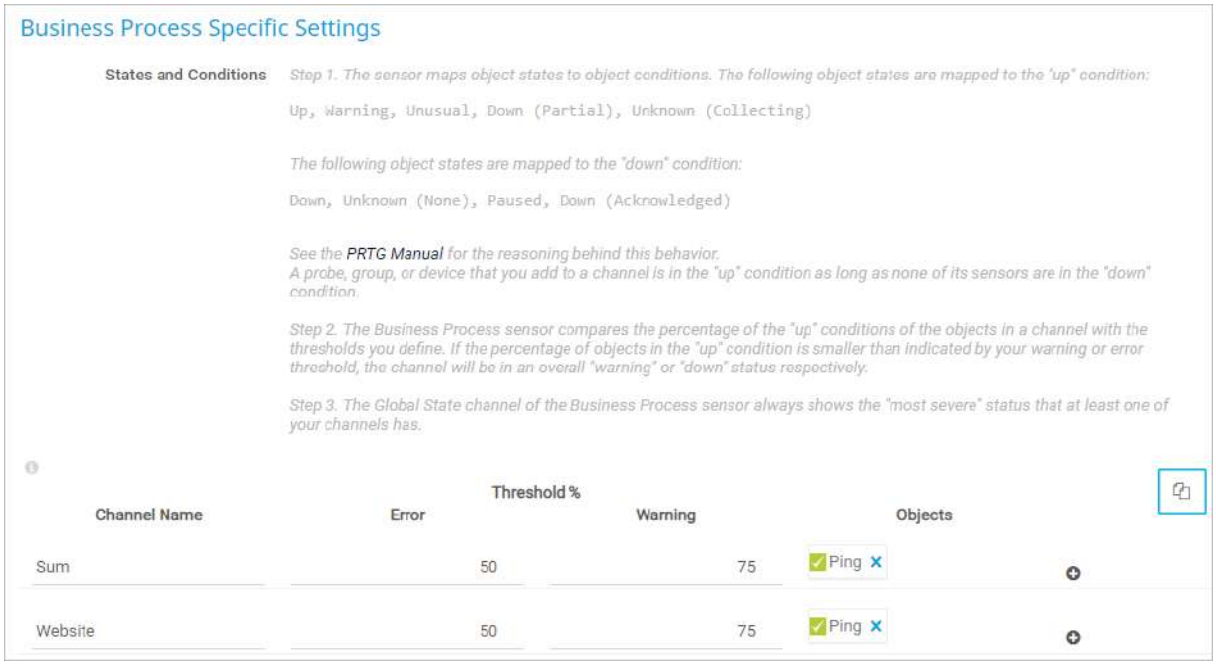
The Business Process "up" ▲ and "down" ▼ conditions are different from the normal Up and Down sensor states. This is necessary for the Business Process sensor to calculate summarized states and to show a calculated result for an entire business process. This table illustrates which sensor status leads to which Business Process condition.

The Relation Between Object States And Business Process Conditions

Channel Object Status	Business Process Condition		Reason: Why does a specific sensor status correspond to a specific Business Process condition?
Up	Up	▲	The monitored object works, so everything is fine.
Warning	Up	▲	The sensor might show a warning, but the monitored object still works.

Channel Object Status	Business Process Condition		Reason: Why does a specific sensor status correspond to a specific Business Process condition?
Down (Partial)	Up	▲	This status is available in a cluster and is displayed if at least one cluster node reports the sensor as in the Up status and at least one cluster node reports it as in the Down status. With at least one Up report, the monitored object is supposed to be working and meets the Business Process "up" condition.
Unusual	Up	▲	The sensor might show unusual values, but the monitored object works.
Collecting	Up	▲	The sensor is still waiting for more monitoring data to definitely decide on the sensor status, but so far the monitored object works. This PRTG internal status is visualized as the Unknown status in the PRTG web interface.
Down	Down	▼	The monitored object does not work.
Unknown	Down	▼	The sensor does not know if the monitored object works, for example because it has not yet received any data or because it has not received any data for a certain amount of time.
None	Down	▼	The sensor has not yet received any monitoring data from the monitored object. This PRTG internal status is visualized as the Unknown status in the PRTG web interface.
Paused	Down	▼	The monitored object does not work and monitoring has been paused, for example actively by the user, by inheritance, or by schedules. It might be convenient to exclude regularly or frequently paused objects from your business process monitoring, so you do not give more weight than necessary to a Business Process "down" condition because of issues you already know about.
Down (Acknowledged)	Down	▼	The monitored object does not work and someone already knows.

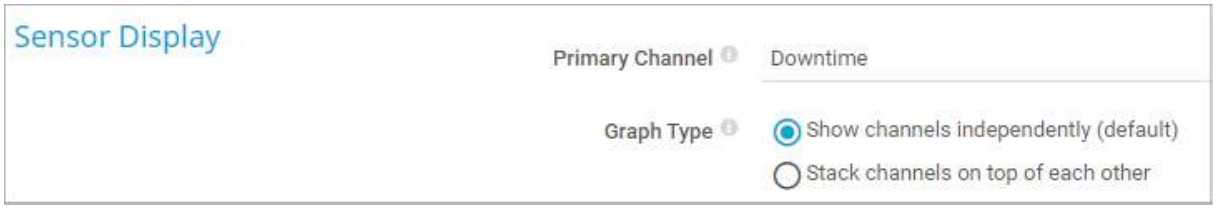
ⓘ If you encounter issues with your Business Process sensor and want to contact the Paessler support team, send us your exact configuration. Click in the upper-right corner of the Business Process Specific Settings table to copy your configuration:



The Business Process Sensor Configuration Clipboard

A window opens that contains your configuration. Copy the highlighted text and paste it into the support form to send it to the Paessler support team.

Sensor Display



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.

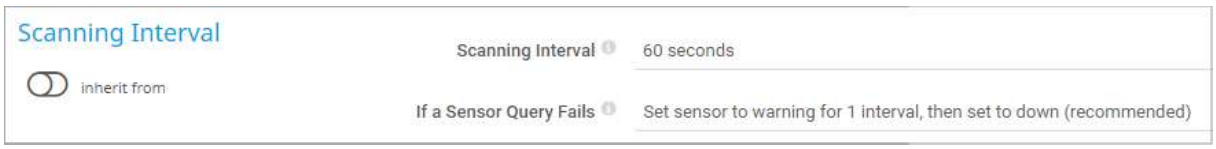
Setting	Description
	▪ Stack channels on top of each other: Stack channels on top of each other to create a multi-channel graph. This generates a graph that visualizes the different components of your total traffic. ⓘ You cannot use this option in combination with manual Vertical Axis Scaling (available 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 root group settings 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

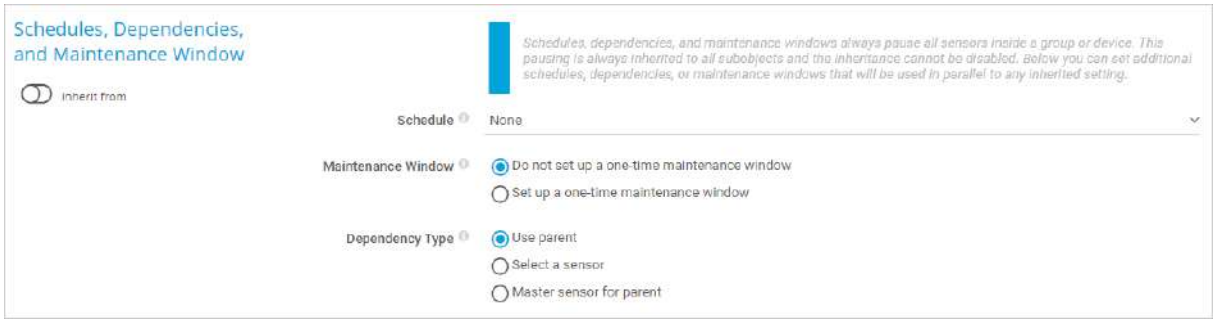


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

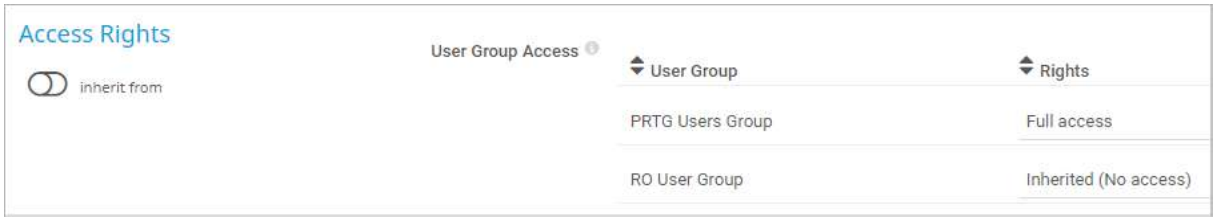
ⓘ You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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

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

Channel	Description
[Channel]	The summarized status of the objects contained in each channel according to the individually defined error and warning thresholds ▪ Up status: Up ▪ Warning status: Warning ▪ Down status: Down ▪ Unknown status: Inactive
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 ⓘ The Business Process sensor never shows values in the Downtime channel because they cannot be calculated for this sensor.

Channel	Description
Global State	The overall and summarized status of all channels in the Global State channel ▪ Up status: Up ▪ Warning status: Warning ▪ Down status: Down ▪ Unknown status: Inactive ⓘ This channel is the primary channel by default.

More

KNOWLEDGE BASE

How does the Business Process sensor calculate summarized sensor states?

- https://kb.paessler.com/en/topic/66647

What security features does PRTG include?

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

How can I use the Business Process sensor?

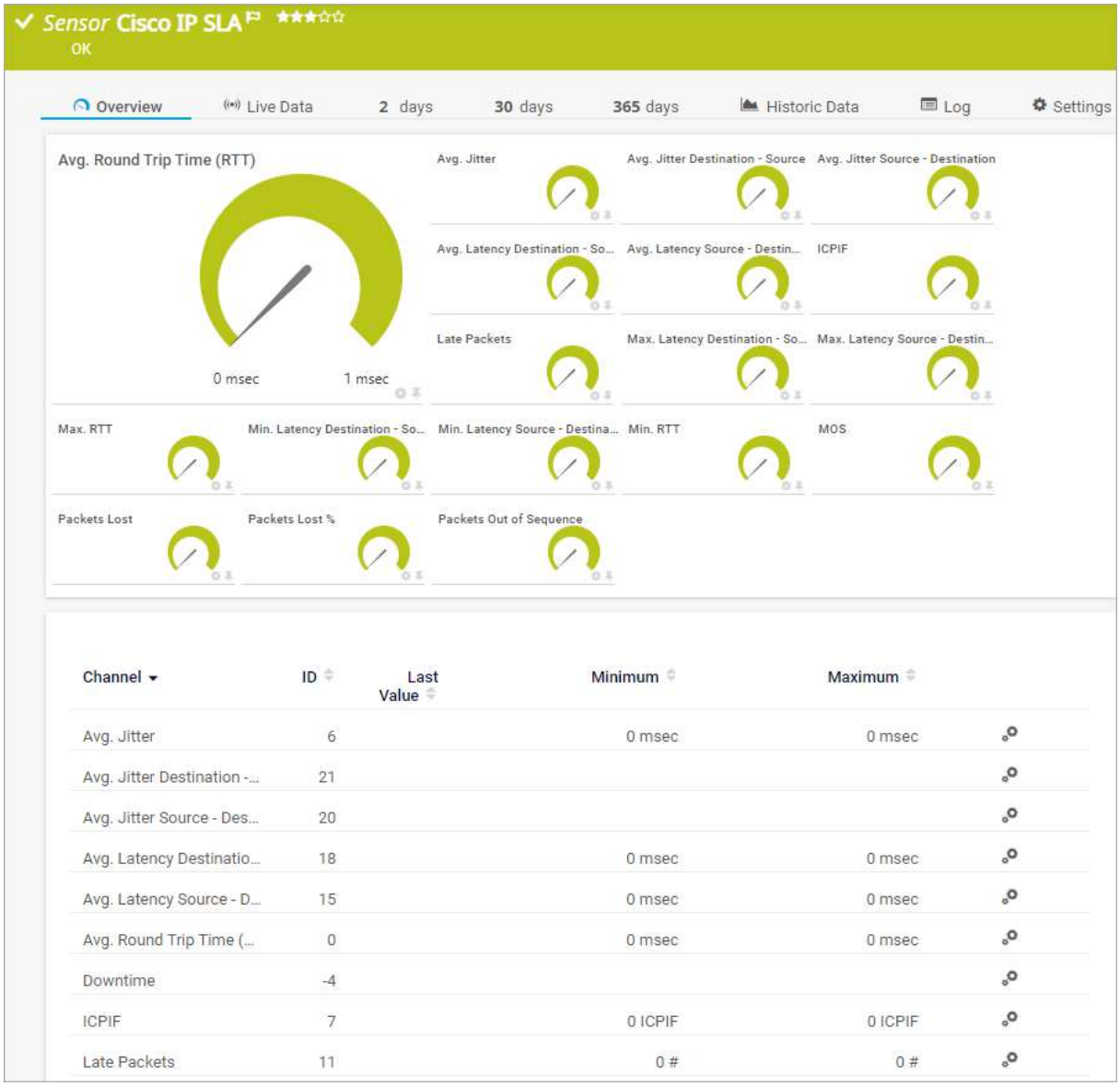
- https://kb.paessler.com/en/topic/67109

How can I avoid numerous notifications for branch offices?

- https://kb.paessler.com/en/topic/86094

7.8.11 Cisco IP SLA Sensor

The Cisco IP SLA sensor monitors Voice over IP (VoIP) network parameters using IP service level agreements (SLA) from Cisco via the Simple Network Management Protocol (SNMP).



Cisco IP SLA Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 750.

Sensor in Other Languages

- Dutch: Cisco IP SLA
- French: Cisco IP SLA
- German: Cisco IP SLA
- Japanese: Cisco IP SLA

- Portuguese: Cisco IP SLA
- Russian: Cisco IP SLA
- Simplified Chinese: Cisco IP SLA
- Spanish: Cisco IP SLA

Remarks

- This sensor only supports IPv4.
- This sensor has a low performance impact.
- This sensor uses lookups to determine the status values of one or more channels.
- If the object identifiers (OID) that the sensor uses are not available on the target device, the sensor shows the error message: No such object (SNMP error # 222). If this occurs, open the SNMP Compatibility Options setting of the parent device or group and set the Request Mode to Use single get.
- If there is a very large number of IP SLAs available during sensor creation, we recommend that you limit the result set by using the Start Interface Index and End Interface Index options in the SNMP Compatibility Options setting of the parent device or group.

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?
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 (<>). ⓘ 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: ▪ ipslasensor
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 (★★★★★).

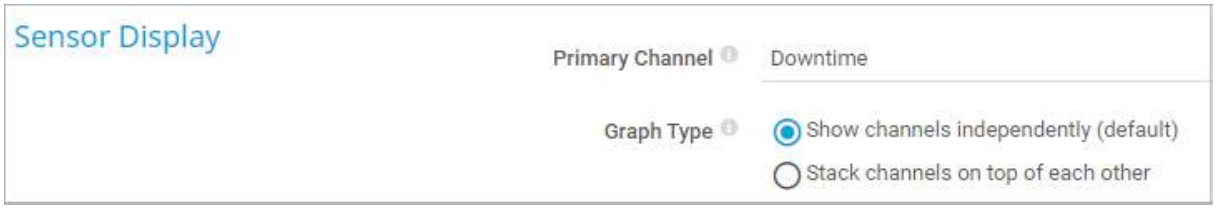
IP SLA Specific

IP SLA Specific

Setting	Description
ID	The ID of the SLA that this sensor monitors. The sensor can support the following operations with the specified type IDs: ▪ echo (1)

Setting	Description
	▪ pathEcho (2) ▪ fileIO (3) ▪ script (4) ▪ udpEcho (5) ▪ tcpConnect (6) ▪ http (7) ▪ dns (8) ▪ jitter (9) ▪ dlsw (10) ▪ dhcp (11) ▪ ftp (12) ▪ icmp-jitter (16) ▪ path-jitter (23) ⓘ The numbers are the IDs of the SLA types as reported by the target device. PRTG translates them into the corresponding strings. These IDs are independent of the IDs that you see in the Add Sensor dialog. If the target device returns other values, the sensor shows an error message that says that it cannot find the type. ⓘ Packet Loss values are summarized but have no explicit channel for Source-Destination or Destination-Source values.
Type	The type of the SLA that this sensor monitors.
Name (Tag)	The name of the SLA that this sensor monitors.
Owner	The owner of the SLA that this sensor monitors.
Frequency	The frequency of the SLA that this sensor monitors.

Sensor Display



Sensor Display

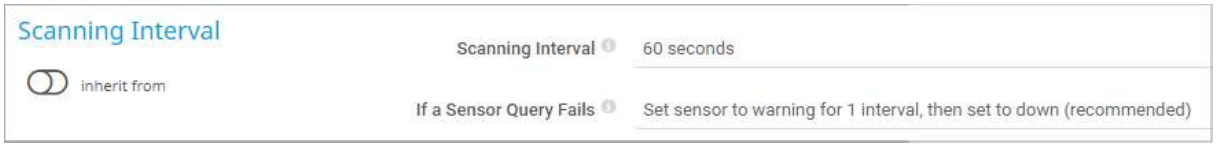
Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor. ⓘ You can set a different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

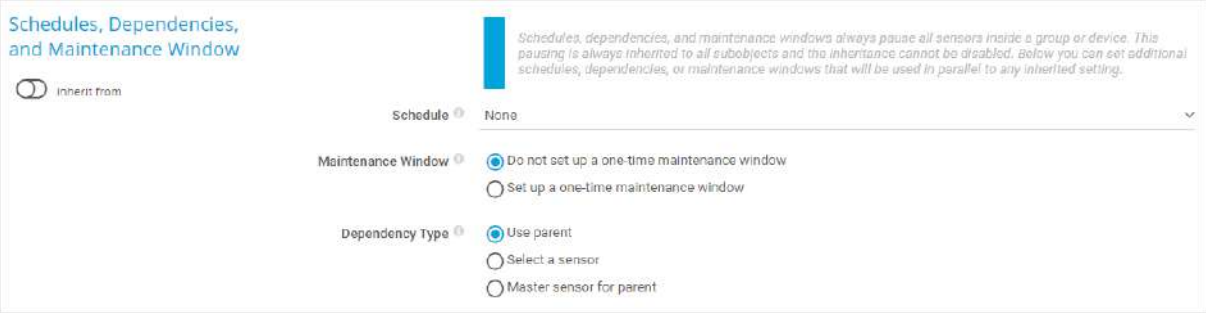


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

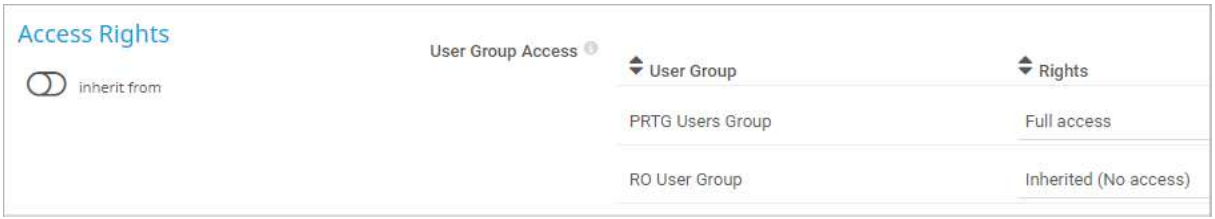
ⓘ You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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

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

Channel	Description
Avg. Jitter	The average jitter
Avg. Jitter Destination - Source	The average jitter between destination and source
Avg. Jitter Source - Destination	The average jitter between source and destination
Avg. Latency Destination - Source	The average latency between destination and source
Avg. Latency Source - Destination	The average latency between source and destination

Channel	Description
Average Round Trip Time (RTT)	The average RTT ⓘ 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
ICPIF	The ICPIF
Late Packets	The number of late packets
Max. Latency Destination - Source	The maximum latency between destination and source
Max. Latency Source - Destination	The maximum latency between source and destination
Max. RTT	The maximum RTT
Min. Latency Destination - Source	The minimum latency between destination and source
Min. Latency Source - Destination	The minimum latency between source and destination
Min. RTT	The minimum RTT
MOS	The MOS
Packets Lost	The number of lost packets
Packets Lost %	The number of lost packets (%)
Packets Out of Sequence	The number of out-of-sequence packets

More

KNOWLEDGE BASE

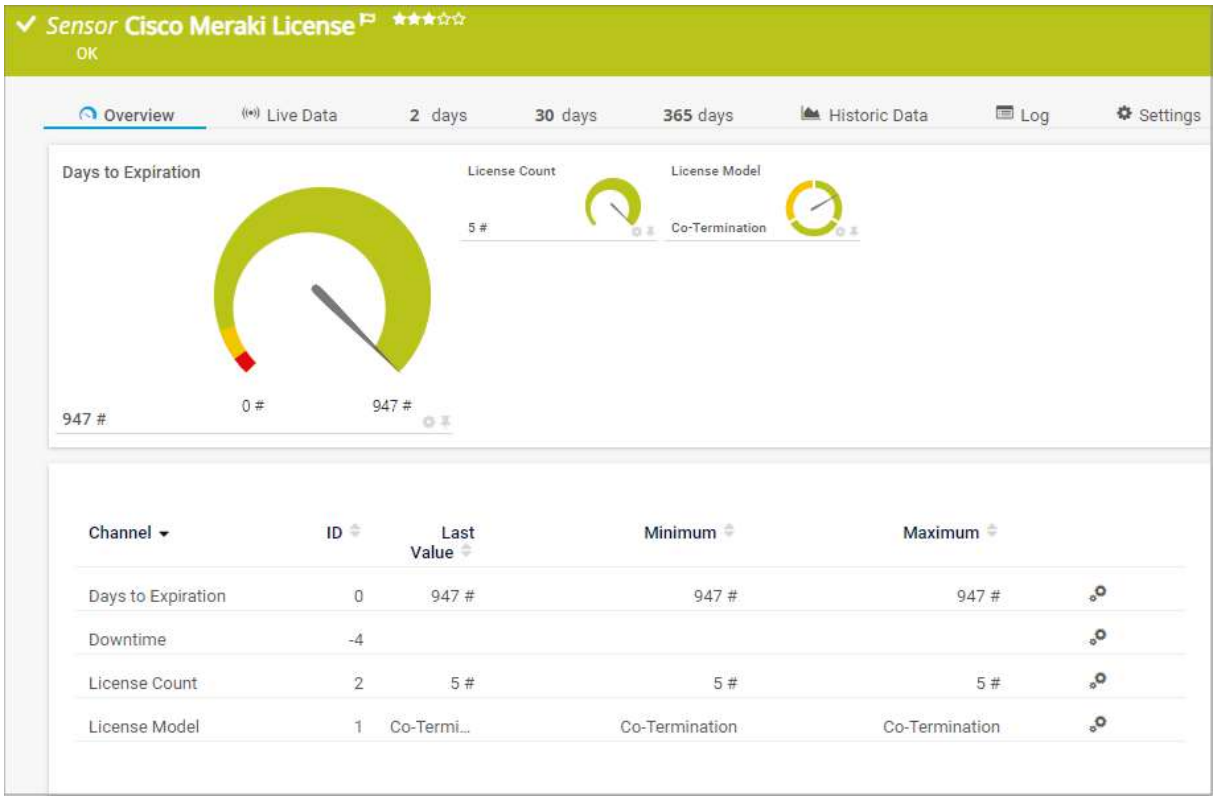
What security features does PRTG include?

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

7.8.12 Cisco Meraki License Sensor (BETA)

The Cisco Meraki License sensor monitors Meraki licenses of an organization via the Cisco Meraki Dashboard API.

BETA This sensor is in beta status. The operating methods and the available settings are still subject to change. Do not expect that all functions work properly, or that this sensor works as expected at all.



Cisco Meraki License Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 758.

Sensor in Other Languages

- Dutch: Cisco Meraki License
- French: Cisco Meraki License
- German: Cisco Meraki Lizenz
- Japanese: Cisco Meraki License
- Portuguese: Cisco Meraki License
- Russian: Cisco Meraki License
- Simplified Chinese: Cisco Meraki License
- Spanish: Licencia Cisco Meraki

Remarks

- This sensor requires 753 that the Beta Sensors experimental feature is enabled.
- This sensor requires 753 that the access of an organization to the Cisco Meraki Dashboard API is enabled.
- This sensor requires an API key with Cisco Meraki Dashboard API permissions.
- This sensor requires credentials for Cisco Meraki in settings that are higher in the object hierarchy.
- This sensor supports IPv6.
- This sensor has a very low performance impact.

Detailed Requirements

Requirement	Description
Enabled Beta Sensors experimental feature	This sensor requires that the Beta Sensors experimental feature of PRTG is enabled. For more information, see the Knowledge Base: What are beta sensors and how can I use them?
Enabled organization API access	Cisco Meraki sensors require that the access of an organization to the Cisco Meraki Dashboard API is enabled. If the API access for an organization is disabled, you must enable it manually. For more information, see Cisco Meraki Dashboard API: Enable API Access. The API key inherits the permissions of the Cisco Meraki Dashboard Administrator account that was used to generate the API key. The API key that is used for the Cisco Meraki License sensor must inherit the permissions of a Cisco Meraki Dashboard Administrator account with at least Read-only admin permissions.

Basic Sensor Settings

Basic Sensor Settings

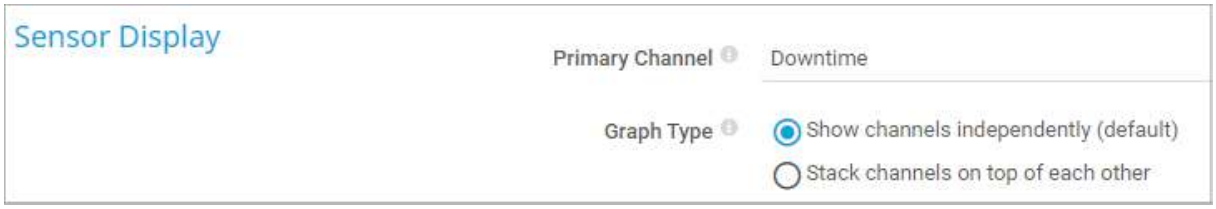
Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the device tree, as well as in alarms, logs, notifications, reports, maps, libraries, and tickets. ⓘ If the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons.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

Cisco Meraki License Specific

Cisco Meraki License Specific

Setting	Description
Organization	The name of the organization that the monitored licenses belong to.

Sensor Display



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. ⓘ 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

Setting	Description
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 name is Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites this file 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.

Inherited Settings

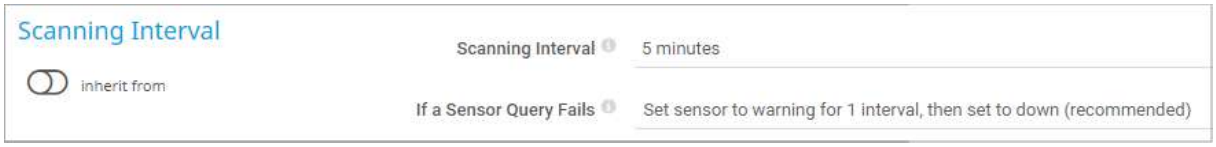
By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the root group settings if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display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

For more information, see section Inheritance of Settings.

Scanning Interval

The minimum scanning interval of this sensor is 10 seconds.

The recommended scanning interval of this sensor is 6 hours.

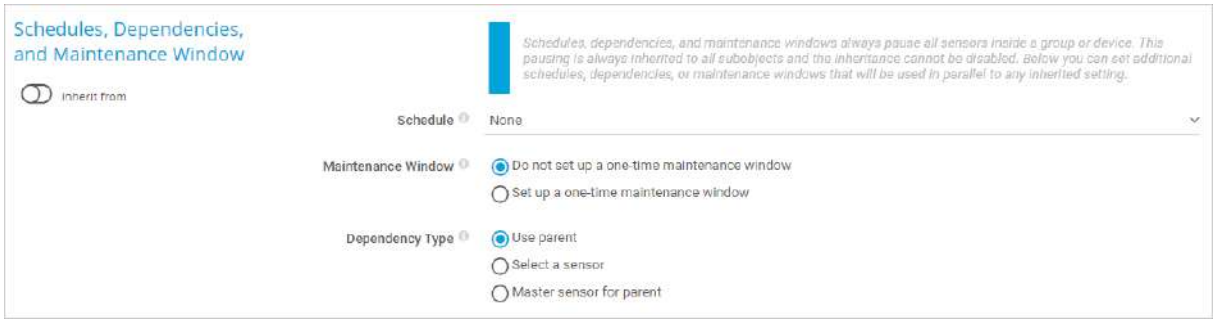


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

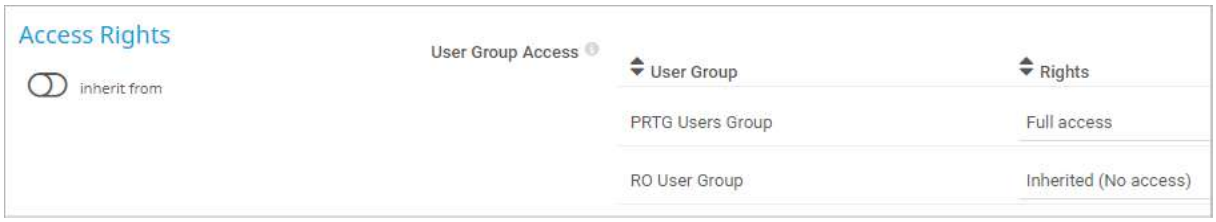
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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



Schedules, Dependencies, and Maintenance Window

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

Access Rights

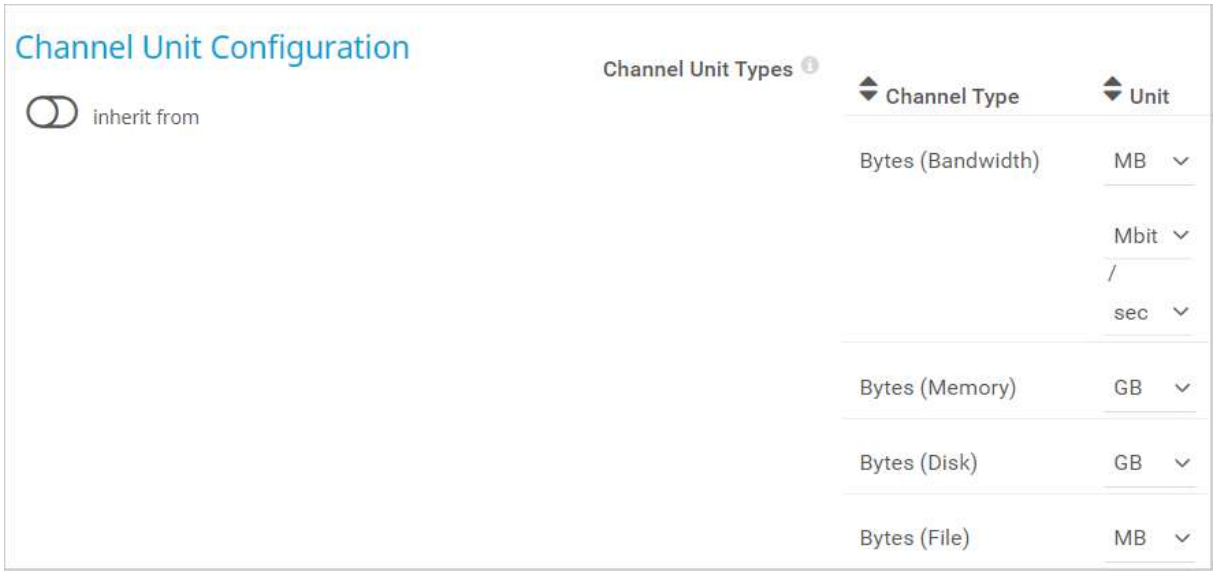


Access Rights

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

Channel Unit Configuration

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

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

Channel	Description
Days to Expiration	The days to expiration This channel is the primary channel by default. This channel has default limits ▪ Lower error limit: 30 days ▪ Lower warning limit: 90 days
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
License Count	The number of licenses
License Model	The license model of the monitored license ▪ Up status: Co-Termination, Per-Device ▪ Warning status: Unknown

More

KNOWLEDGE BASE

What are beta sensors and how can I use them?

- https://kb.paessler.com/en/topic/88697

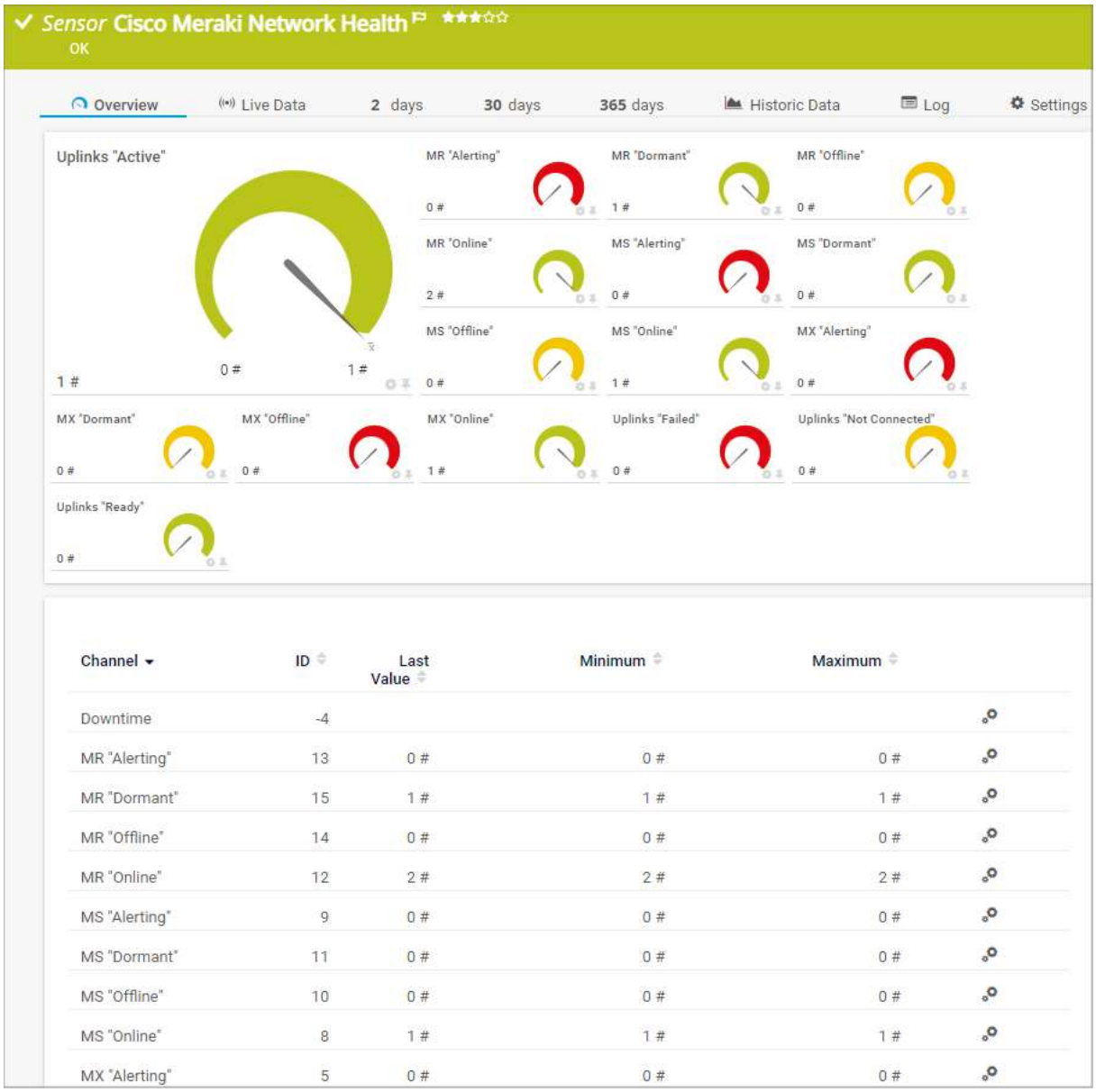
What security features does PRTG include?

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

7.8.13 Cisco Meraki Network Health Sensor (BETA)

The Cisco Meraki Network Health sensor monitors the health of Cisco Meraki network devices via the Cisco Meraki Dashboard API.

BETA This sensor is in beta status. The operating methods and the available settings are still subject to change. Do not expect that all functions work properly, or that this sensor works as expected at all.



Channel	ID	Last Value	Minimum	Maximum
Downtime	-4			
MR "Alerting"	13	0 #	0 #	0 #
MR "Dormant"	15	1 #	1 #	1 #
MR "Offline"	14	0 #	0 #	0 #
MR "Online"	12	2 #	2 #	2 #
MS "Alerting"	9	0 #	0 #	0 #
MS "Dormant"	11	0 #	0 #	0 #
MS "Offline"	10	0 #	0 #	0 #
MS "Online"	8	1 #	1 #	1 #
MX "Alerting"	5	0 #	0 #	0 #

Cisco Meraki Netw ork Health Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 765.

Sensor in Other Languages

- Dutch: Cisco Meraki Network Health

- French: Cisco Meraki Network Health
- German: Cisco Meraki Netzwerkzustand
- Japanese: Cisco Meraki Network Health
- Portuguese: Cisco Meraki Network Health
- Russian: Cisco Meraki Network Health
- Simplified Chinese: Cisco Meraki Network Health
- Spanish: Salud de la red Cisco Meraki

Remarks

- This sensor requires 760 that the Beta Sensors experimental feature is enabled.
- This sensor requires 760 that the access of an organization to the Cisco Meraki Dashboard API is enabled.
- This sensor requires credentials for Cisco Meraki in settings that are higher in the object hierarchy.
- This sensor supports IPv6.
- This sensor has a very low performance impact.

Detailed Requirements

Requirement	Description
Enabled Beta Sensors experimental feature	This sensor requires that the Beta Sensors experimental feature of PRTG is enabled. For more information, see the Knowledge Base: What are beta sensors and how can I use them?
Enabled organization API access	Cisco Meraki sensors require that the access of an organization to the Cisco Meraki Dashboard API is enabled. If the API access for an organization is disabled, you must enable it manually. For more information, see Cisco Meraki Dashboard API: Enable API Access. The API key inherits the permissions of the Cisco Meraki Dashboard Administrator account that was used to generate the API key.

Basic Sensor Settings

Basic Sensor Settings

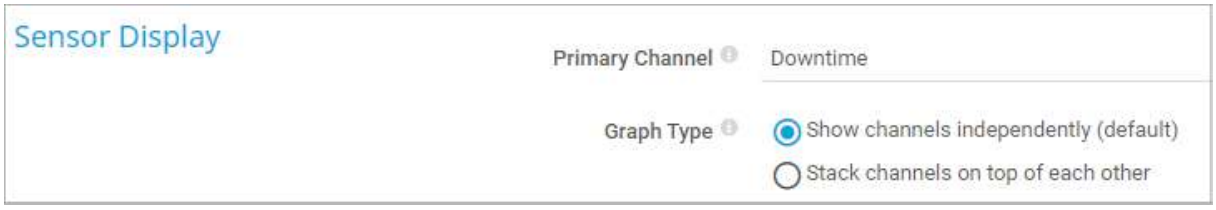
Setting	Description
Sensor Name	Enter a name to identify the sensor. By default, PRTG shows this name in the device tree, as well as in alarms, logs, notifications, reports, maps, libraries, and tickets. ⓘ If the name contains angle brackets (<>), PRTG replaces them with braces ({}) for security reasons.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

Cisco Meraki Specific

Cisco Meraki Specific

Setting	Description
Network	The name of the network that this sensor monitors.
Organization	The name of the organization that the monitored network belongs to.

Sensor Display



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. ⓘ You cannot use this option in combination with manual Vertical Axis Scaling (available in the channel settings).

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.

Debug Options

Debug Options

Setting	Description
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 name is Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites this file 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.

Inherited Settings

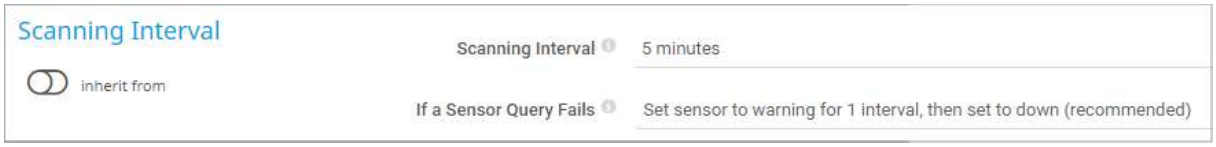
By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the root group settings if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display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

For more information, see section Inheritance of Settings.

Scanning Interval

The minimum scanning interval of this sensor is 10 seconds.

The recommended scanning interval of this sensor is 5 minutes.

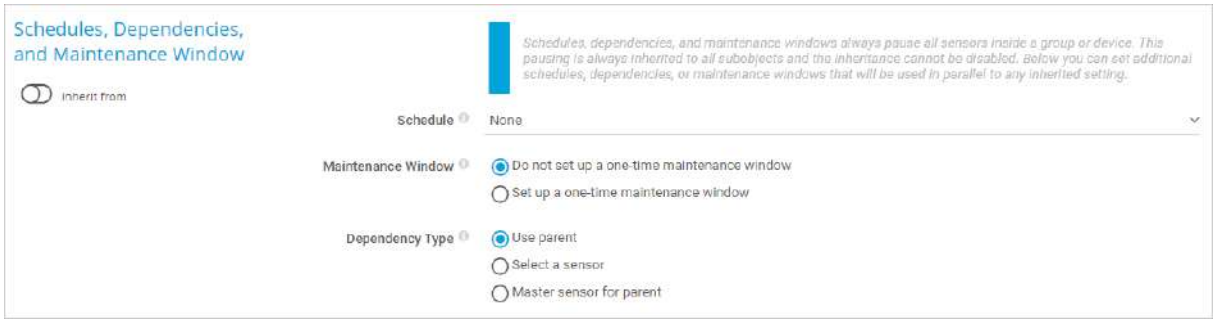


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

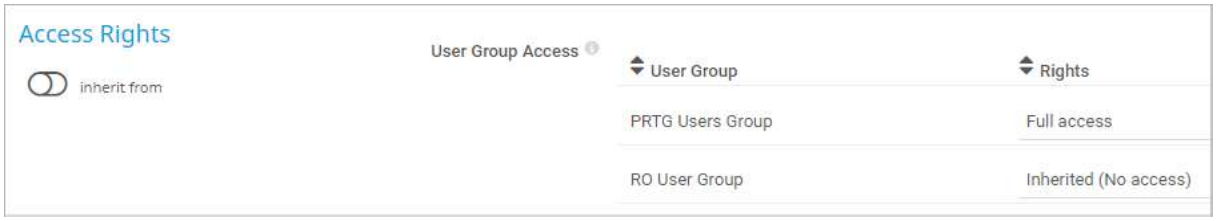
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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



Schedules, Dependencies, and Maintenance Window

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

Access Rights

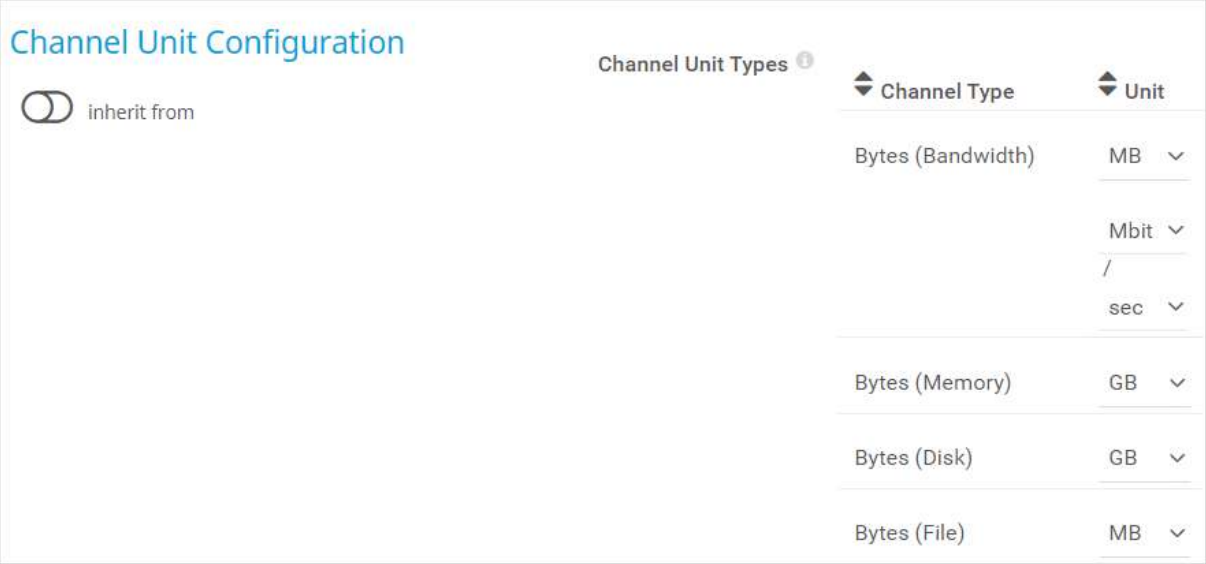


Access Rights

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

Channel Unit Configuration

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

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
IOT "Alerting"	IOT devices in alerting status
IOT "Dormant"	IOT devices in dormant status
IOT "Offline"	IOT devices in offline status
IOT "Online"	IOT devices in online status
MR "Alerting"	Meraki Radios (MR) devices in alerting status
MR "Dormant"	MR devices in dormant status
MR "Offline"	MR devices in offline status
MR "Online"	MR devices in online status

Channel	Description
MS "Alerting"	Meraki Switching (MS) devices in alerting status
MS "Dormant"	MS devices in dormant status
MS "Offline"	MS devices in offline status
MS "Online"	MS devices in online status
MX "Alerting"	Meraki Security (MX) devices in alerting status
MX "Dormant"	MX devices in dormant status
MX "Offline"	MX devices in offline status
MX "Online"	MX devices in online status
Uplinks "Active"	Uplinks in active status ⓘ This channel is the primary channel by default.
Uplinks "Failed"	Uplinks in failed status
Uplinks "Not Connected"	Uplinks in not connected status
Uplinks "Ready"	Uplinks in ready status

More

KNOWLEDGE BASE

What are beta sensors and how can I use them?

- https://kb.paessler.com/en/topic/88697

What security features does PRTG include?

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

7.8.14 Citrix XenServer Host Sensor

The Citrix XenServer Host sensor monitors a Xen host server via HTTP.

Citrix XenServer Host Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 772.

Sensor in Other Languages

- Dutch: Citrix XenServer Host
- French: Citrix XenServer serveur hôte
- German: Citrix XenServer Host
- Japanese: Citrix XenServer ホスト
- Portuguese: Host Citrix XenServer
- Russian: Узел Citrix XenServer
- Simplified Chinese: Citrix XenServer 主机

- Spanish: Host Citrix XenServer

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 768 .NET 4.7.2 or later from Microsoft on the probe system.
- This sensor requires that the parent device is a Citrix XenServer as of version 5.0.
- This sensor requires that the parent device represents one host server of your XenServer pool.
- This sensor requires credentials for VMware/XenServer in the settings of the parent device.
- This sensor does not fully support Transport Layer Security (TLS) 1.2 connections. You cannot add it to XenServers with the security protocol setting "TLS 1.2 only".
- This sensor only supports IPv4.
- PRTG also includes hosts that do not run in the Add Sensor dialog.

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). If the framework is missing, you cannot create this sensor. For more information, see the Knowledge Base: Which .NET version does PRTG require?

Monitoring a XenServer Pool

In a XenServer pool, there is one "pool master" that manages the pool. Incoming queries on any host are automatically forwarded to the pool master. If you want to monitor your VMs or host servers, create respective sensors on a device that represents one host server of your pool. Internal processes make sure that monitoring takes place and continues independently from the physical host.

In the device tree, the sensors for VMs always remain on the host you originally created them on, also if they are currently running on a different host.

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?
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.
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: ▪ xenhostsensor
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 (★★★★★).

Host Settings

Host Settings

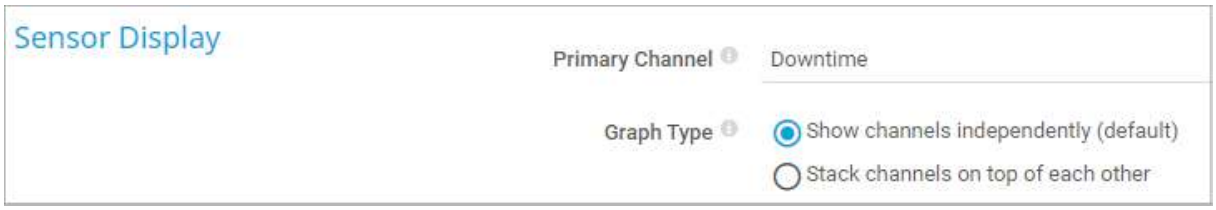
Setting	Description
UUID	The universally unique identifier (UUID) of the host that this sensor monitors. ⓘ PRTG shows this value for reference purposes only. We strongly recommend that you only change it if the Paessler support team explicitly asks you to do so. Wrong usage can result in incorrect monitoring data.
Name	The name of the host that this sensor monitors.

Debug Options

Debug Options

Setting	Description
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 and Result of Sensor [ID].Data.txt. 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



Sensor Display

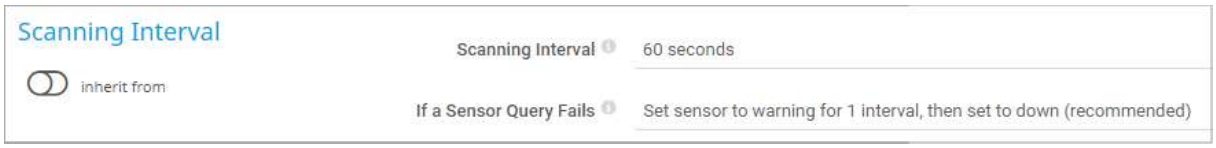
Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor. ⓘ You can set a different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

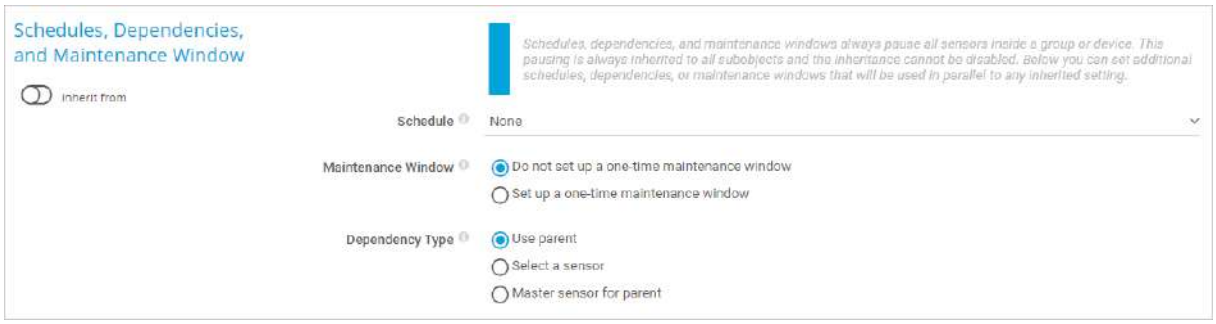


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

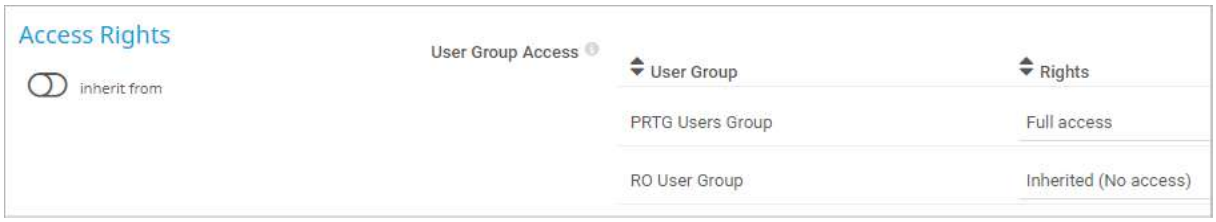
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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

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

Channel	Description
CPU [Value] Usage	The CPU usage ⓘ 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
Load Average	The load average amount
VMs Running	The number of running VMs
Total Memory Free	The total memory available
Total Memory Used	The total memory used

More

KNOWLEDGE BASE

Which .NET version does PRTG require?

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

What security features does PRTG include?

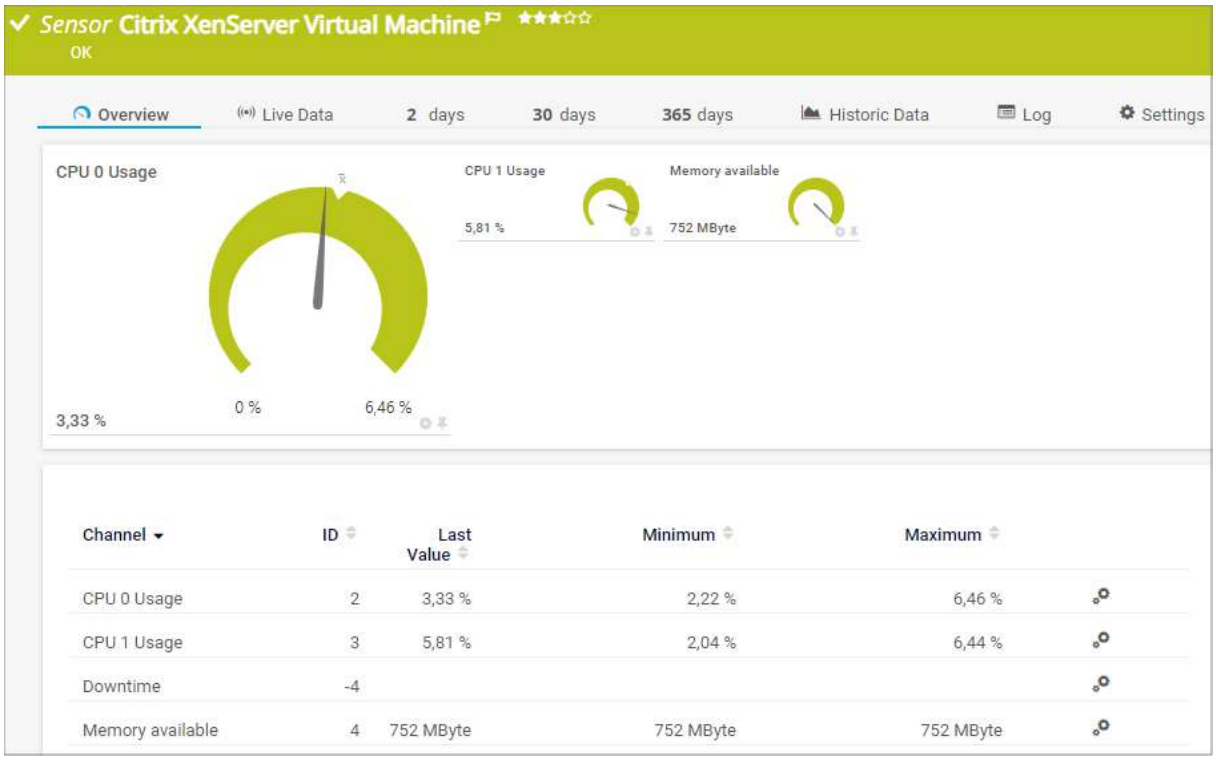
- https://kb.paessler.com/en/topic/61108

Does PRTG impair my Citrix environment?

- https://kb.paessler.com/en/topic/61880

7.8.15 Citrix XenServer Virtual Machine Sensor

The Citrix XenServer Virtual Machine sensor monitors a virtual machine (VM) on a XenServer via HTTP.



Citrix XenServer Virtual Machine Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 779.

Sensor in Other Languages

- Dutch: Citrix XenServer Virtuele Machine
- French: Citrix XenServer machine virtuelle
- German: Citrix XenServer Virtuelle Maschine
- Japanese: Citrix XenServer 仮想マシン
- Portuguese: Máquina virtual Citrix XenServer
- Russian: Виртуальная машина Citrix XenServer
- Simplified Chinese: Citrix XenServer 虚拟机
- Spanish: Máquina virtual Citrix XenServer

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 775 .NET 4.7.2 or later from Microsoft on the probe system.
- This sensor requires that the parent device is a Citrix XenServer as of version 5.0.

- This sensor requires that the parent device represents one host server of your XenServer pool.
- This sensor requires credentials for VMware/XenServer in the settings of the parent device.
- This sensor does not fully support Transport Layer Security (TLS) 1.2 connections. You cannot add it to XenServers with the security protocol setting "TLS 1.2 only".
- This sensor only supports IPv4.
- PRTG requests a full list of all VMs that are configured on the Citrix XenServer, including VMs that do not run. Therefore, it might take a few seconds before the dialog loads.

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). If the framework is missing, you cannot create this sensor. For more information, see the Knowledge Base: Which .NET version does PRTG require?

Monitoring a XenServer Pool

In a XenServer pool, there is one "pool master" that manages the pool. Incoming queries on any host are automatically forwarded to the pool master. If you want to monitor your VMs or host servers, create respective sensors on a device that represents one host server of your pool. Internal processes make sure that monitoring takes place and continues independently from the physical host.

In the device tree, the sensors for VMs always remain on the host you originally created them on, also if they are currently running on a different host.

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?
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.
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: ▪ xenhostsensor
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 (★★★★★).

Virtual Machine Settings

Virtual Machine Settings

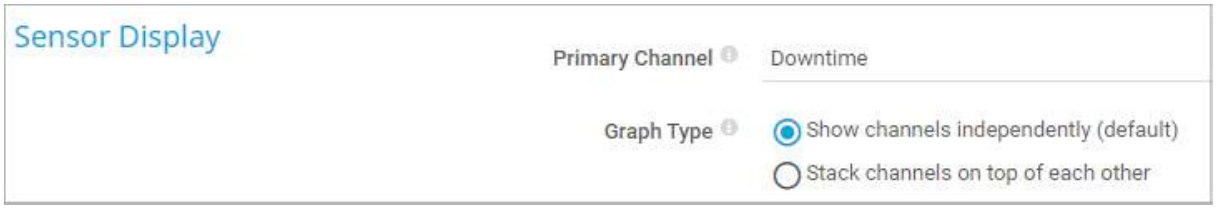
Setting	Description
UUID	The universally unique identifier (UUID) of the VM that this sensor monitors. ⓘ PRTG shows this value for reference purposes only. We strongly recommend that you only change it if the Paessler support team explicitly asks you to do so. Wrong usage can result in incorrect monitoring data.
Name	The name of the VM that this sensor monitors.

Debug Options

Debug Options

Setting	Description
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 and Result of Sensor [ID].Data.txt. 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



Sensor Display

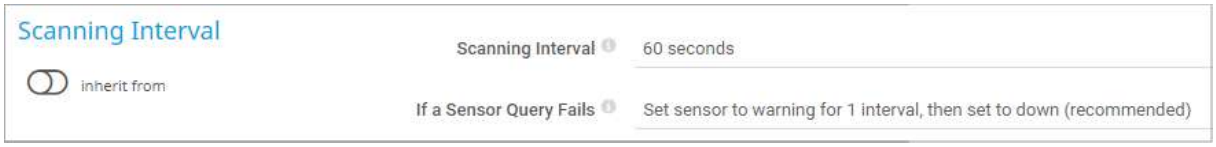
Setting	Description
Primary Channel	Select a channel from the list to define it as the primary channel. In the device tree, the last value of the primary channel is always displayed below the sensor's name. The available options depend on what channels are available for this sensor. ⓘ You can set a different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

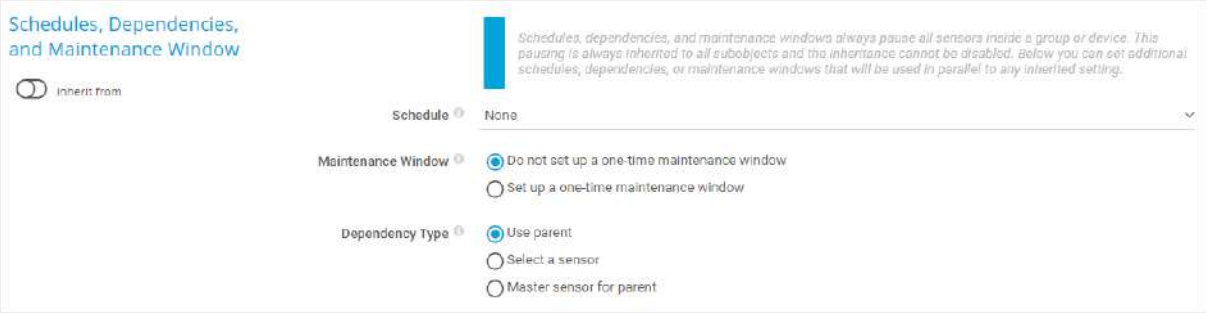


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

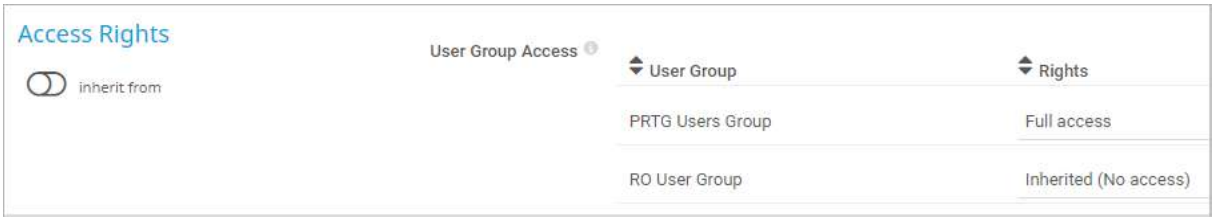
ⓘ You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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

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

Channel	Description
CPU [Value] Usage	The CPU usage ⓘ 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
Memory Available	The available memory
Memory Used	The used memory
VM Balloon Driver Target	The balloon driver target size

More

KNOWLEDGE BASE

Which .NET version does PRTG require?

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

What security features does PRTG include?

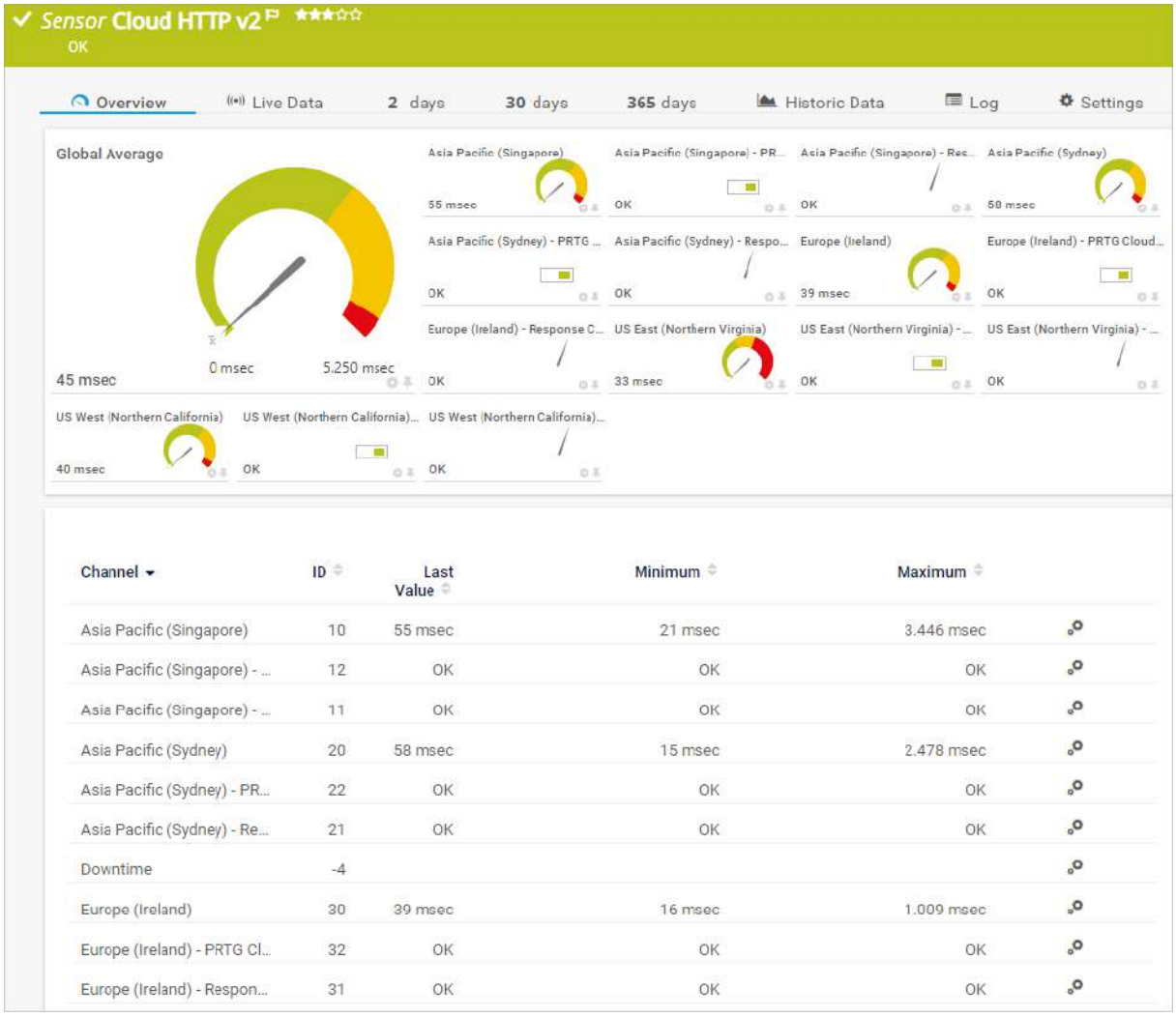
- https://kb.paessler.com/en/topic/61108

Does PRTG impair my Citrix environment?

- https://kb.paessler.com/en/topic/61880

7.8.16 Cloud HTTP v2 Sensor

The Cloud HTTP v2 sensor monitors the loading time of a web server via HTTP from different locations worldwide via the PRTG Cloud. The locations are distributed among four continents around the globe.



Cloud HTTP v2 Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 789.

Sensor in Other Languages

- Dutch: Cloud HTTP v2
- French: Cloud HTTP v2
- German: Cloud HTTP v2
- Japanese: Cloud HTTP v2
- Portuguese: Cloud HTTP v2
- Russian: Cloud HTTP v2
- Simplified Chinese: Cloud HTTP v2

- Spanish: Nube HTTP v2

Remarks

- The probe system requires access to the internet and must be able to reach https://api.prtgcloud.com:443 to communicate with the PRTG Cloud.
- This sensor requires that the address in the settings of the parent device is reachable via the internet. You cannot use this sensor to monitor localhost (127.0.0.1).
- This sensor supports smart URL replacement 788.
- This sensor supports IPv6.
- This sensor has a low performance impact.
- This sensor uses lookups to determine the status values of one or more channels.
- This sensor has predefined limits for several metrics.
- To monitor a probe system, enter the URL of the probe system that is reachable via the internet as Custom URL in the Cloud HTTP Specific 784 settings or add a device with the URL in the settings of the device.
- This sensor inherits proxy settings for HTTP sensors from the parent device.
- Knowledge Base: What is the PRTG Cloud Bot?

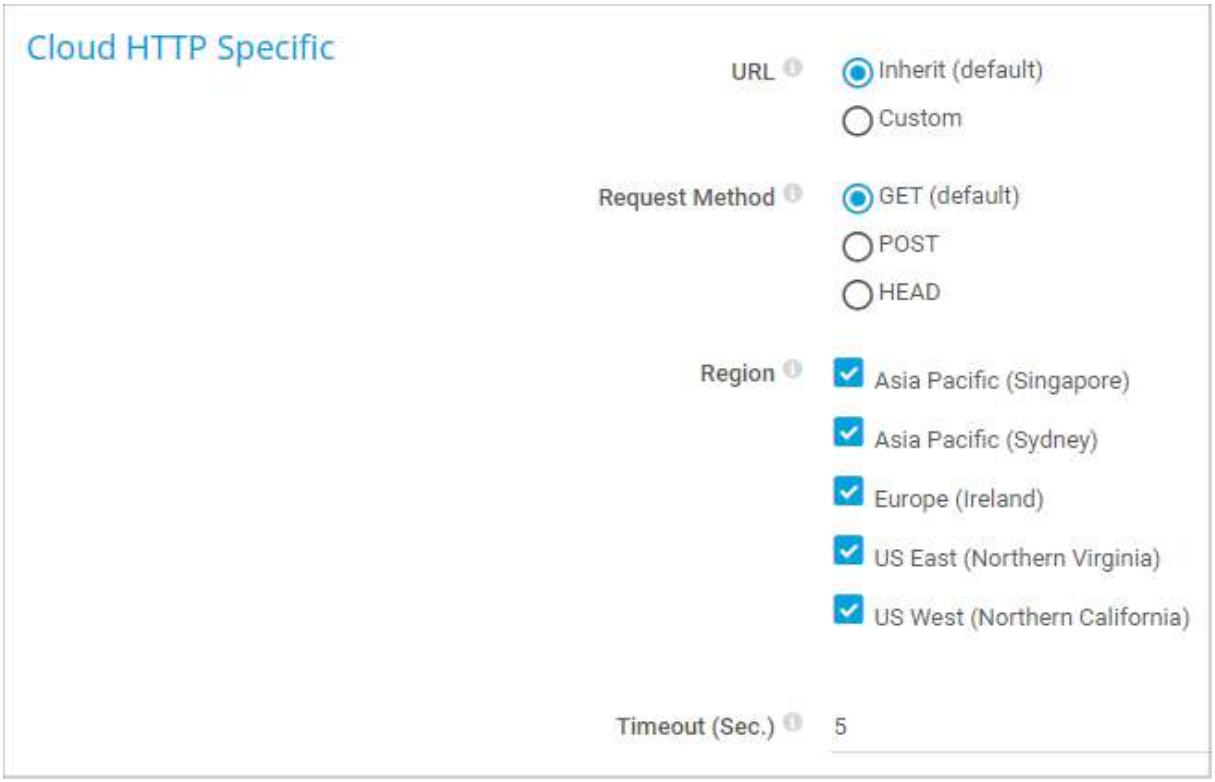
Basic Sensor Settings

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?
Parent Tags	The tags that the sensor inherits from its parent device, parent group, and parent probe.

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: ▪ cloud ▪ cloudhttpsensor ▪ http
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 (★★★★★).

Cloud HTTP Specific

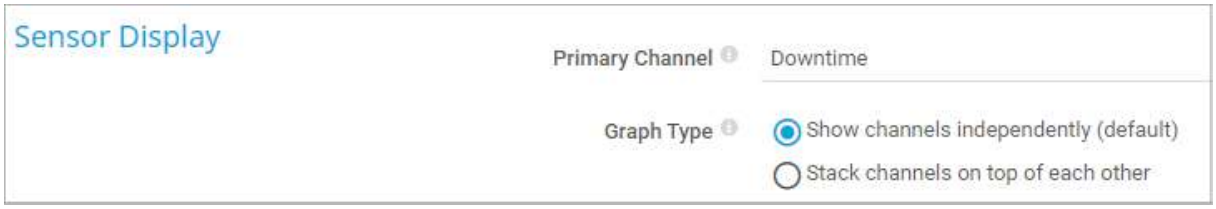


Cloud HTTP Specific

Setting	Description
URL	Select if you want to inherit the URL from the parent device or if you want to enter a custom URL: ▪ Inherit (default) ▪ Custom
Custom URL	This setting is only visible if you select Custom above. Enter the URL that you want to monitor. The URL must be valid and URL encoded. You can enter a URL that leads to a web page, for example, to measure the page source code's loading time, or you can enter the URL of an image or other page asset to measure this element's availability and loading time. PRTG uses a smart URL replacement with which you can use the parent device's IP address or Domain Name System (DNS) name setting as part of the URL. For more information, see section Smart URL Replacement 788.

Setting	Description
Request Method	Select an HTTP request method to determine how the sensor requests the URL: ▪ GET (default): Directly request the web page. We recommend that you use this setting for a simple check of a web page. ▪ POST: Send post form data to the URL. ▪ HEAD: Only request the HTTP header from the server without the actual web page. ⓘ This setting saves bandwidth because it transfers less data. However, we do not recommend this setting because the measured request time is not the request time that the users experience and you might not be notified of slow results or timeouts.
Postdata	This setting is only visible if you select POST as Request Method above. Enter the data part for the POST request.
Region	Select the regions from which you want to check the service: ▪ Asia Pacific (Singapore) ▪ Asia Pacific (Sydney) ▪ Europe (Ireland) ▪ US East (Northern Virginia) ▪ US West (Northern California) ⓘ PRTG creates two channels for every region that you select.
Timeout (Sec.)	Enter a timeout in seconds for the ping. If the reply takes longer than this value, PRTG cancels the request and shows an error message. Enter an integer. You can enter a value between 1 and 30 seconds.

Sensor Display



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. ⓘ 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

Setting	Description
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 name is Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites this file 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.

Inherited Settings

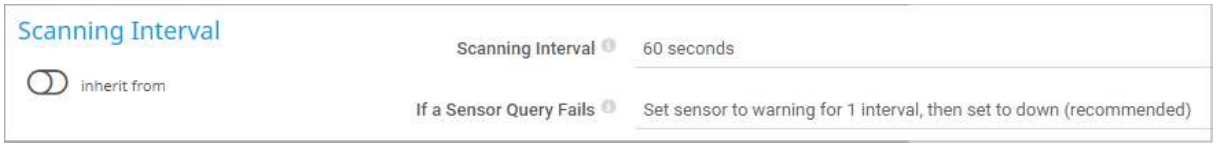
By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the root group settings if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display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

For more information, see section Inheritance of Settings.

Scanning Interval

The minimum scanning interval of this sensor is 1 minute.

The recommended scanning interval of this sensor is 5 minutes.

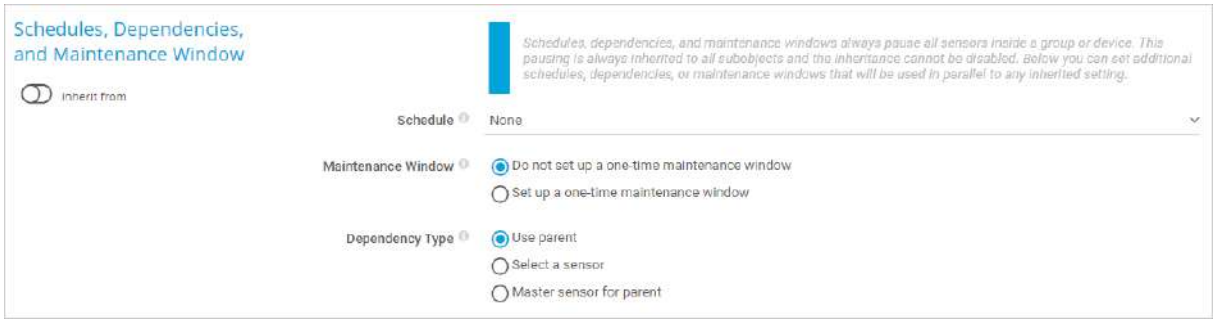


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

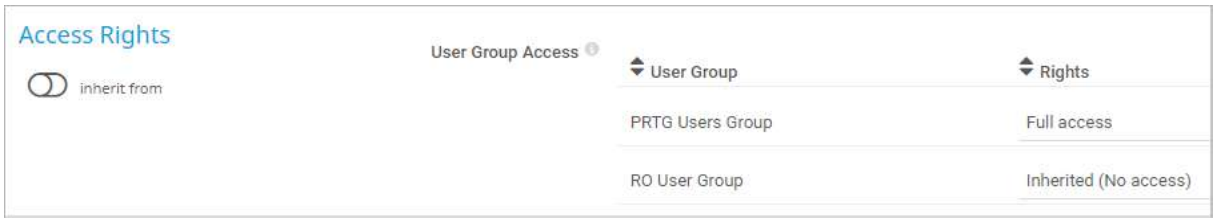
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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



Schedules, Dependencies, and Maintenance Window

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

Access Rights

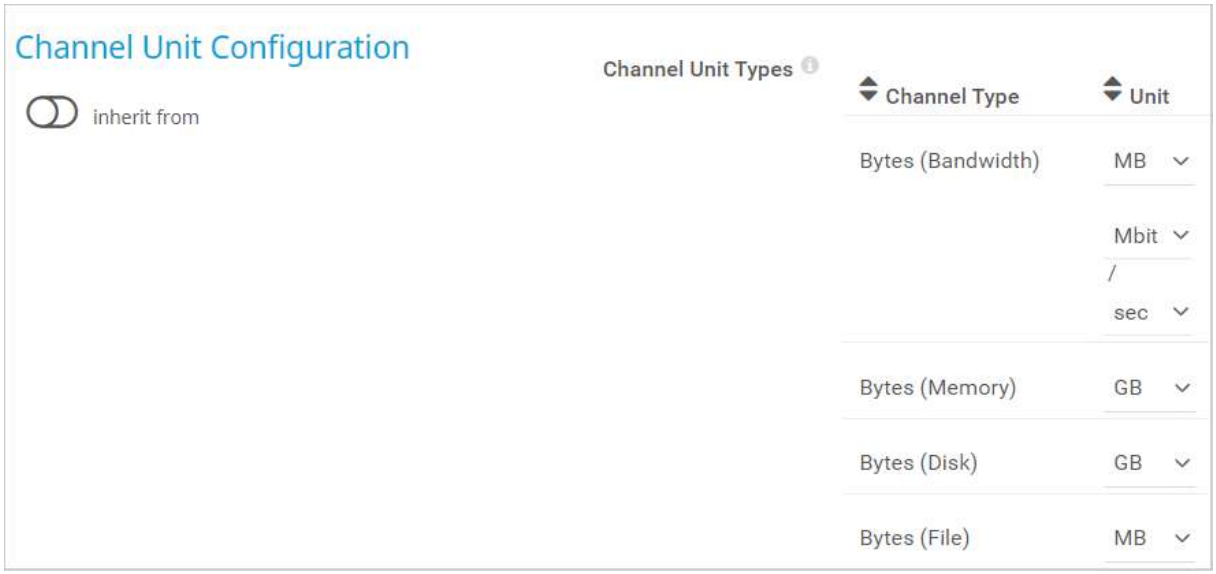


Access Rights

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

Channel Unit Configuration

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.

Smart URL Replacement

Instead of entering a complete address in the URL field of an HTTP sensor, you can only enter the protocol followed by a colon and three forward slashes (this means that you can enter either http:/// or https:///, or even a simple forward slash / as the equivalent for http:///). PRTG automatically fills in the parent device's IP Address/DNS Name in front of the third forward slash.

Whether this results in a valid URL or not depends on the IP address or Domain Name System (DNS) name of the parent device. In combination with cloning devices, you can use smart URL replacement to create many similar devices.

For example, if you create a device with the DNS name www.example.com and you add an HTTP sensor to it, you can provide values in the following ways:

- If you enter https:/// in the URL field, PRTG automatically creates the URL https://www.example.com/
- If you enter /help in the URL field, PRTG automatically creates and monitor the URL http://www.example.com/help
- It is also possible to provide a port number in the URL field. It is taken over by the device's DNS name and is internally added, for example, http://:8080/

Smart URL replacement does not work for sensors that run on the probe device.

Channel List

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

Channel	Description
Asia Pacific (Singapore)	The response time of the target server at the location This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
Asia Pacific (Singapore) - HTTP Response Code	The response code of the target server at the location
Asia Pacific (Singapore) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed
Asia Pacific (Sydney)	The response time of the target server at the location This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
Asia Pacific (Sydney) - HTTP Response Code	The response code of the target server at the location
Asia Pacific (Sydney) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed
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

Channel	Description
Europe (Ireland)	The response time of the target server at the location ⓘ This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
Europe (Ireland) - HTTP Response Code	The response code of the target server at the location
Europe (Ireland) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed
Global Average	The average global loading time ⓘ This channel is the primary channel by default. ⓘ This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
US East (Northern Virginia)	The response time of the target server at the location ⓘ This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
US East (Northern Virginia) - HTTP Response Code	The response code of the target server at the location
US East (Northern Virginia) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed
US West (Northern California)	The response time of the target server at the location ⓘ This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec

Channel	Description
US West (Northern California) - HTTP Response Code	The response code of the target server at the location
US West (Northern California) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed

More

KNOWLEDGE BASE

What is the PRTG Cloud Bot?

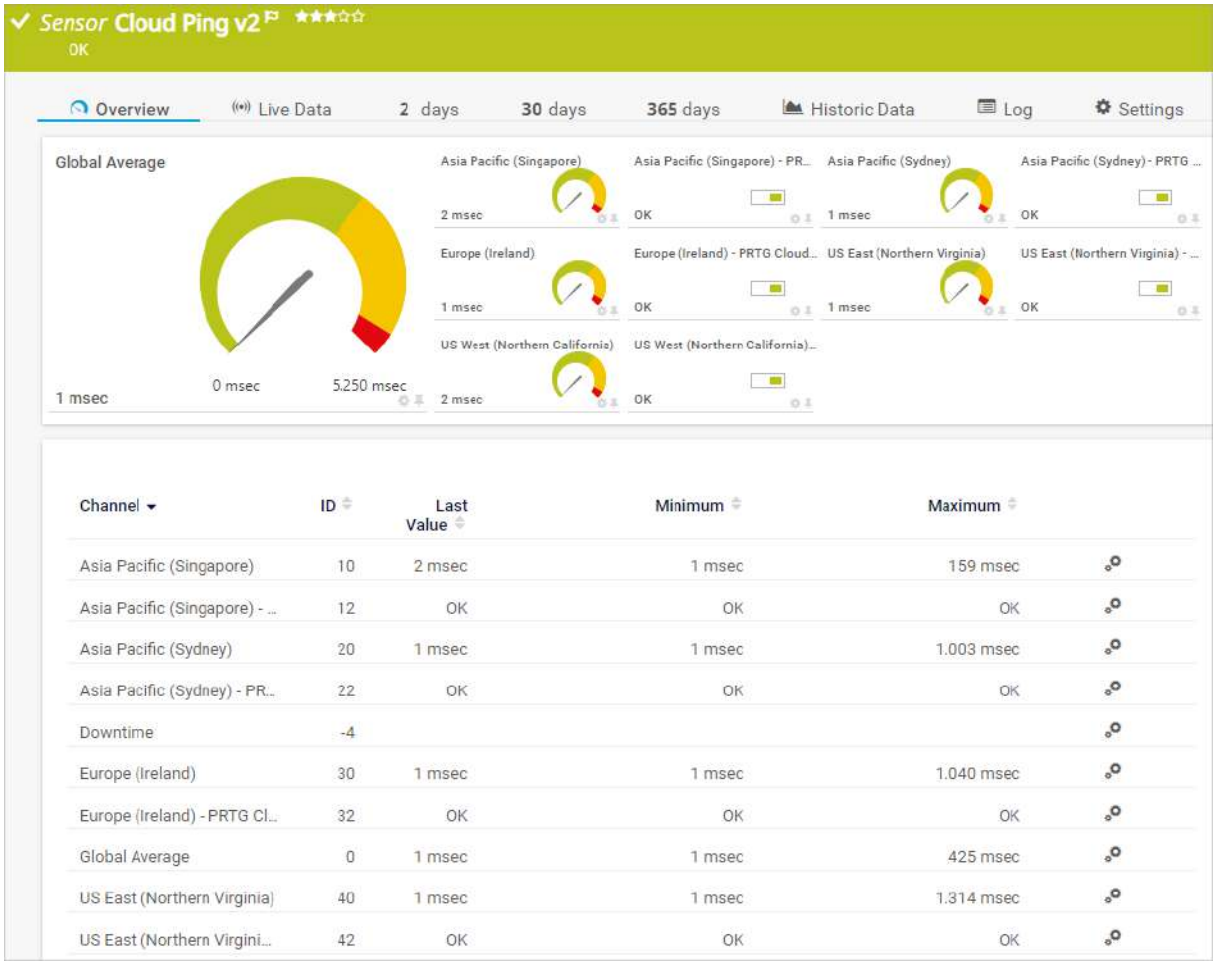
- https://kb.paessler.com/en/topic/65719

What security features does PRTG include?

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

7.8.17 Cloud Ping v2 Sensor

The Cloud Ping v2 sensor monitors the Transmission Control Protocol (TCP) ping times to its parent device from different locations worldwide via the PRTG Cloud. These locations are distributed among four continents around the globe.



Cloud Ping v2 Sensor

For a detailed list and descriptions of the channels that this sensor can show, see section Channel List 798.

Sensor in Other Languages

- Dutch: Cloud Ping v2
- French: Cloud Ping v2
- German: Cloud Ping v2
- Japanese: Cloud Ping v2
- Portuguese: Cloud Ping v2
- Russian: Cloud Ping v2
- Simplified Chinese: Cloud Ping v2
- Spanish: Nube ping v2

Remarks

- The probe system requires access to the internet and must be able to reach https://api.prtgcloud.com:443 to communicate with the PRTG Cloud.
- This sensor requires that the address in the settings of the parent device is reachable via the internet. You cannot use this sensor to monitor localhost (127.0.0.1).
- This sensor only supports IPv4.
- This sensor has a low performance impact.
- This sensor has predefined limits for several metrics.
- To monitor the probe system, enter the IP address or the fully qualified domain name (FQDN) of the probe system that is reachable via the internet as Custom Target Address in the Cloud Ping Specific 794 settings or add a device with the IP address or the DNS name of the probe system.
- This sensor uses Transmission Control Protocol (TCP) ping.
- This sensor inherits proxy settings for HTTP sensors from the parent device.
- Knowledge Base: What is the PRTG Cloud Bot?

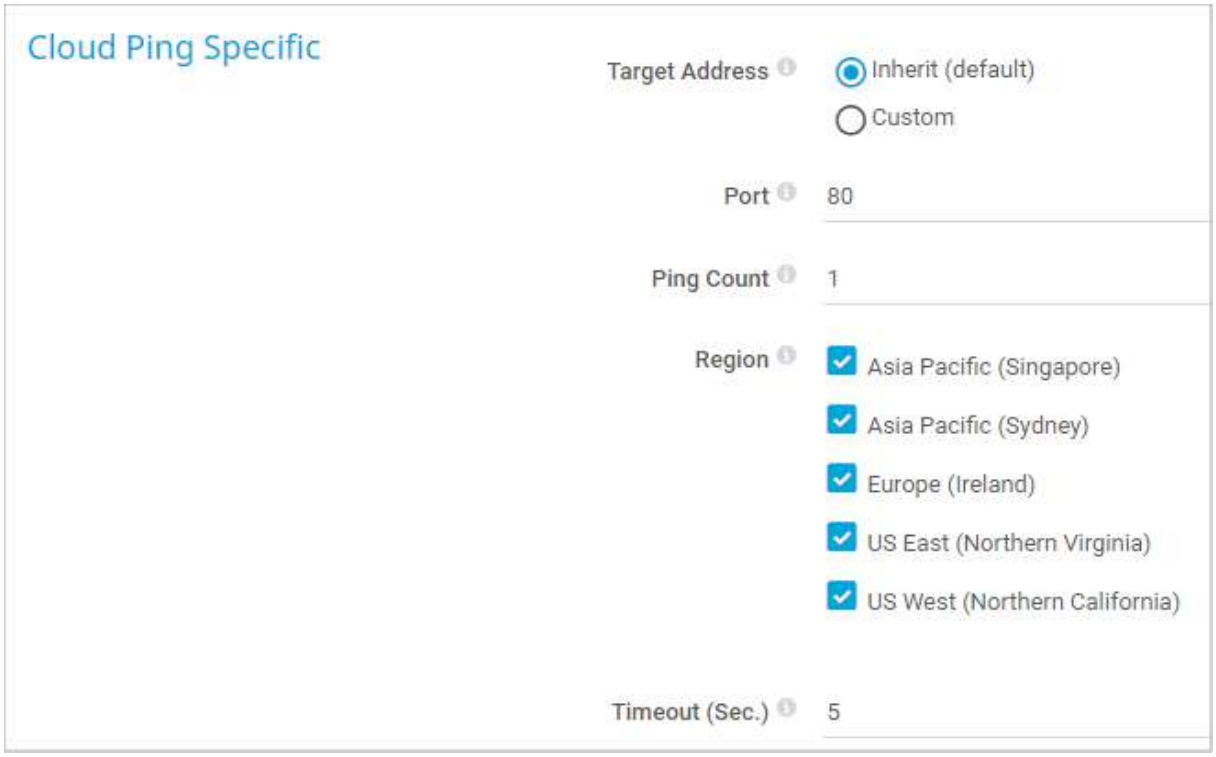
Basic Sensor Settings

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?
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 (<>). ⓘ 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: ▪ cloud ▪ cloudpingsensor ▪ ping
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 (★★★★★).

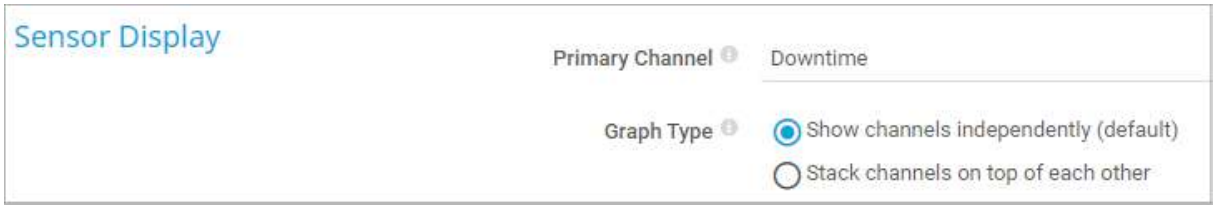
Cloud Ping Specific



Cloud Ping Specific

Setting	Description
Target Address	Select if you want to inherit the IP address or the fully qualified domain name (FQDN) from the parent device or if you want to enter a custom target address: ▪ Inherit (default) ▪ Custom
Custom Target Address	This setting is only visible if you select Custom above. Enter the IP address or the FQDN of the target device.
Port	Enter the number of the port that the sensor uses for TCP ping. The default port is 80. ⓘ This sensor does not support port 25.
Ping Count	Enter the number of pings that PRTG sends in a row to the parent device in one scanning interval. Enter an integer. The minimum value is 1. The maximum value is 10.
Region	Select the regions from which you want to check the service: ▪ Asia Pacific (Singapore) ▪ Asia Pacific (Sydney) ▪ Europe (Ireland) ▪ US East (Northern Virginia) ▪ US West (Northern California)
Timeout (Sec.)	Enter a timeout in seconds per ping. You can enter a value between 1 and 30 seconds. ⓘ The actual timeout duration depends on the number of pings that you entered under Ping Count. PRTG calculates this value by multiplying Ping Count by Timeout (Sec.).

Sensor Display



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. ⓘ 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

Setting	Description
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 name is Result of Sensor [ID].log. This setting is for debugging purposes. PRTG overwrites this file 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.

Inherited Settings

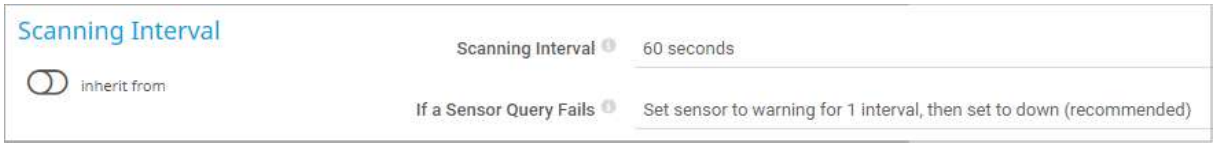
By default, all of these settings are inherited from objects that are higher in the hierarchy. We recommend that you change them centrally in the root group settings if necessary. To change a setting for this object only, click under the corresponding setting name to disable the inheritance and to display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

For more information, see section Inheritance of Settings.

Scanning Interval

The minimum scanning interval of this sensor is 1 minute.

The recommended scanning interval of this sensor is 5 minutes.

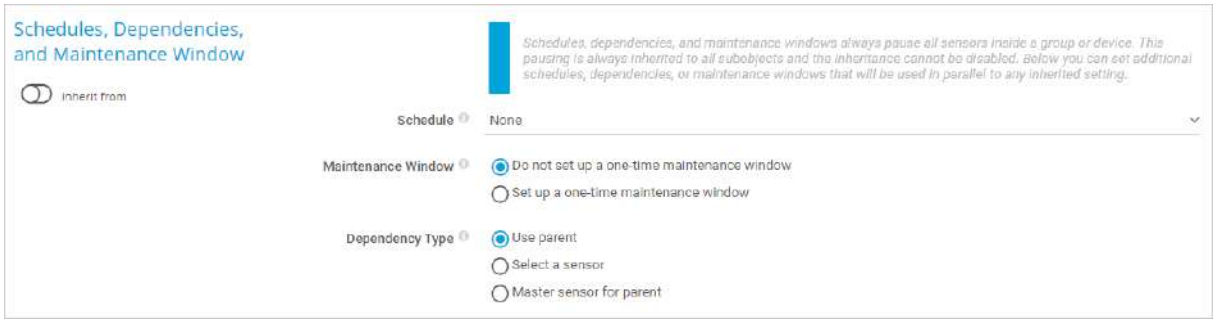


Scanning Interval

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

Schedules, Dependencies, and Maintenance Window

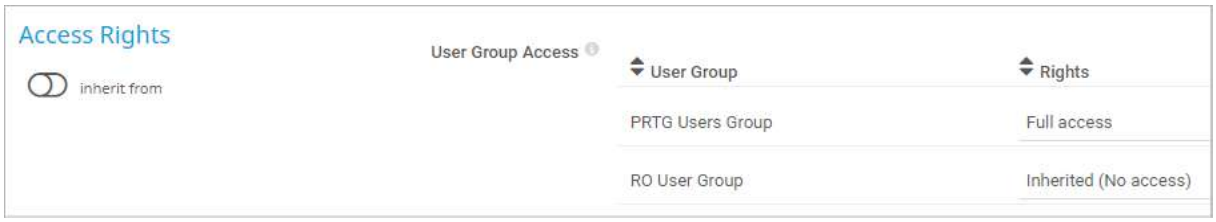
You cannot interrupt the inheritance for schedules, dependencies, and maintenance windows. The corresponding settings from the parent objects are always active. However, you can define additional schedules, dependencies, and maintenance windows. They are active at the same time as the parent objects'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



Schedules, Dependencies, and Maintenance Window

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

Access Rights

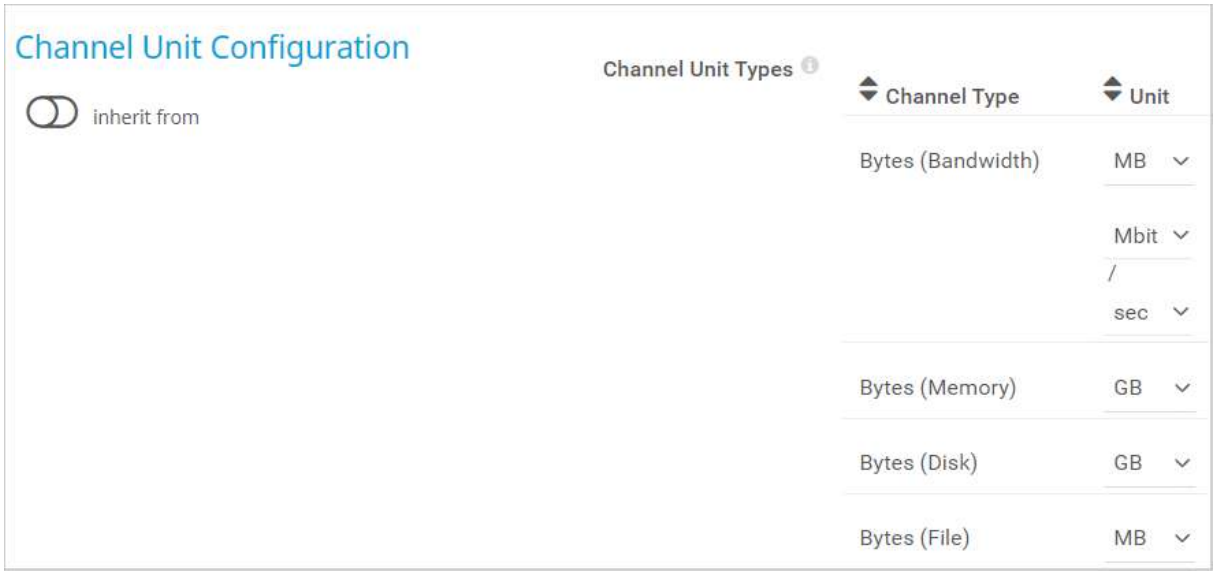


Access Rights

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

Channel Unit Configuration

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

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

Channel	Description
Asia Pacific (Singapore)	The response time of the target server at the location This channel has default limits

Channel	Description
	▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
Asia Pacific (Singapore) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed
Asia Pacific (Sydney)	The response time of the target server at the location ⓘ This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
Asia Pacific (Sydney) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed
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
Europe (Ireland)	The response time of the target server at the location ⓘ This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
Europe (Ireland) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed
Global Average	The average global response time ⓘ This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec ⓘ This channel is the primary channel by default.

Channel	Description
US East (Northern Virginia)	The response time of the target server at the location ⓘ This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
US East (Northern Virginia) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed
US West (Northern California)	The response time of the target server at the location ⓘ This channel has default limits ▪ Upper error limit: 5000 msec ▪ Upper warning limit: 3333 msec
US West (Northern California) - PRTG Cloud Response	If the query of the PRTG Cloud was successful or not ▪ Up status: OK ▪ Down status: Failed

More

KNOWLEDGE BASE

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What security features does PRTG include?

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