Release Notes Osiris (Software – Mercury – Atlas)

1.1.128-3032:

Fixed issues:

- Fixed a bug causing the PROFIBUS measurement not to start correctly

1.1.128-3031:

Fixed issues:

- Fixed a bug causing topology to be incorrect in some scenarios when LLDP information was not reported completely.
- Fixed a bug causing the measurement to not restart correctly.
- Fixed a bug where the a “Restart failed” notification appears even when measurement was restarted correctly.
- Fixed a bug in the selection of the traces in the message recording window.

1.1.127-2956:

Security Features

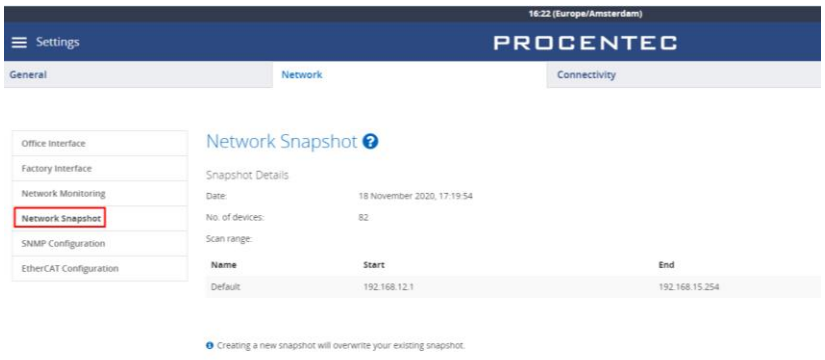
This release of Osiris brings you a wide subset of features, allowing Osiris to be your go-to place for security monitoring! These features allow the user to monitor assets deployed in the field, protecting them from accidental or intentional changes from people who are present at the physical network. This can be people who are performing work on a system, where they are not intentionally trying to damage the system, but also characters who make improper changes to devices, causing the system to fail and stop.

The Security Features enables you to easily understand there is a possible attack or threat from someone at the operational network. It will utilize our existing hardware and software resources to raise an alarm when inappropriate changes occur, so they can be addressed appropriately and in a timely manner.
All the security features, except for Network Compare, require a separate Security License.

Network Compare

Network Compare allows you to create a snapshot of the monitored network, and then receive a special notification if something has changed, to better monitor the status of the network, and to address any sudden, potentially critical changes.

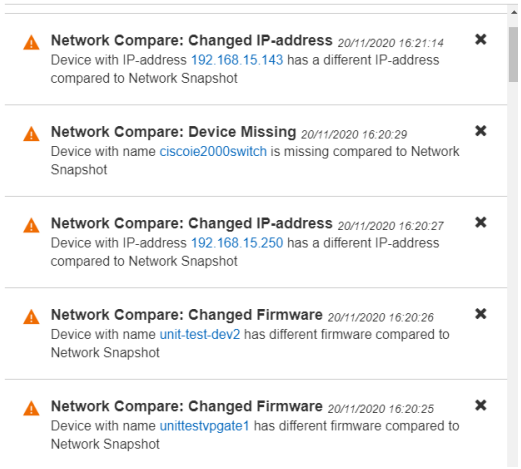
From Osiris settings, it is possible to create and delete a network snapshot, which contains a baseline of the active monitored Ethernet network.



Network Compare								
Missing Device	⊘	⊘	✔	✔	✔	✔	✔	✔
New Device	⊘	⊘	✔	✔	✔	✔	✔	✔
Different Firmware	⊘	⊘	✔	✔	✔	✔	✔	✔
Different Name	⊘	⊘	✔	✔	✔	✔	✔	✔
Different IP Address	⊘	⊘	✔	✔	✔	✔	✔	✔

From the moment of the creation, every deviation from the snapshot will trigger a desired output (Notifications, Traffic Light, Email, MQTT, OPC UA, Relay) as configured in the alarm configuration page.
The following deviations can be configured:

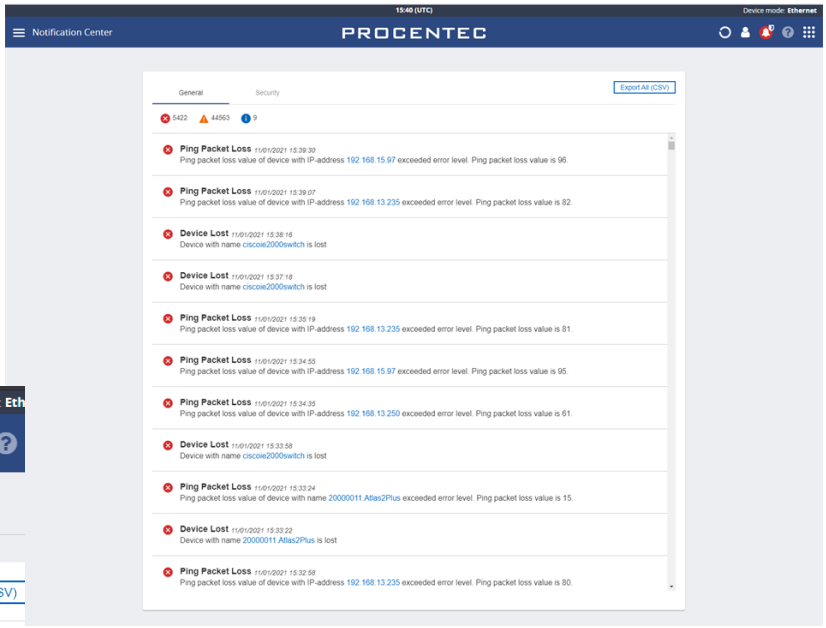
- New Device: a new device appears in the network.
- Missing Device: a device is not present in the network anymore.
- Different Firmware: a device has a different firmware version.
- Different Device Name: a device has a different device name.
- Different IP Address: a device has a different IP address.

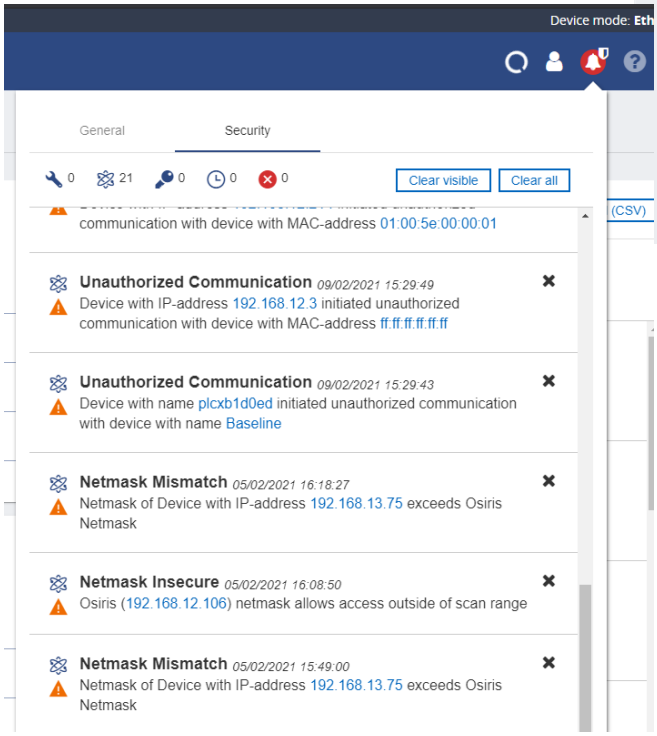


Notification Center & Notification Panel

The Notification Center is the new page, accessible from the dedicated tile on the Dashboard, where the last 1000 notifications are shown.

It is divided by General and Security, based on the type of notification. From here it is also possible to export a full list of the system notifications (last 50.000) in CSV format.



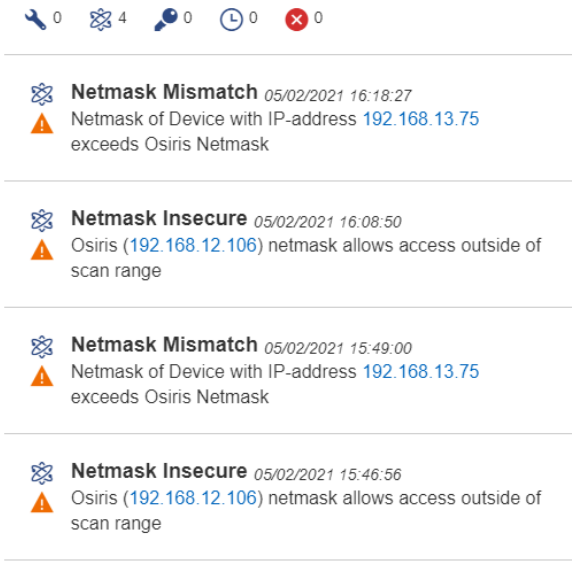


The Notification Panel now has the same structure of the Notification Center, but it contains only the last 50 notifications.

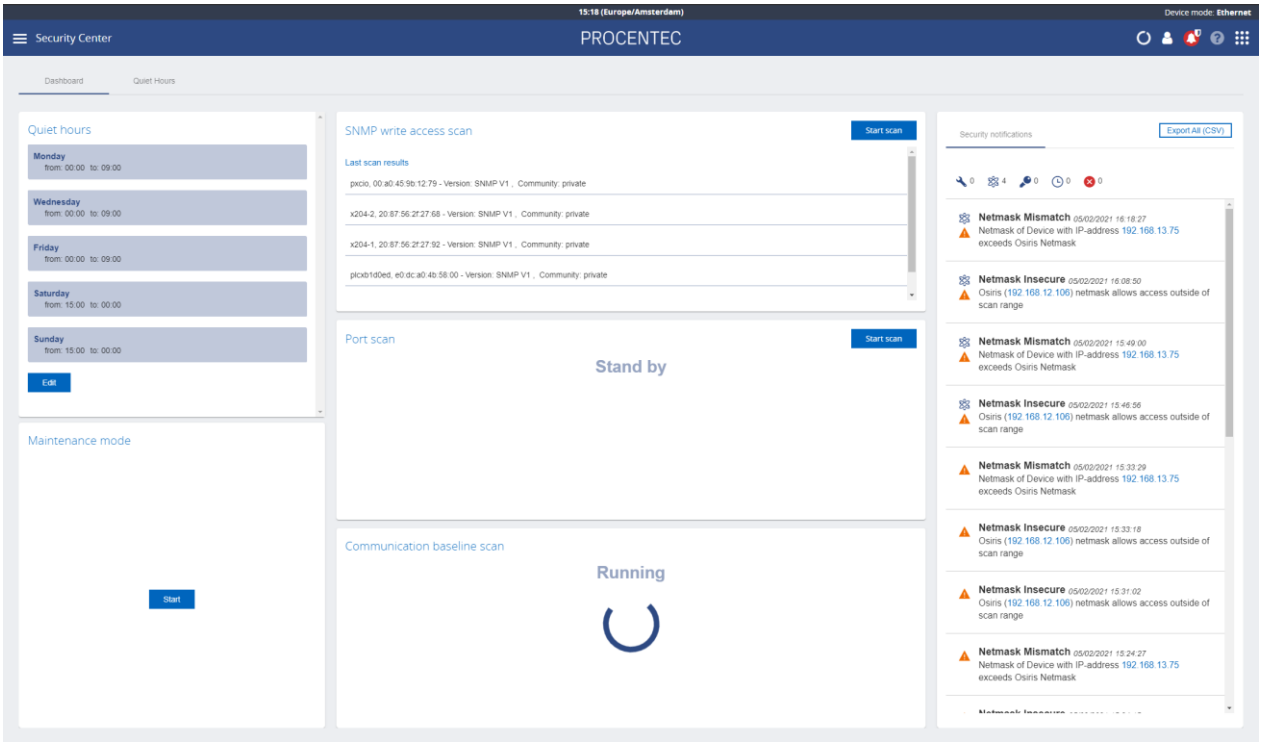
The notification bell is also adjusted to show security notifications: if a security notification is present, a shield will appear near the bell icon.

Permanent Monitoring: Netmask Check

Osiris constantly checks if the netmask of the devices is wider that the Osiris Factory interface netmask. Wider netmask means possible communications outside of the monitored range of Osiris, which can be a security issue. In case of mismatch a security notification is created.



Security Center



The Security Center is accessible via a dedicated tile in the Osiris Dashboard, and it contains:

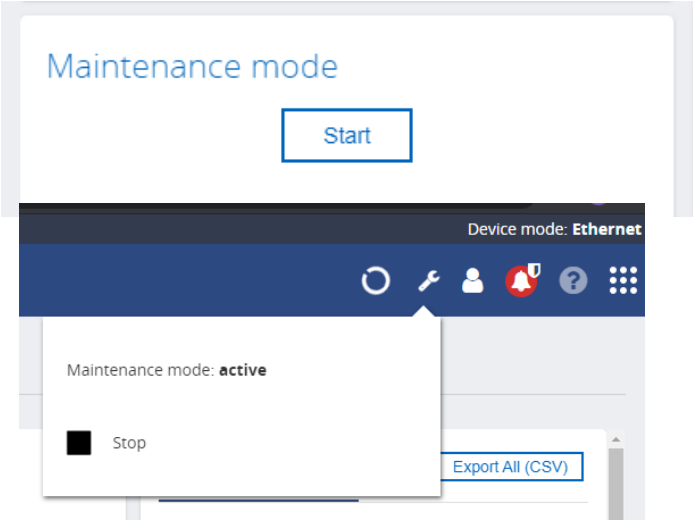
- An overview of the results and notifications of permanent monitoring.
- The option to perform manual checks via the Security Wizard.
- The option to change system settings via Quiet Hours and Maintenance Mode.

Maintenance Mode

Maintenance mode is designed around the concept that in an OT network that changes in network are done during a maintenance period.

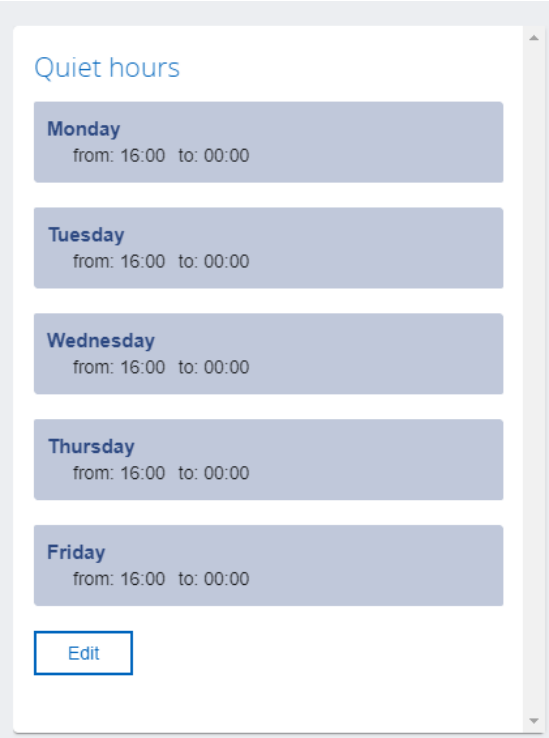
By activating maintenance mode, it is possible to select which device to put in maintenance. While the maintenance mode is active:

- Any notification about devices NOT in maintenance becomes a security error notification.
- Any notification about devices in maintenance becomes a security info notification.



Quiet Hours

Quiet Hours enables a user to get security notifications for events that take place at a time when no one is expected to be in the workplace to cause those events, e.g., at night, in the weekends, public holidays, etc. Any notification during the Quiet Hours period becomes a security notification.



Security Wizard

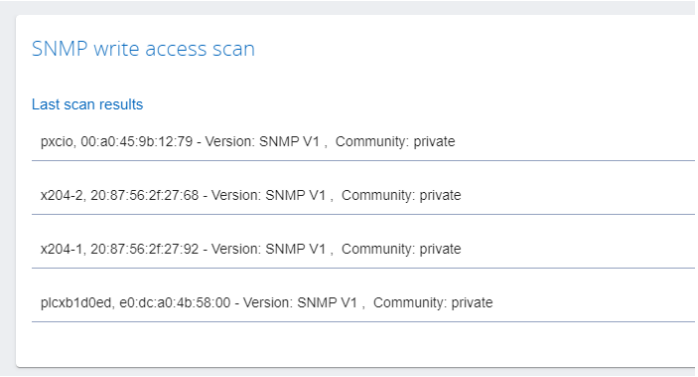
The security wizard features provide a one-time check for security threats. These are advanced functionalities that can be started when needed and they provide help on security checks during the commissioning phase of the network.

Security wizard results are integrated in the Security Dashboard.

SNMP Write Access Scan

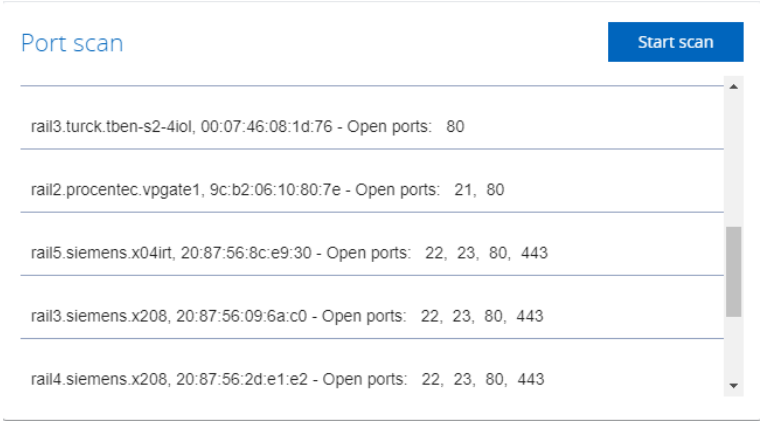
While SNMP information reading is essential for good industrial network monitoring, SNMP Write access can be seen as a security threat, as a malicious user can manipulate device configuration with SNMP messages if the SNMP Community is not adjusted.

With the SNMP Write Access Scan, Osiris will automatically test all devices in the network and check if SNMP Write access is possible. The result is a list of devices with Device name, MAC address, SNMP Version and Community string that is available for Write Access.



Note: This functionality will use SNMP messages to the devices in the network, it is recommended to run this test when these type of messages on the network will not disrupt the process communication.

Port Scan



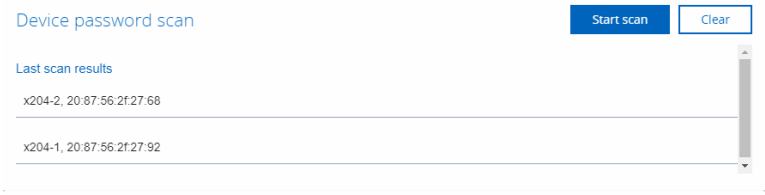
With the Port Scan, Osiris will automatically test all devices in the network and check if there are possible open ports.
The following ports are currently tested:

Port	Service
21	FTP
22	SSH
23	Telnet
25	SMTP
43	WHOIS
53	DNS
69	TFTP
80	HTTP
443	HTTPS
515	LDP
3306	MySQL
3389	RDP
5432	PostgreSQL
5900	VNC
5938	TeamViewer

The result is a list of devices with Device name, MAC address, and ports that are open.
Not every open port is a vulnerability, but it is important to have a clear overview of the open ports status. It is recommended to check if these services are in use or they can be disabled.

Note: This functionality will use TCP messages to the devices in the network, it is recommended to run this test when these messages on the network will not disrupt the process communication.

Password Scan (Mercury / Osiris Software only)



It is recommended to change the credentials of switches and other devices in the network from default values to avoid attackers changing configuration via the web interface of devices.

Most industrial networks can have dozens of switches, and it becomes long and complicated to test all of them.

With the Password Scan, Osiris can automatically test if the devices on the network are still using the default username/password set, such as “Admin/Admin”. All in one click!

Currently, the following device families are supported:

- Siemens X200 Switches
- Cisco IE2000 Switches

If you are interested to have this test for other type of devices, please contact us!

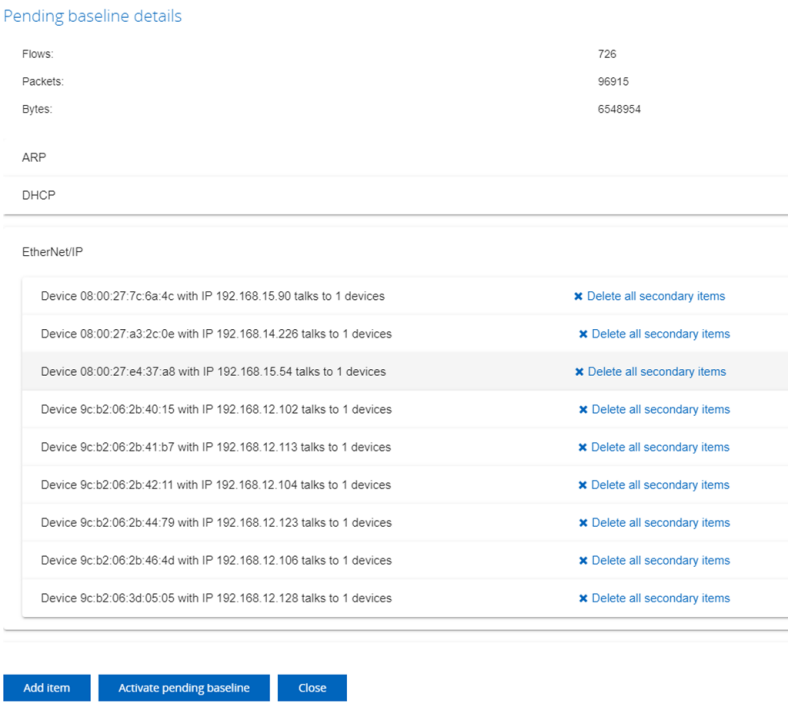
Note: This functionality will use HTTP messages to the devices in the network, it is recommended to run this test when these type of messages on the network will not disrupt the process communication.

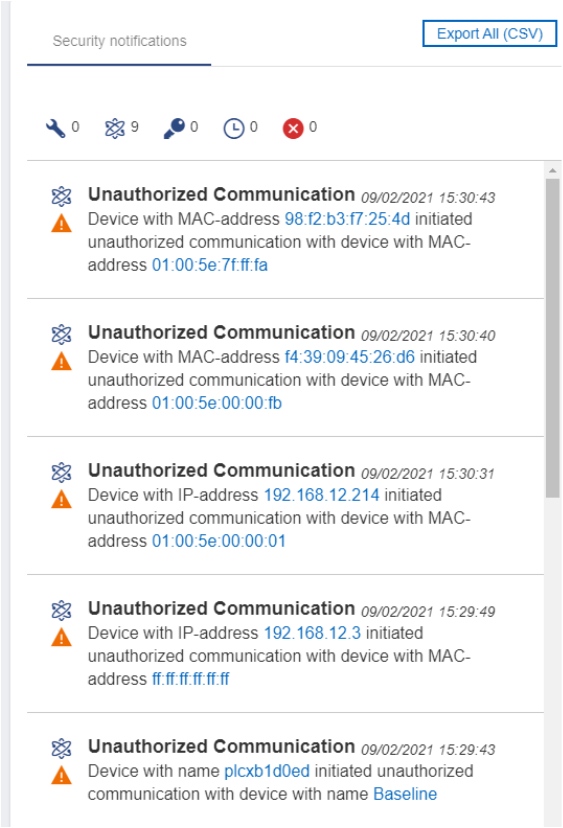
Communication Baseline Scan (Requires EtherTAP)

When looking at critical components in a network from a security perspective, the Controller is the most important one. The communication baseline serves two major roles in monitoring this critical component.

Osiris can automatically generate a communication baseline: when started, Osiris will monitor the communication on the EtherTAP link. After 5 minutes, a table with a summary of all the protocols and devices talking on the EtherTAP link is created.

This overview can be used as an overview to see if there is any unwanted communication happening on the EtherTAP link.





The baseline can then be activated, from that moment any communication deviation from the baseline (such as a new device initiates a communication, a new protocol appears, etc.) will trigger a security notification.

Security Notifications in the Report

It is now possible to include the security notifications in the Report via the dedicated selection in the Report customization.

Other Features and Bugfixes:

ComBricks Overview in the Report

ComBricks information can be added to the report now: information, network measurements and scope measurements for each ComBricks will be added to the Report when the *ComBricks Overview* section is selected in the report builder.

1 ComBricks Overview

ComBricks 192.168.13.235

Name	IP Address	MAC Address	Serial number	Status
	192.168.13.235	9c:b2:06:00:1b:ab	7083	Online

Network Measurements

Network	Baudrate	Protocol Status	Masters	Slaves	Recordings
Network 1	No baudrate	Unknown	0	0	No Recordings
Network 2	No baudrate	Unknown	0	0	No Recordings
Network 3	No baudrate	Unknown	0	0	No Recordings
Network 4	No baudrate	Unknown	0	0	No Recordings

ComBricks 192.168.13.236

Name	IP Address	MAC Address	Serial number	Status
ComBricks Head Station	192.168.13.236	9c:b2:06:00:02:8c	652	Online

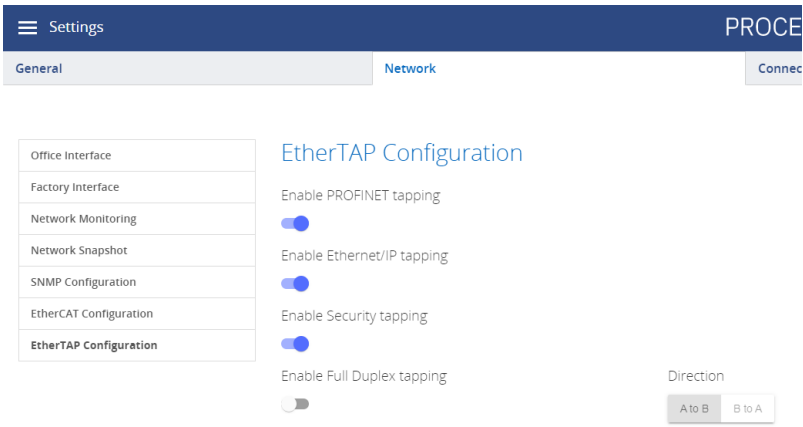
Network Measurements

Network	Baudrate	Protocol Status	Masters	Slaves	Recordings
Network 1	1.5Mbps	Ok	1	2	No Recordings
Network 2	1.5Mbps	Ok	0	0	No Recordings
Network 3	No baudrate	Unknown	0	0	No Recordings
Network 4	No baudrate	Unknown	0	0	No Recordings

Scope Measurements

Module	Network	Type	Bar Graph	Idle Level	SNAP Scope Analysis
Module 1	Network 1	DP	In Range	In Range	SNAP disabled ⚠

EtherTAP configuration



A new EtherTAP Configuration tab in the settings has been added.
From here it is possible to:

- Enable or Disable PROFINET tapping
- Enable or Disable Ethernet/IP tapping
- Enable or Disable Security Tapping.
- Enable or Disable Full Duplex tapping.

For better performance, it is recommended to disable functionalities that are not used.

By disabling Full duplex tapping, it is possible to maximize TAP performances on a high load network by selecting to TAP and analyze only one direction at the time. In this way, all the processing power will be dedicated to one communication direction, allowing Osiris to achieve better performance on very high load networks.

Added features:

- French, Korean and Polish Translation files are updated to 1.115.
- Logos are changed to the new CI.
- Change PROCENTEC contacts to new address and phone numbers.

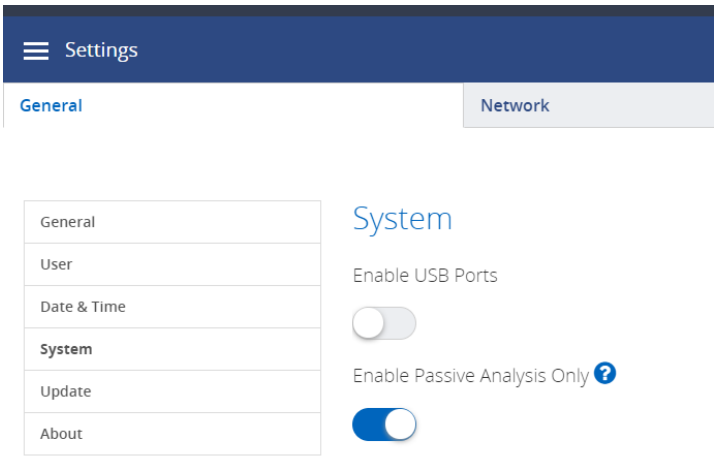
Fixed issues:

- Fixed an issue where only one client was able to visualize ComBricks Scope images simultaneously.
- Fixed a bug where the START/STOP measurement buttons were not working from the Settings page.
- Fixed a bug on clearing data when selecting both “Reset Lost Devices” and “Remove lost devices” would not remove devices properly.
- Fixed a bug on clearing data causing the Max Response time to not be cleared correctly, causing the traffic light “Devices Slow to respond” to be triggered immediately after.
- Osiris Control updated to V2.11 with various bug fixes.

1.1.115-2765:

Added features:

- **PROFINET Passive Analysis Only**

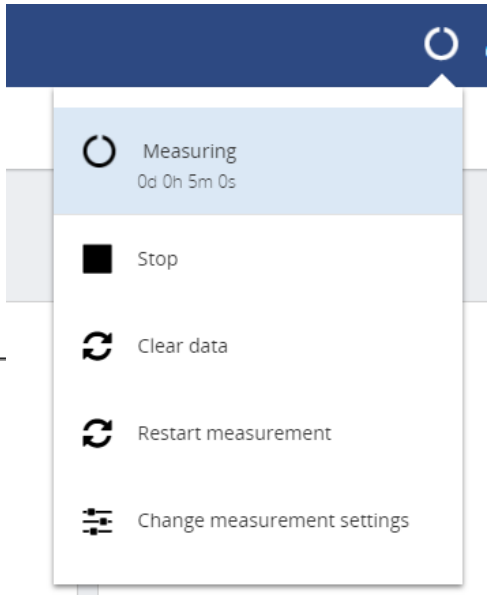


Osiris is now capable to operate in completely passive mode allowing the use of the PROFINET EtherTAP - Message Analysis functionalities without sending any data on the network.
When this functionality is enabled, Osiris will only analyze the data coming from the connected EtherTAP, this allows pure passive analysis of the network without the need of connecting the Factory Interface for scanning.

All the active scanning functionalities are disabled, therefore all the data coming from active analysis (such as Device list, Topology, etc.) will not be available.
This functionality is recommended only when active scanning in a network is forbidden or not recommended for security reasons.

It is possible to enable Passive Analysis Only from **Settings** > **General** > **System**
Note: This setting will be applied after restarting the measurement.

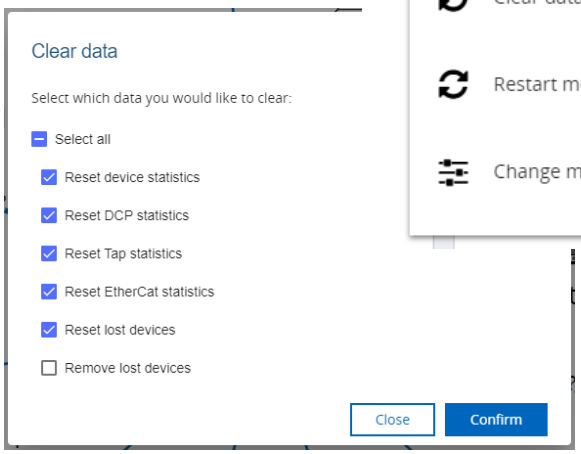
- **Restart Measurement button and Advanced clear data**



The Clear Data functionality has been divided in two functionalities:

Restart Measurement: This button has the same functionality of the “Clear Data” of previous versions. When clicking it, all the data will be cleared and a new measurement will be started. All errors, notifications, and trending data related to the current measurement will be deleted.

Clear Data:
With the new clear data functionalities, it is now possible to select what part of the data to clear and keep the measurement running.
This also allows clients connected to Osiris via OPC-UA to keep the connection alive and avoid losing objects on reconnection.

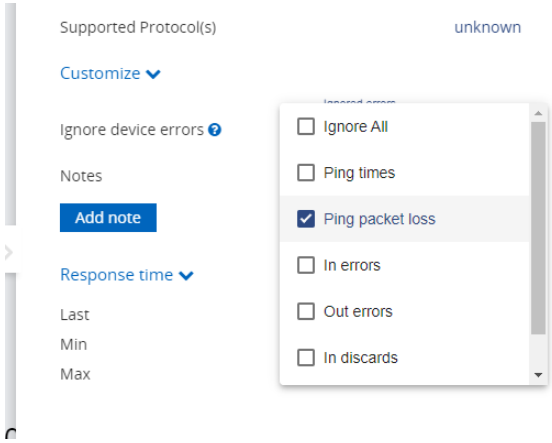


- **Advanced ignore device**

When ignoring a device, is now possible to select a subset of data to ignore from the device. The following data can be ignored:

  - Ping packet times
  - Ping packet loss
  - In/Out errors
  - In/Out discards

When Ignore All is selected, the behavior of ignore device is the same as before. If only a subset of data is selected, the rest of the data will still trigger alarms as set in the Alarm Configuration page.



- IXON VPN is now removed from Atlas functionalities.
- Translation files are updated to 1.115.
- Mercury and Software installer now have a setup.exe link to facilitate user installation, please refer to the installation manual.

Fixed issues:

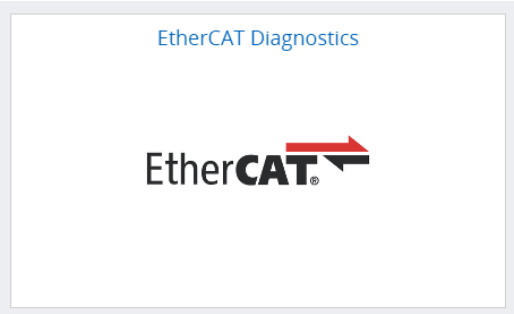
- Notifications: Fixed a bug causing notifications not to be sent on in/out Errors and Discards.
- Report Builder: Fixed a bug causing the removal logo confirmation popup to appear behind the report dialog.
- Device Details: Fixed a bug causing the “ignore device” slider to not work correctly.
- Device List and Device Details: System is adapted to support a behavior caused by devices equipped with Siemens ERTEC Chip to not provide I&M data correctly.

1.1.115-2760:

EtherCAT diagnostics

Osiris can now extract diagnostic information from EtherCAT controllers who expose diagnostic data via the EtherCAT Master Diagnostics interface.

By connecting to EtherCAT controller, Osiris can display:

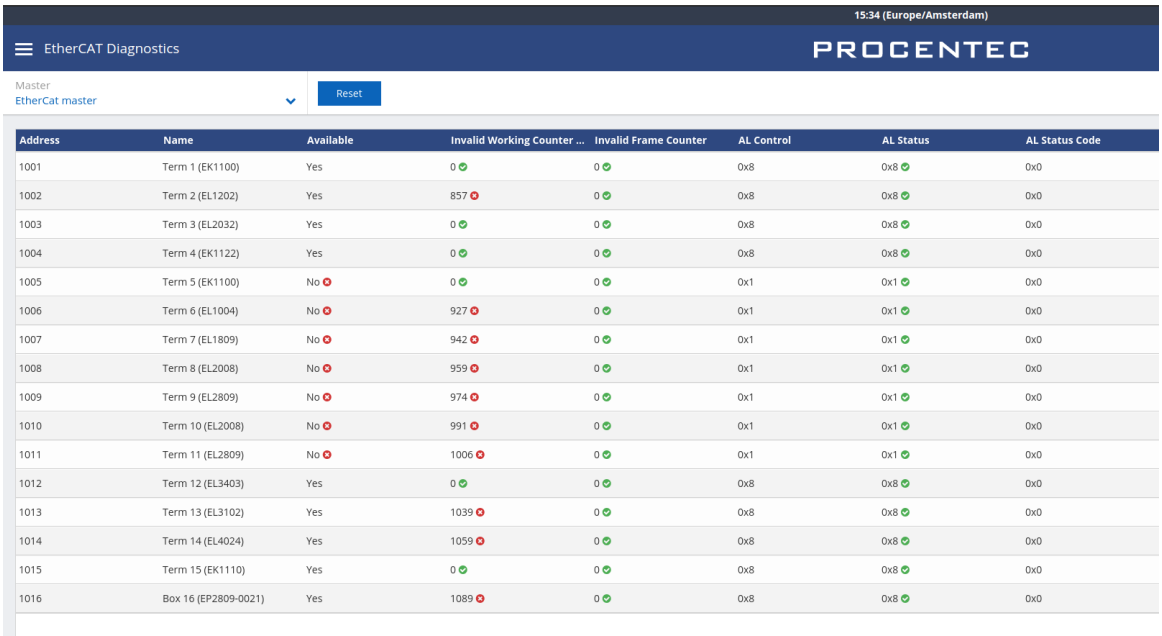


- Address
- Name
- Status
- Invalid working counter
- Invalid frame counter
- AL control
- AL status
- AL status code

of all the EtherCAT devices connected to the EtherCAT Master.

All the data is updated live and can provide a valid support when troubleshooting and monitoring the status of an EtherCAT network. The EtherCAT page has Delphi text, helping the user understand the reported information.

EtherCAT Diagnostics require a new license, please contact your sales representative for more information.

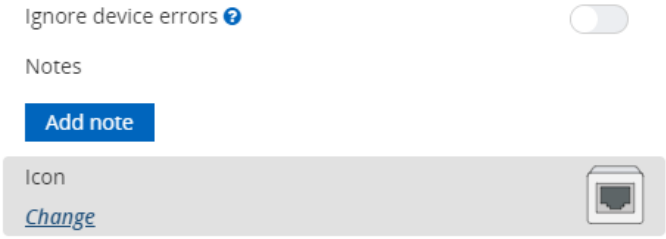


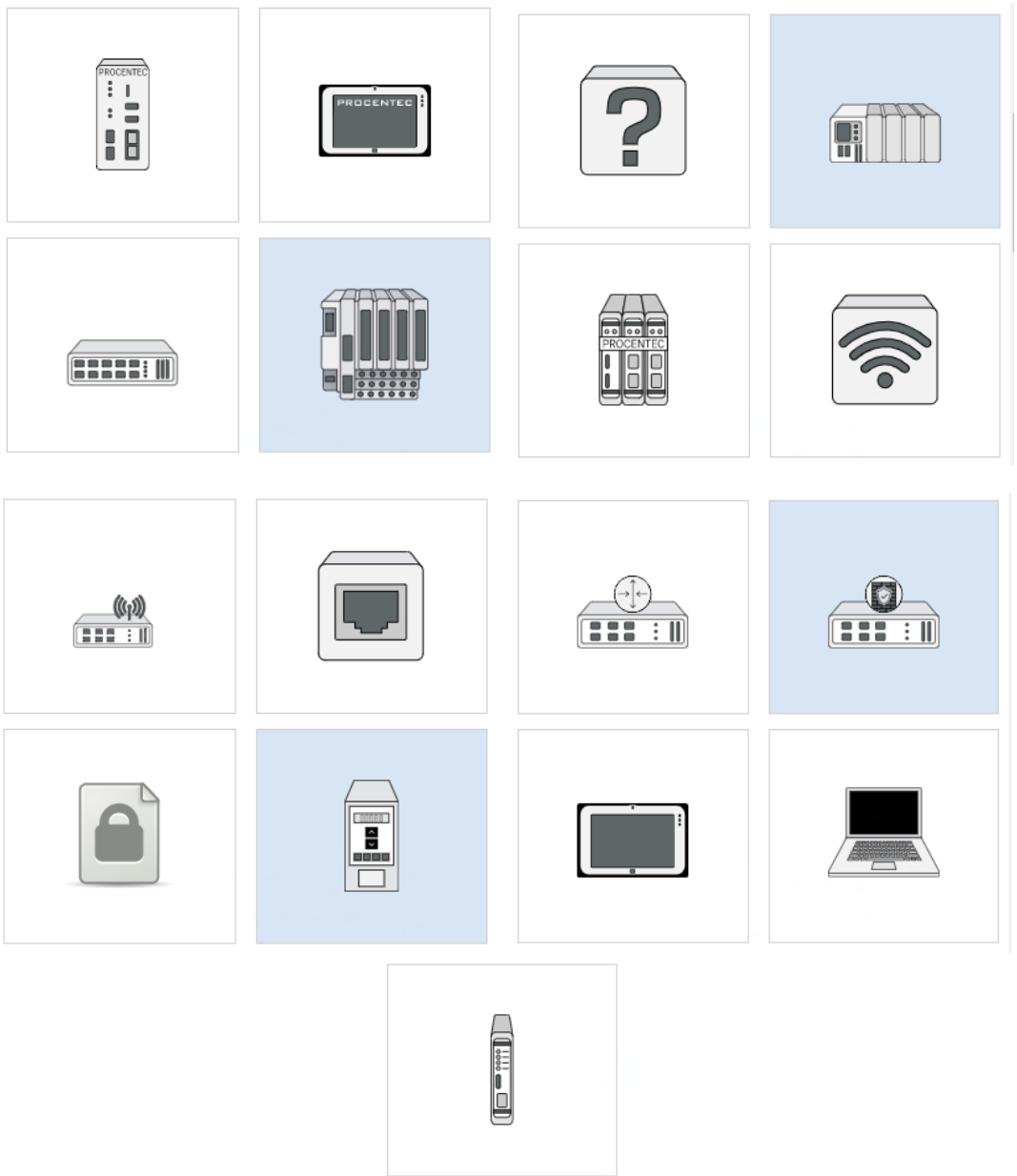
Address	Name	Available	Invalid Working Counter ...	Invalid Frame Counter	AL Control	AL Status	AL Status Code
1001	Term 1 (EK1100)	Yes	0	0	0x8	0x8	0x0
1002	Term 2 (EL1202)	Yes	857	0	0x8	0x8	0x0
1003	Term 3 (EL2032)	Yes	0	0	0x8	0x8	0x0
1004	Term 4 (EK1122)	Yes	0	0	0x8	0x8	0x0
1005	Term 5 (EK1100)	No	0	0	0x1	0x1	0x0
1006	Term 6 (EL1004)	No	927	0	0x1	0x1	0x0
1007	Term 7 (EL1809)	No	942	0	0x1	0x1	0x0
1008	Term 8 (EL2008)	No	959	0	0x1	0x1	0x0
1009	Term 9 (EL2809)	No	974	0	0x1	0x1	0x0
1010	Term 10 (EL2008)	No	991	0	0x1	0x1	0x0
1011	Term 11 (EL2809)	No	1006	0	0x1	0x1	0x0
1012	Term 12 (EL3403)	Yes	0	0	0x8	0x8	0x0
1013	Term 13 (EL3102)	Yes	1039	0	0x8	0x8	0x0
1014	Term 14 (EL4024)	Yes	1059	0	0x8	0x8	0x0
1015	Term 15 (EK1110)	Yes	0	0	0x8	0x8	0x0
1016	Box 16 (EP2809-0021)	Yes	1089	0	0x8	0x8	0x0

Custom Topology icons

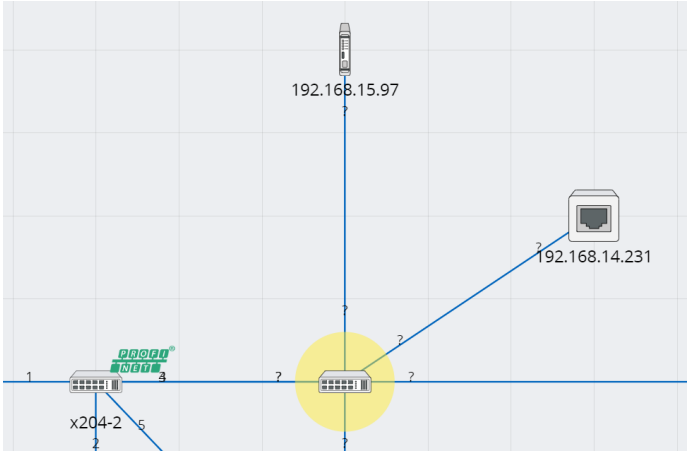
The device icon in the Custom Topology view is now customizable for every device, including unknown groups.

It is possible to select a different icon from the updated icon set. The new set includes icons of a drive, gateway, router, firewall, tablet and laptop from the already present icons.





When a new icon is selected, the custom topology is updated in order to show the new icon.

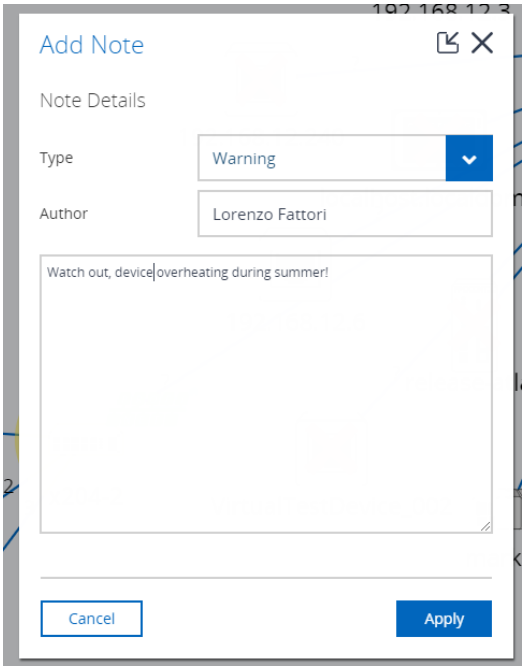


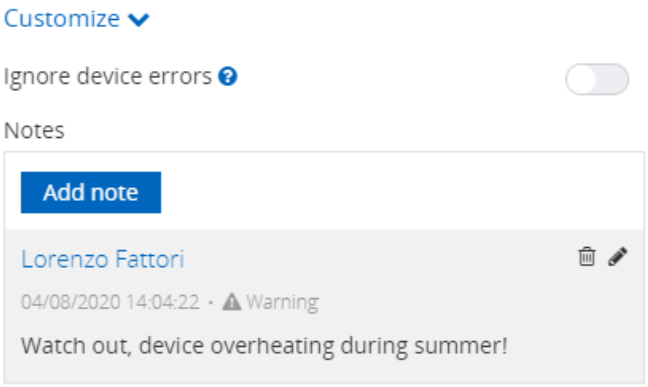
Device Notes

It's now possible to make notes for every device in your network, allowing storing and sharing information about the devices in the networks.

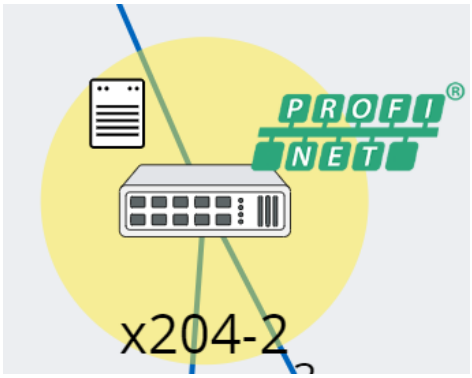
In the Topology view, when selecting a device, you can now make custom notes for every device, every note has a timestamp and can be categorized in the following 4 categories:

- Info
- Warning
- Bug
- Environmental





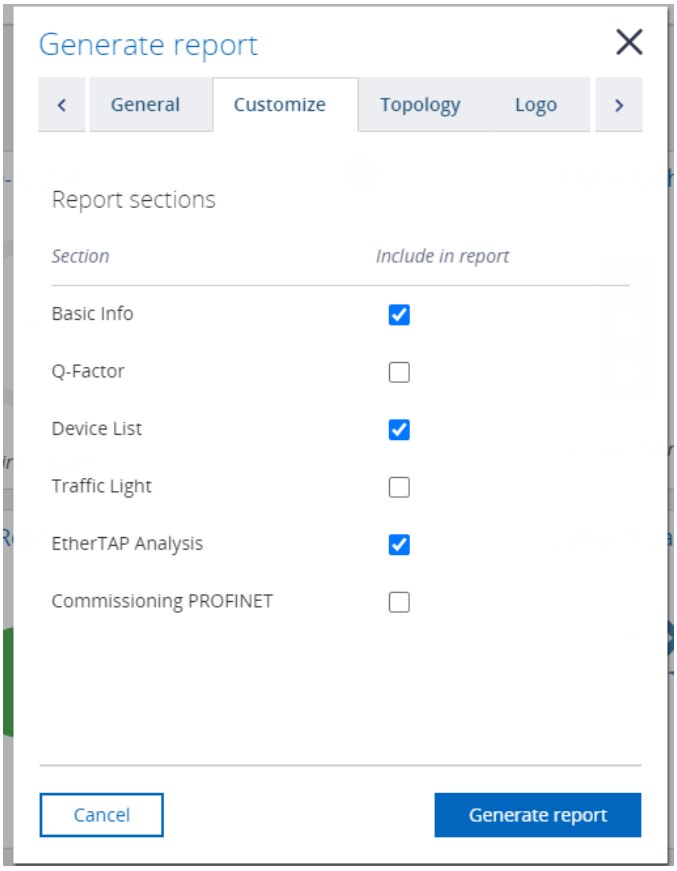
A small icon will appear on the device when the device has a note.



Report Builder - Customization

The reporting functionalities of Osiris have been extended allowing more information and customization to the report.

Osiris reports are now unified, when running the Commissioning Wizard the report data will be saved and added to the standard report, allowing the creation of one complete report.

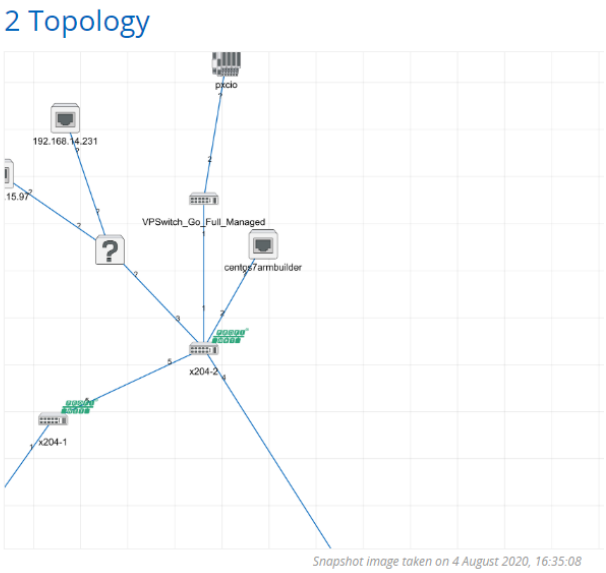


Report Builder - Topology

It's now possible to include the topology in the Report.

From the topology view, it's possible to create a screenshot of the topology by clicking the camera button on the top right part of the screen. After few seconds the current view of the topology is saved.

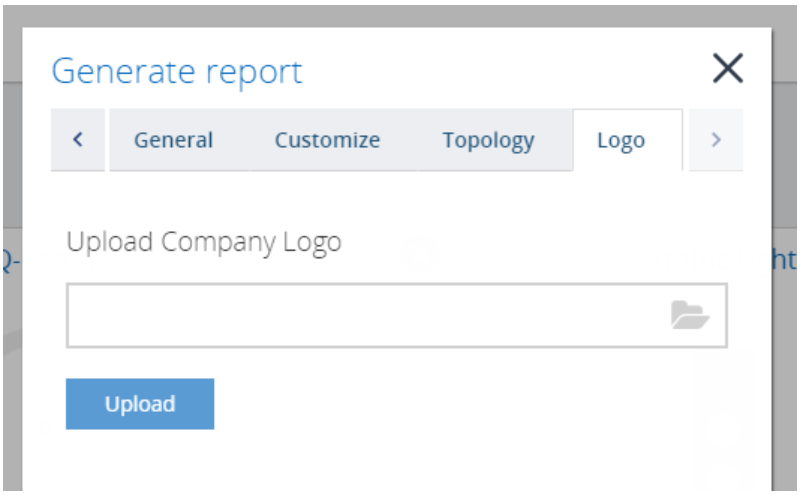
Once the image is generated, it is possible to add it in the report by selecting the appropriate field in the Customize tab of the Report builder.



Report Builder – Custom Logo

It’s not possible to include a custom company logo in the Report.

From the Logo tab of the Report builder, it’s possible to load a custom image.



Once loaded, the logo will appear in the report:

PROCENTEC

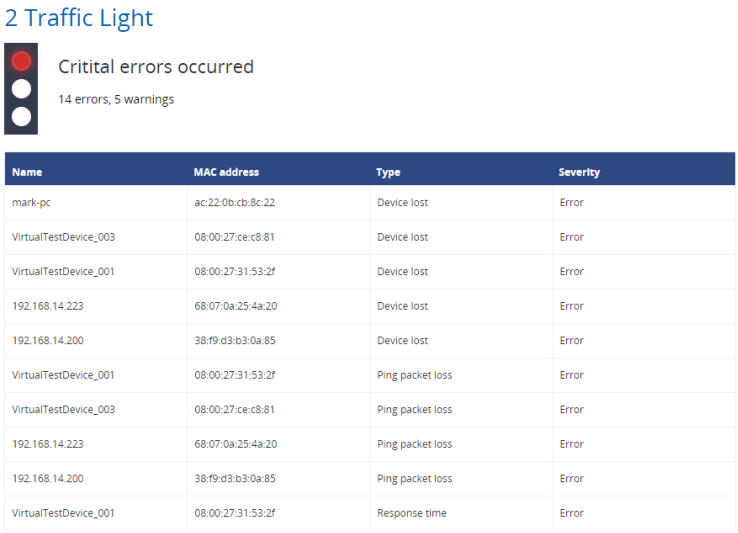
Atlas
Network Report

DUNDER MIFFLIN, INC
PAPER COMPANY

Company	ffdfd
Location	test
Network name	test
Measurement duration	0d 0h 15m 3s

Report Builder – Extended Traffic light details

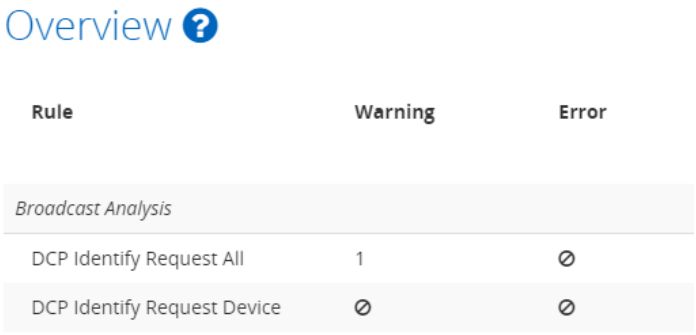
The traffic light details now show also the details of the devices casuing the traffic light to be red / orange.



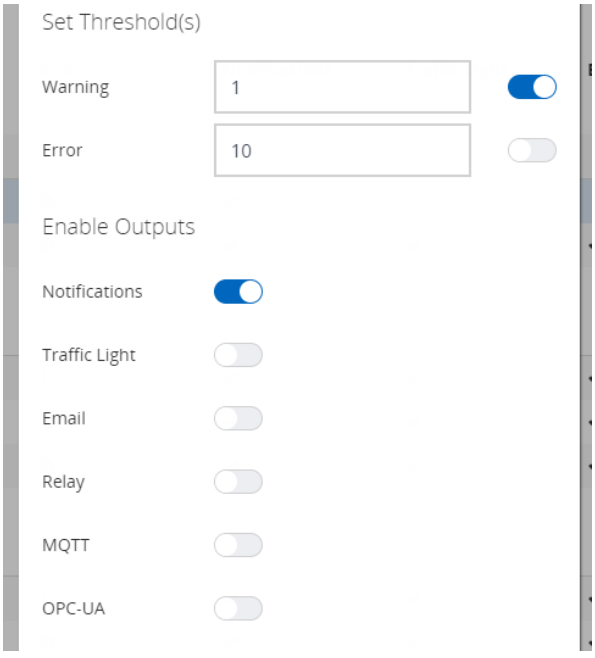
Name	MAC address	Type	Severity
mark-pc	ac:22:0b:cb:8c:22	Device lost	Error
VirtualTestDevice_003	08:00:27:ce:c8:81	Device lost	Error
VirtualTestDevice_001	08:00:27:31:53:2f	Device lost	Error
192.168.14.223	68:07:0a:25:4a:20	Device lost	Error
192.168.14.200	38:f9:d3:b3:0a:85	Device lost	Error
VirtualTestDevice_001	08:00:27:31:53:2f	Ping packet loss	Error
VirtualTestDevice_003	08:00:27:ce:c8:81	Ping packet loss	Error
192.168.14.223	68:07:0a:25:4a:20	Ping packet loss	Error
192.168.14.200	38:f9:d3:b3:0a:85	Ping packet loss	Error
VirtualTestDevice_001	08:00:27:31:53:2f	Response time	Error

Alarm Configuration – New Features

Osiris now is capable to detect DCP messages in the network. Both DCP request for a certain device and DPC Identify All can be detected. With this feature, it becomes very easy to be notified if a PROFINET IO-device in the network is missing and the IO-controller is looking for it and if there is a device scanning for all PROFINET devices in the network.



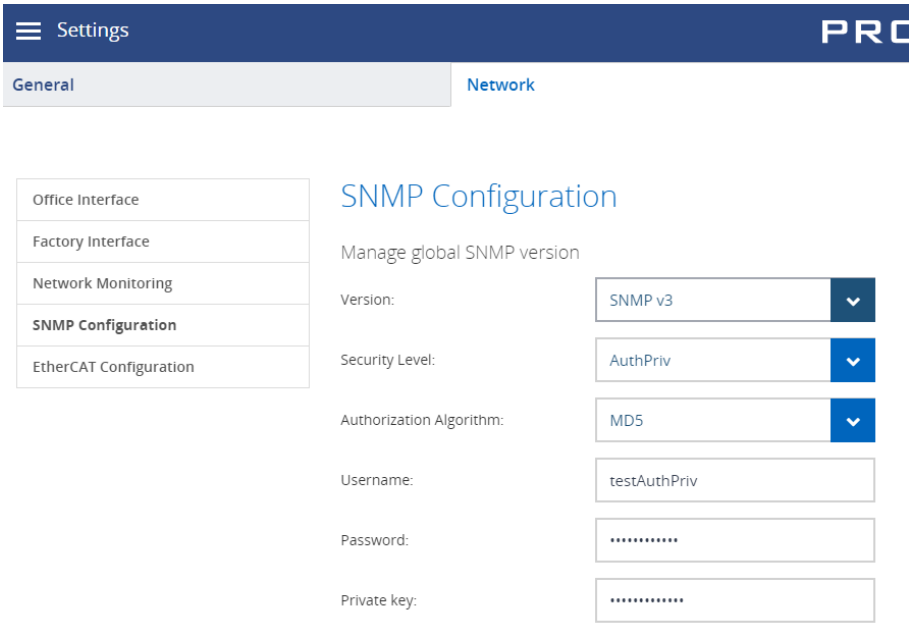
Two new outputs are added in the Alarm Center: MQTT and OPC-UA.
You can now be notified via MQTT or OPC-UA when one of the customizable thresholds set in the Alarm Configuration page is reached.



SNMP v2c and v3
Osiris now supports also version v2c and v3 of the SNMP protocol.

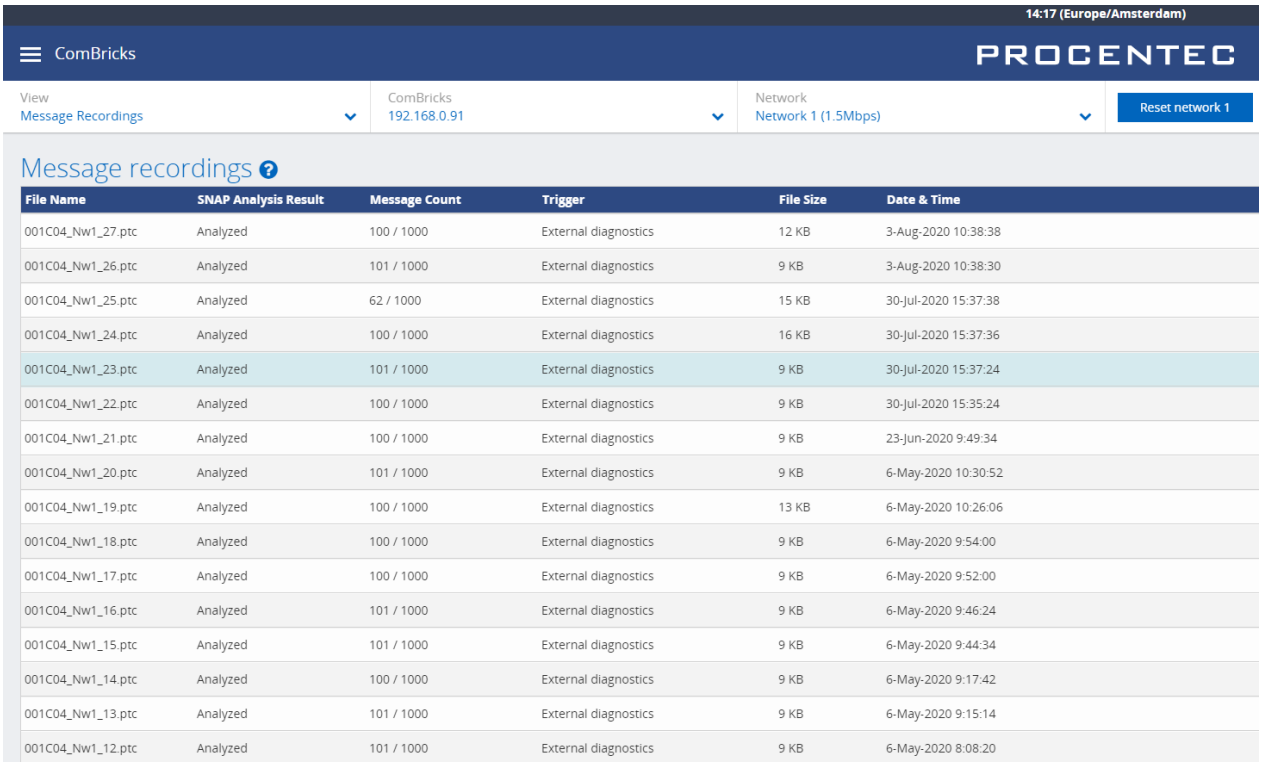
In this way, it is now possible to collect diagnostic data from devices who don't support the standard version v1.

It's possible to select which SNMP version to use and set the required parameters from the settings page.



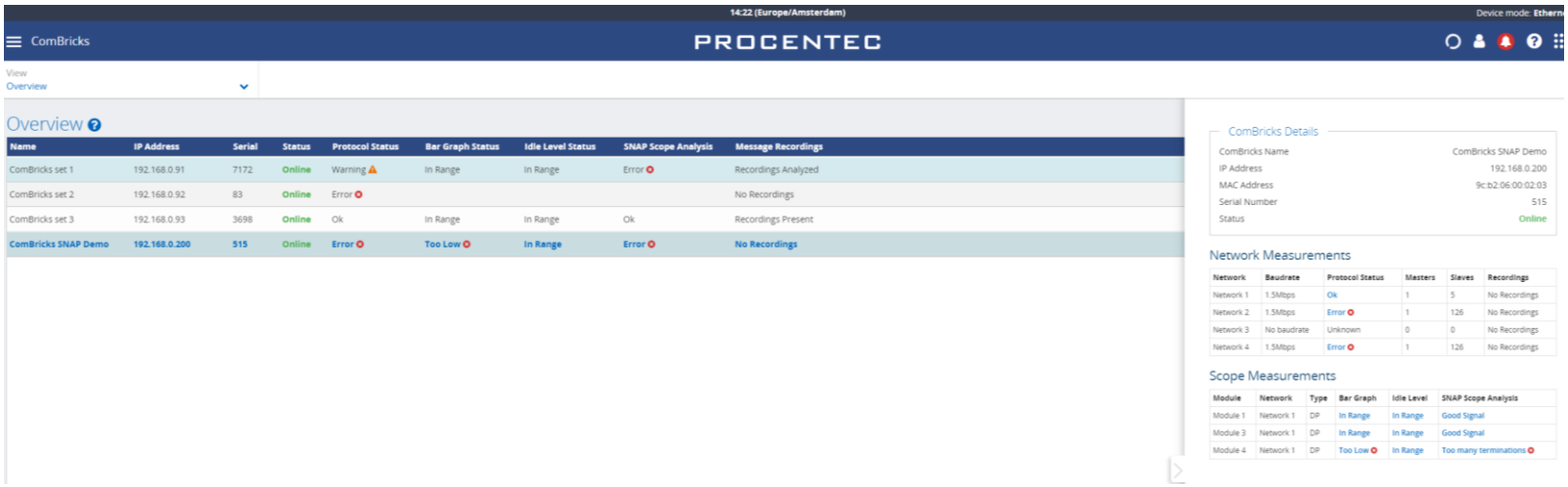
ComBricks Integration: Message Recording

This view displays all the message recordings present in the ComBricks units.



File Name	SNAP Analysis Result	Message Count	Trigger	File Size	Date & Time
001C04_Nw1_27.ptc	Analyzed	100 / 1000	External diagnostics	12 KB	3-Aug-2020 10:38:38
001C04_Nw1_26.ptc	Analyzed	101 / 1000	External diagnostics	9 KB	3-Aug-2020 10:38:30
001C04_Nw1_25.ptc	Analyzed	62 / 1000	External diagnostics	15 KB	30-Jul-2020 15:37:38
001C04_Nw1_24.ptc	Analyzed	100 / 1000	External diagnostics	16 KB	30-Jul-2020 15:37:36
001C04_Nw1_23.ptc	Analyzed	101 / 1000	External diagnostics	9 KB	30-Jul-2020 15:37:24
001C04_Nw1_22.ptc	Analyzed	100 / 1000	External diagnostics	9 KB	30-Jul-2020 15:35:24
001C04_Nw1_21.ptc	Analyzed	100 / 1000	External diagnostics	9 KB	23-Jun-2020 9:49:34
001C04_Nw1_20.ptc	Analyzed	101 / 1000	External diagnostics	9 KB	6-May-2020 10:30:52
001C04_Nw1_19.ptc	Analyzed	100 / 1000	External diagnostics	13 KB	6-May-2020 10:26:06
001C04_Nw1_18.ptc	Analyzed	100 / 1000	External diagnostics	9 KB	6-May-2020 9:54:00
001C04_Nw1_17.ptc	Analyzed	100 / 1000	External diagnostics	9 KB	6-May-2020 9:52:00
001C04_Nw1_16.ptc	Analyzed	101 / 1000	External diagnostics	9 KB	6-May-2020 9:46:24
001C04_Nw1_15.ptc	Analyzed	101 / 1000	External diagnostics	9 KB	6-May-2020 9:44:34
001C04_Nw1_14.ptc	Analyzed	100 / 1000	External diagnostics	9 KB	6-May-2020 9:17:42
001C04_Nw1_13.ptc	Analyzed	101 / 1000	External diagnostics	9 KB	6-May-2020 9:15:14
001C04_Nw1_12.ptc	Analyzed	101 / 1000	External diagnostics	9 KB	6-May-2020 8:08:20

SNAP Analysis PROFIBUS



Osiris now supports SNAP Analysis.

SNAP is the new advanced Machine learning system designed to provide the easiest troubleshooting experience for the Industry 4.Human™ user.

With the SNAP features, all the complicate part of PROFIBUS troubleshooting is delegated to our systems, and immediate results and help is achieved, in combination with our Delphi help!

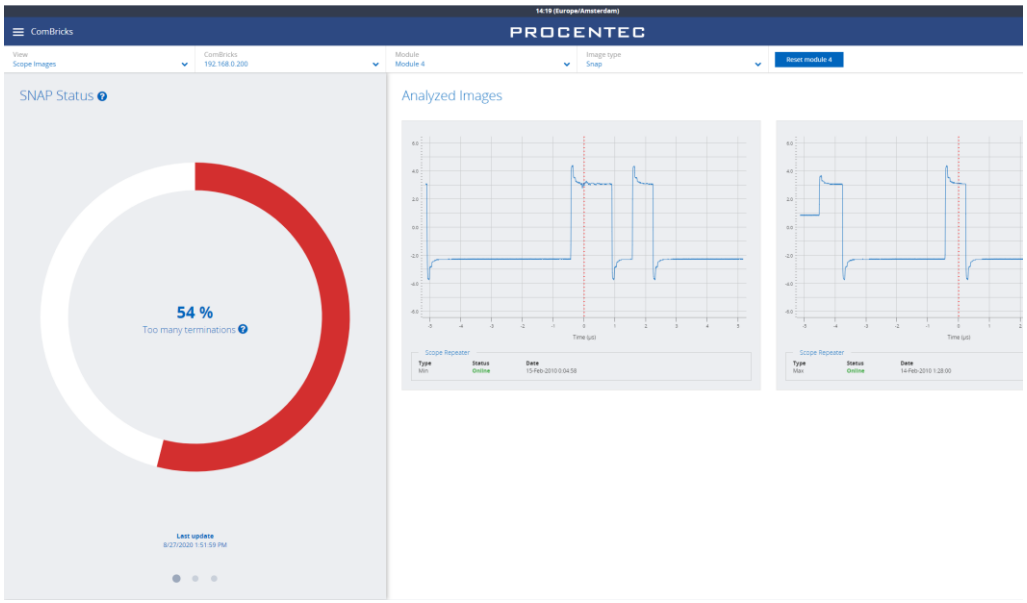
For more info regarding SNAP, please contact PROCENTEC

SNAP Analysis PROFIBUS – Scope Image Analysis

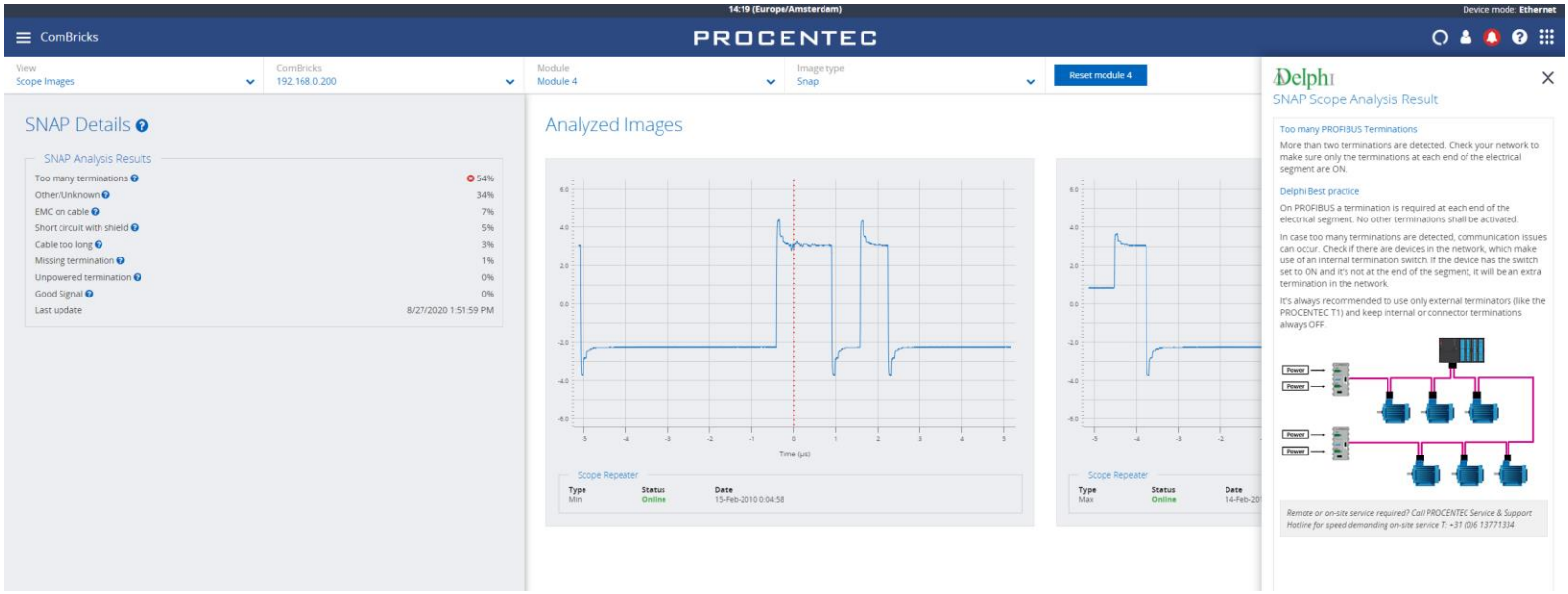
When SNAP is enabled, Osiris will automatically collect all the MIN and MAX scope images collected by the ComBricks devices in the network and send them to our SNAP servers.

There, our SNAP Scope Analysis algorithm will automatically detect if the PROFIBUS signal in the network is good signal or one of the most common issues for PROFOFIBUS networks is happening in the measured network.

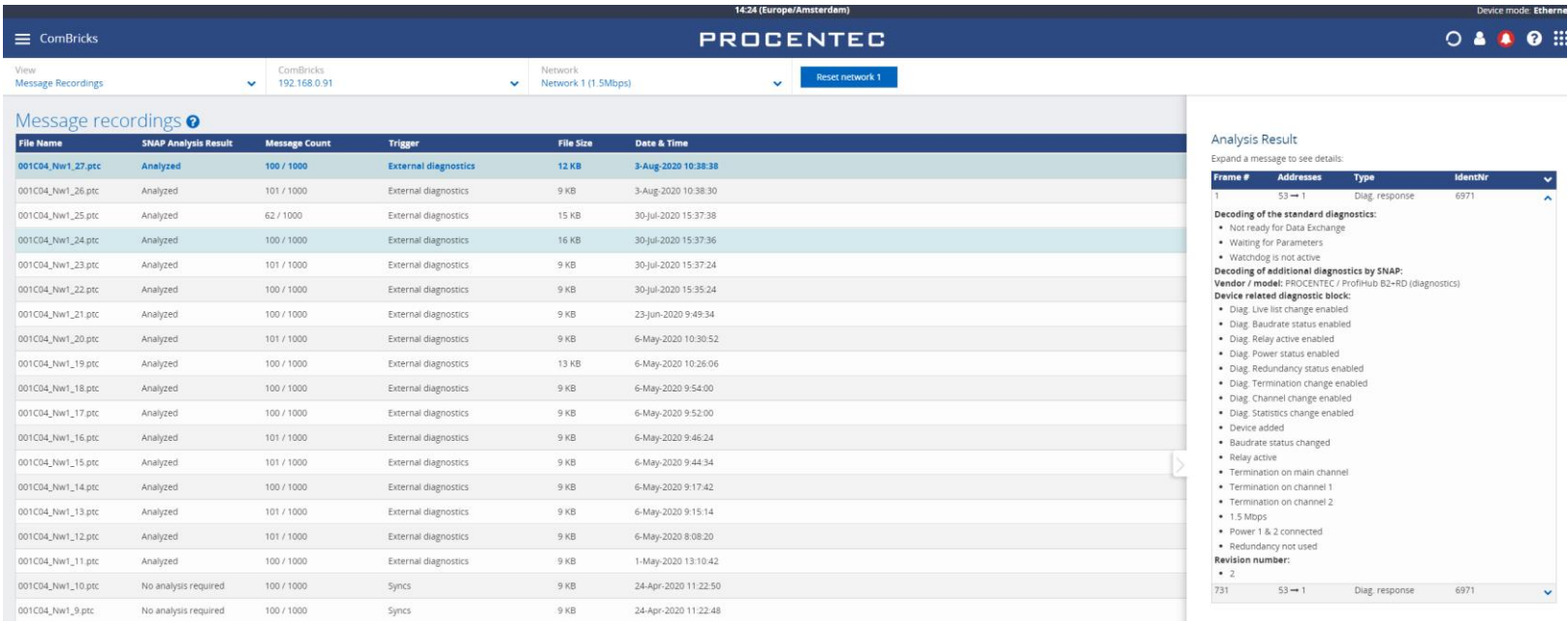
The result is sent back to Osiris, which will display it with a OK or Warning status, with the most probable issue detected and the level of confidence for each detectable issue.



The Delphi help will guide the user understanding and how to fix every detected issue.



SNAP Analysis PROFIBUS – Message recordings



When a message recording is triggered in ComBricks, the file is now sent to Osiris, and the PROFIBUS diagnostic messages in the captured file are extracted and sent to our SNAP servers for analysis.

SNAP will automatically decode the diagnostic messages based on our extended device database, and Osiris will automatically show the vendor, type of device and the diagnostic message sent from the device at the moment of the message recording.

This will allow the user to easily see and troubleshoot device issues reported via diagnostic messages, without the need to know the device or own the GSD file of the device.

Added features:

- Introduced a new topology algorithm in order to fix potential issues with devices reporting bad SNMP data.
- The I&M1-4 information is now available in the Device list and via OPC-UA and MQTT
- The Link List, EtherTAP PROFINET and ComBricks overview data is now available via MQTT
- EtherTAP PROFINET data is now available via OPC-UA
- MQTT data is now extended and consistent with OPC-UA
- The severity of an Alarm is added to EtherTAP Alarms and Acyclic readings in the device details.
- All the ComBricks integration pages now have Delphi Text.
- They system now notifies with a popup if there connection with the backend is lost.

Fixed issues:

- Fixed a bug causing the TLS certificate for MQTT not to load.
- Fixed a bug causing MQTT request message to not work
- Fixed a bug causing MQTT data to be sent also when not clients were subscribed
- Fixed a bug causing Osiris to crash when retrieving NTP settings
- Fixed a bug causing emails not be sent on all Outputs of the Alarm Configuration
- Fixed a bug causing Osiris to report inDiscards on the factory link.
- Fixed a bug in the Ethernet/IP Message Recordings causing the download button to not work.
- Fixed a bug causing files to be exported multiple times
- Fixed a bug causing the Firmware differences to not be shown correctly in the report
- Fixed a bug causing the TAP trending to not to be displayed correctly.

1.1.105-2523 (18/31-08-2020):

Added features:

- Osiris is now translated in Czech.
- Translation files are updated to 1.105

Fixed issues:

- PROFINET Alarm List: Delphi help button now displayed correctly
- Fixed a bug in the PROFINET Alarm List causing the ALL counter to not reset correctly.
- Fixed a bug in the PROFINET Alarm List causing the Alarms to not be sorted correctly by Date/Time.
- Fixed a bug causing the Q-factor Trending not being displayed correctly.
- Fixed a bug in the Topology view causing the Device Details not being displayed correctly.
- Fixed a bug causing the OPC-UA Tag of the Traffic Light not being updated correctly.
- Fixed a bug causing high CPU loads when using DCP functionalities.
- Fixed a bug causing Osiris to not recognize devices as PROFINET and therefore not show all the PROFINET diagnostics.
- Fixed a bug causing the traffic light to not be displayed properly after clearing data.

1.1.105-2518 (19-06-2020):

This is a patchfix release for Atlas Only

Fixed issues:

- Fixed a bug causing Atlas to restart at boot, causing longer boot times.

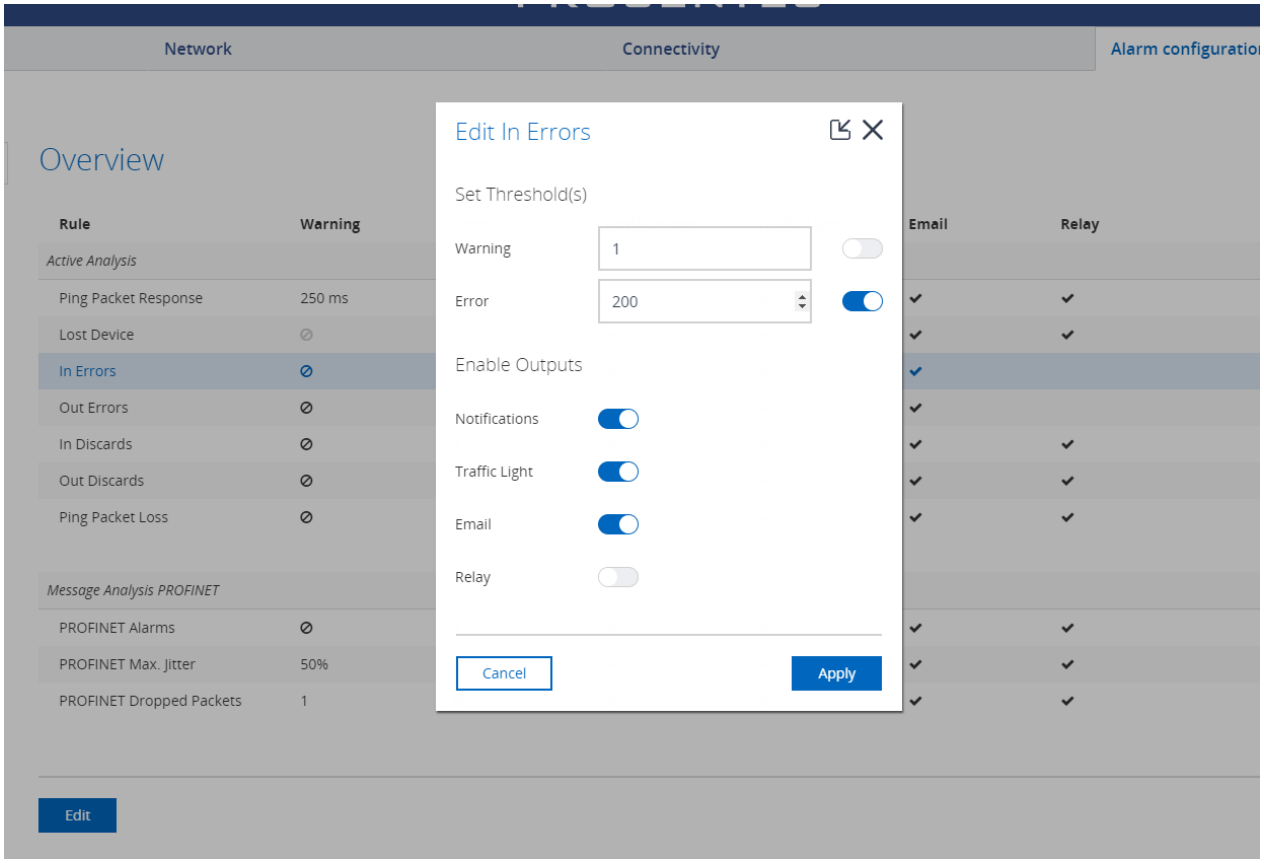
1.1.105 (23-04-2020):

New settings Page

The settings tab has been re-designed into a full page where you can access all the configuration fields for Osiris easily.

Settings are divided in different tabs, divided by main groups: General, Network, Connectivity and Alarm Configuration.

Alarm Configuration
In this page, you can configure rules that are changing the behavior of Osirs when an error in the network is detected.
You can now adjust warning and error thresholds and decide which output will be activated when a threshold is reached.



Ethernet/IP notifications
Ethernet/IP Message Analysis is now also part of the Alarm Configuration, and you can set thresholds for dead connections, jitter and dropped packets.

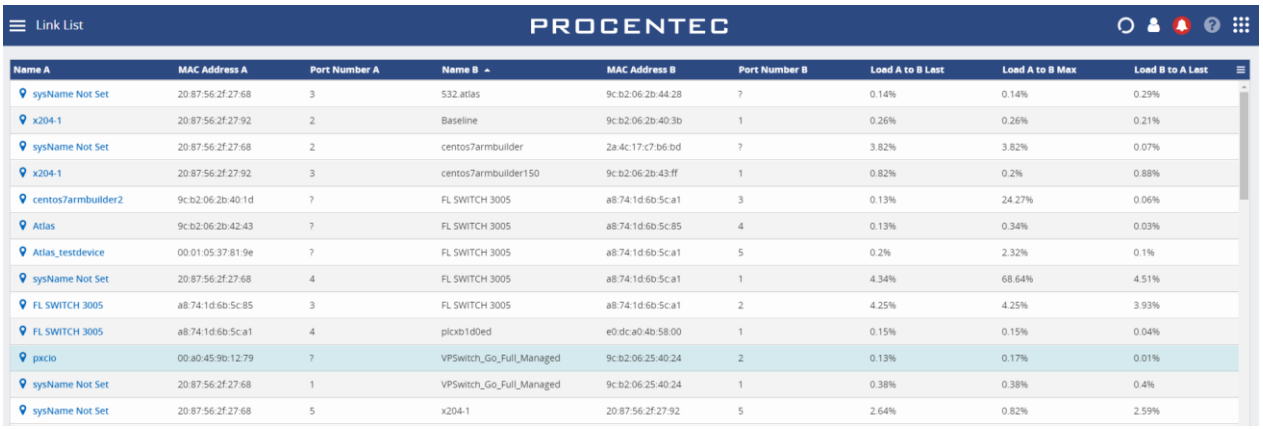
Relay Output (Atlas only)
It's now possible to configure the Relay output of Atlas from the Alarm Configuration page.

Link List

The Link list page contains an overview of all the Ethernet connections between devices (Links), for every link the following information is present:

- Device A/B information (Name, MAC address, Port number)
- Device A/B Load (Last and Max)
- Device A/B Link Status and Speed
- Device A/B Error and Discarded messages

Similar to the device list, it is possible to export the link list as CSV file,



Name A	MAC Address A	Port Number A	Name B	MAC Address B	Port Number B	Load A to B Last	Load A to B Max	Load B to A Last
sysName Not Set	20:87:56:2f:27:68	3	532.atlas	9c:b2:06:2b:44:28	?	0.14%	0.14%	0.29%
x204-1	20:87:56:2f:27:92	2	Baseline	9c:b2:06:2b:40:3b	1	0.26%	0.26%	0.21%
sysName Not Set	20:87:56:2f:27:68	2	centos7armbuilder	2a:4c:17:c7:b6:bd	?	3.82%	3.82%	0.07%
x204-1	20:87:56:2f:27:92	3	centos7armbuilder150	9c:b2:06:2b:43:ff	1	0.82%	0.2%	0.88%
centos7armbuilder2	9c:b2:06:2b:40:1d	?	FL SWITCH 3005	a8:74:1d:6b:5c:a1	3	0.13%	24.27%	0.06%
Atlas	9c:b2:06:2b:42:43	?	FL SWITCH 3005	a8:74:1d:6b:5c:85	4	0.13%	0.34%	0.03%
Atlas_testdevice	00:01:05:37:81:9e	?	FL SWITCH 3005	a8:74:1d:6b:5c:a1	5	0.2%	2.32%	0.1%
sysName Not Set	20:87:56:2f:27:68	4	FL SWITCH 3005	a8:74:1d:6b:5c:a1	1	4.34%	68.64%	4.51%
FL SWITCH 3005	a8:74:1d:6b:5c:85	3	FL SWITCH 3005	a8:74:1d:6b:5c:a1	2	4.25%	4.25%	3.93%
FL SWITCH 3005	a8:74:1d:6b:5c:a1	4	plcxb1d0ed	e0:dc:a0:4b:58:00	1	0.15%	0.15%	0.04%
pxcio	00:a0:45:9b:12:79	?	VPSwitch_Go_Full_Managed	9c:b2:06:25:40:24	2	0.13%	0.17%	0.01%
sysName Not Set	20:87:56:2f:27:68	1	VPSwitch_Go_Full_Managed	9c:b2:06:25:40:24	1	0.38%	0.38%	0.4%
sysName Not Set	20:87:56:2f:27:68	5	x204-1	20:87:56:2f:27:92	5	2.64%	0.82%	2.59%

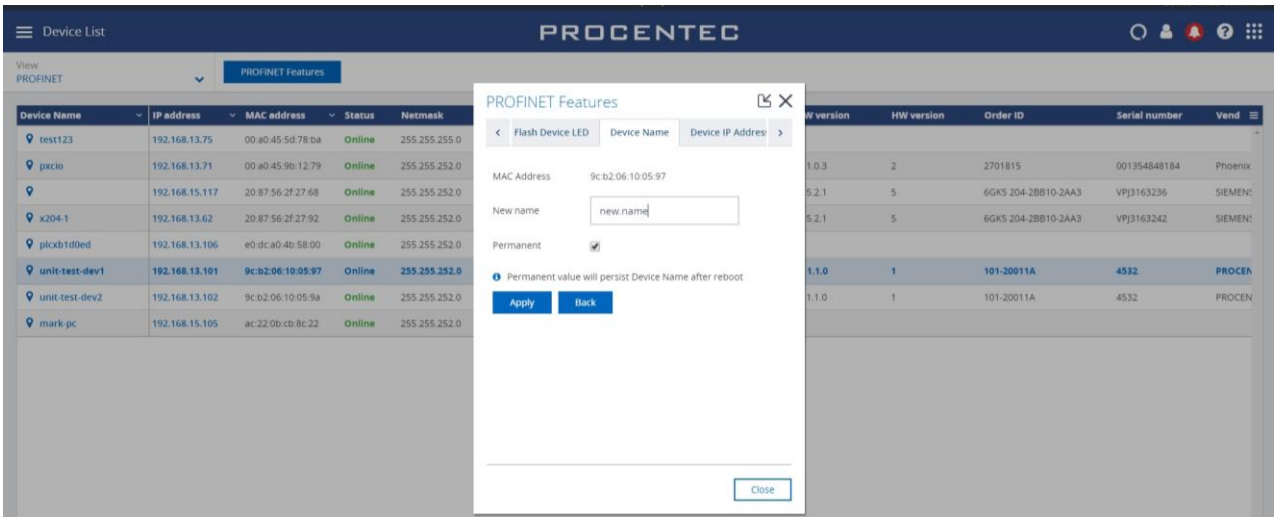
PROFINET Device List and Active features

It's now possible to filter the device list in order to display only PROFINET devices.

When the PROFINET view is selected, it is possible to click on any PROFINET device and perform the following active DCP actions to the device:

- Flash LED
- Change Device Name
- Change IP Address
- Reset to factory default settings

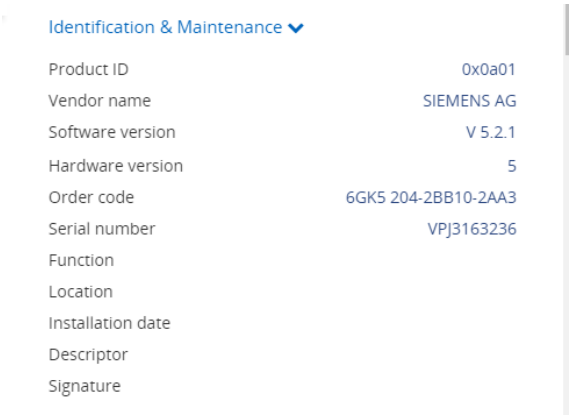
In order to use the PROFINET Active features a dedicated feature license is required and the user must be logged with the dedicated "networkengineer" account.



New PROFINET device information and diagnostics

Osiris is now capable to collect and display additional information for PROFINET devices, expanding the diagnostic capabilities on PROFINET networks.

In the Device details section the Identification and Maintenance area is extended with I&M 1, 2, 3 and 4.



A new PROFINET Configuration status section has been added: in this section, the configuration of the PROFINET modular device with all the connected slots/subslots with the module identifier as represented from the PROFINET GSDML file.

The status indicator will display the status for each module: in case of module mismatch or alarms reported by the device, they will appear in the status area.

PROFINET Configuration status

Slot/SubSlot	Module	Status
0	0x0001f901	Ok
1	0x1ffff000	Ok
2	0x00010500	Ok
3	0x00010500	Ok

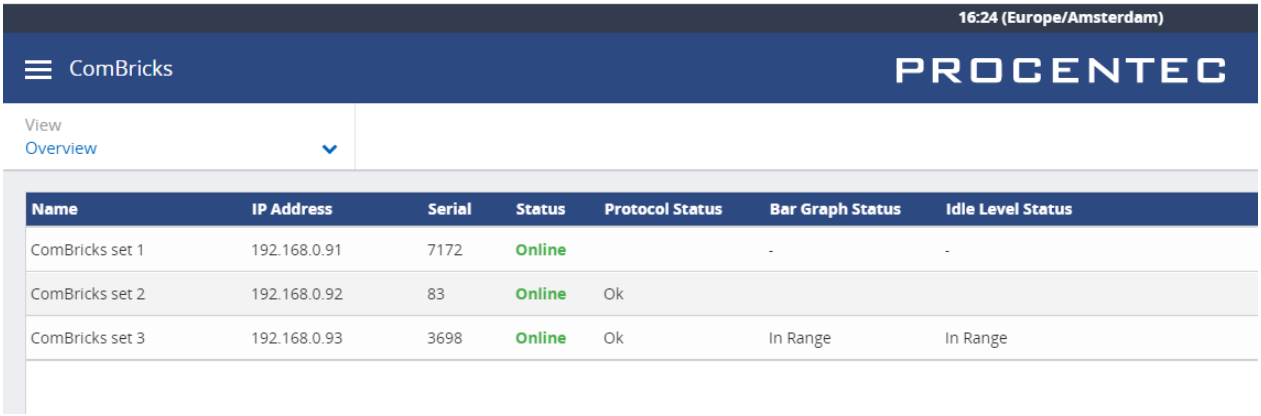
PROFINET Configuration status

Slot/SubSlot	Module	Status
0	0x0000008b	Info
0	Module Mismatch, Substitute	
0/1		
0/32768		
0/32769		
0/32770		
0/32771		
0/32772		

ComBricks Integration: Overview

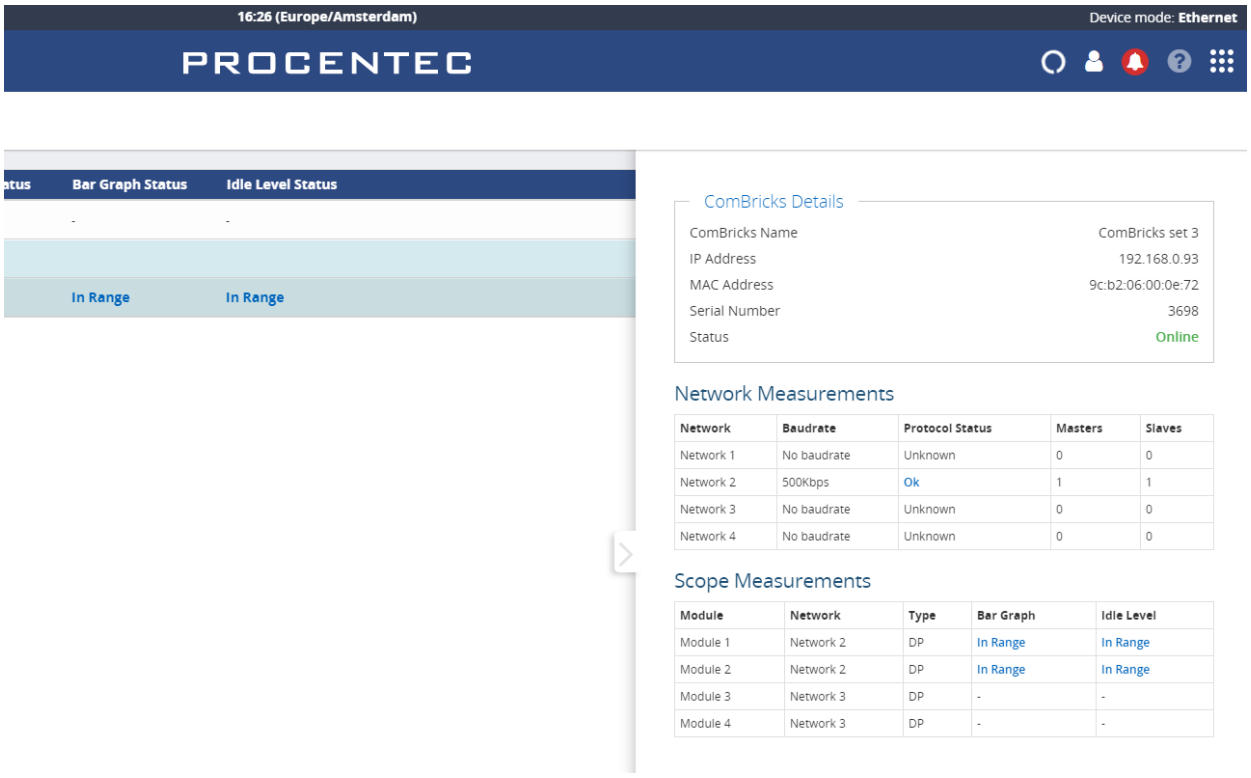
ComBricks devices in the scan-range are now automatically communicating with Osiris. From the new ComBricks view you can now see all the ComBricks devices in your network in one unique view containing all the essential information in one page such as:

- Name
- IP Address
- Serial number
- Status
- Protocol Status
- Bargraph Status
- Idle Level Status



Name	IP Address	Serial	Status	Protocol Status	Bar Graph Status	Idle Level Status
ComBricks set 1	192.168.0.91	7172	Online		-	-
ComBricks set 2	192.168.0.92	83	Online	Ok		
ComBricks set 3	192.168.0.93	3698	Online	Ok	In Range	In Range

By clicking one line of the overview, a side menu will appear showing more information regarding the ComBricks devices and links to the detail pages for every network or module.

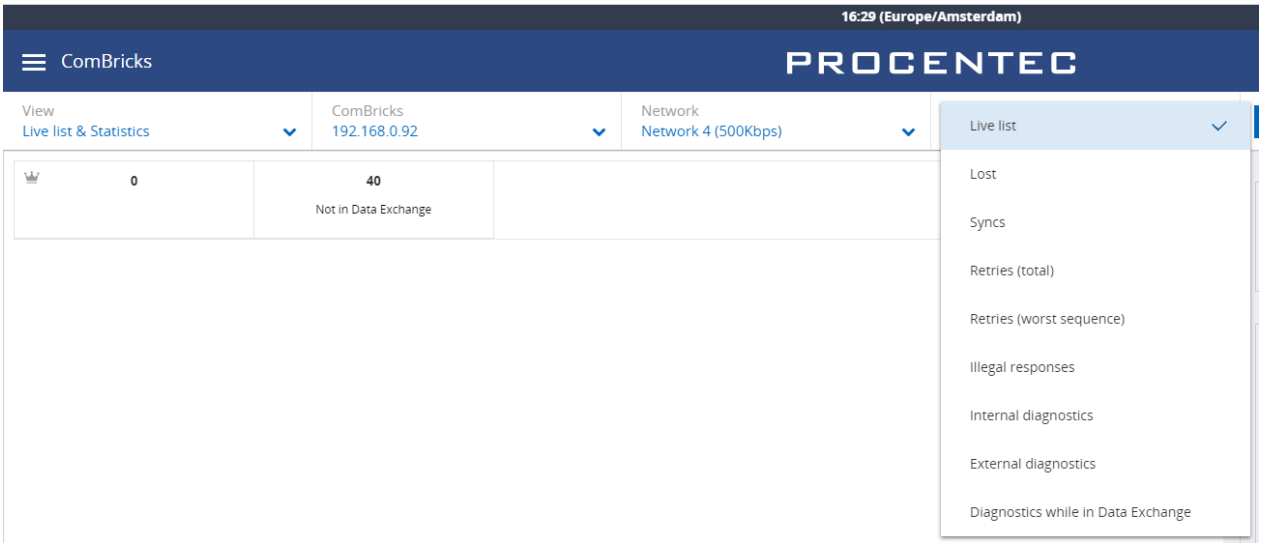


ComBricks Integration: Livelist and Statistics

This view contains the PROFIBUS livelist and statistics matrix for every ComBrick network, with a summary of all the network information.

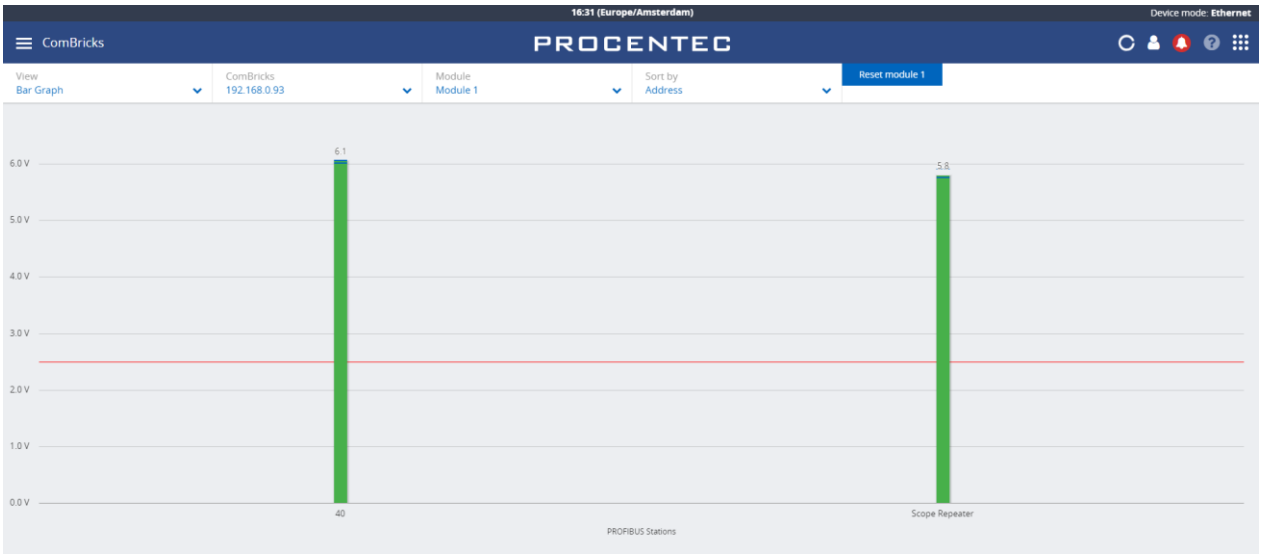
It is possible to switch view in order to show:

- Livelist
- Lost
- Syncs
- Retries (total and worst sequence)
- Illegal responses
- Internal / External / while in DX diagnostics



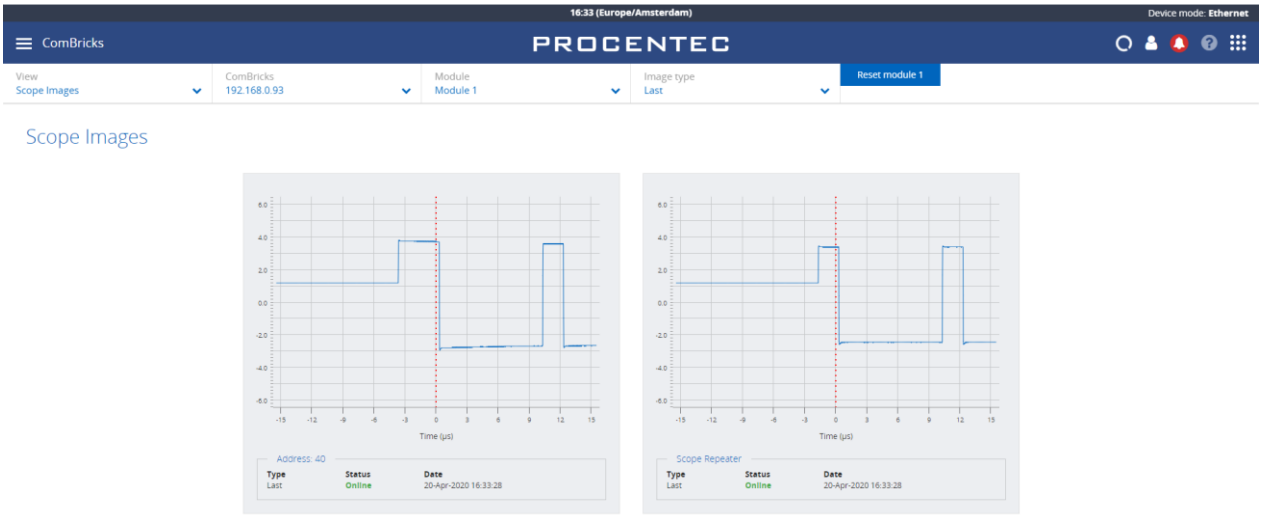
ComBricks Integration: Bargraph

This view contains the Bargraph for every ComBrick scope module, showing the last, minimum and maximum voltage of the electrical signal for every PROFIBUS device connected to the module.



ComBricks Integration: Scope Images

This view contains the Scope images for every ComBrick scope module, showing the last, minimum and maximum oscilloscope image of the electrical signal for every PROFIBUS device connected to the module.



ComBricks Integration: Message Recordings

This view contains a list all the message recordings saved for ever Network of the ComBricks devices, with the file name, message count, trigger event, file size and Date&Time of the recordings.

ComBricks Integration: OPC-UA

The information present in the ComBricks Overview page can be streamed via OPC-UA to external systems such SCADA, HMI panels, etc.

The following variables are available for each connected ComBricks:

- PROFIBUS Communication Status
- Bargraph Status
- Idle Level Status

Added features:

- It's now possible to choose which OPC-UA port to use when connecting to Osiris.
- Added support for secure MQTT connection
- Added a new MQTT topic which triggers Osiris to publish all the data.
- Added Polish translation.

Fixed issues:

- Fixed a bug when there is ET200eco is in the network and no SNMP data is displayed.
- Fixed a behavior when the topology will not be displayed.
- Fixed a bug when a device with bad SNMP data is in the network and cause error in creating the topology.
- Fix a bug causing the PROTOCOL, SW version, HW version or Order code to not appear in the device list.
- Fixed wrong behavior when scanning Ethernet/IP Networks.
- Fixed bug where Firmware difference for Ethernet/IP devices where not displayed in the report.
- Fixed a bug when sorting the overview table in TAP – Message Analysis.
- Fixed some translation errors.

1.1.93-2 Patch (15-01-2020 - First Release Osiris Software):

Node Limitation
It's now possible to have a node-limited license of Osiris. When the user has a node-limited license, the system will analyze only a certain amount of devices until the limit is reached.

Fixed issues:

- Fixed bug which caused the connection to the office interface to be very slow when using routed connections

1.1.93 (05-12-2019):

New Ethernet/IP Commissioning Wizard
It's now possible to run the Commissioning Wizard on Ethernet/IP networks too!
The QuickScan will automatically check:

- Duplicated IP addresses
- Discarded packets
- ARP Messages
- Firmware Differences
- Network Load
- IGMP Multicasts

The Full commissioning will add the following detailed checks:

- Topology and line depth
- Device Details
- Amount of detected devices
- Discarded Packets
- Network Load
- ARP Broadcasts
- IGMP Multicasts

Delphi will guide you in the Commissioning process with dedicated Ethernet/IP information.
All the information and notes are exportable with a dedicated Commissioning Wizard Report
The Commissioning Wizard is available via separate license, please contact PROCENTEC to obtain your new license.

New Ethernet/IP Message Analysis
It's now possible to use EtherTAP (10/100 or 1G) on Ethernet/IP networks, and let Osiris automatically do passive analysis. Delphi will help you understand the displayed information.

- Ethernet/IP Overview: Osiris will analyze the Ethernet/IP communication on the EtherTAP link and display the amount of multicast and unicast connections, Actual Packet Interval (API), Jitter, Dropped packets and Dead Connections
- Ethernet/IP Message Recording: Osiris can now generate Wireshark traces (.pcapng) in case of Dropped Packets, Jitter and Dead connections
- Ethernet/IP Analysis is added to the report.
- Delphi will help you analyzing the Ethernet/IP traffic.

OPC-UA Update

- It’s now possible to use secure OPC-UA connection by using certificates.
- All the Device List information is now available via OPC-UA

MQTT Tile

- It’s now possible to extract data from Osiris via MQTT
- All data available via OPC-UA, including the Device List, is available via MQTT

Added features:

- Delphi help added to PROFIBUS measurements.
- A Zoom All button has been added to the topology page, to quickly re-center the view.
- Osiris is now translated in German – Dutch – Italian – Spanish - Portuguese

Fixed issues:

- Fixed no internet connection error on IXON VPN.
- Fixed a bug when Atlas was not sending emails.
- Fixed a bug when clearing all data
- Fixed a bug causing OPC UA to stop after a restart
- Minor system fixes/improvements.

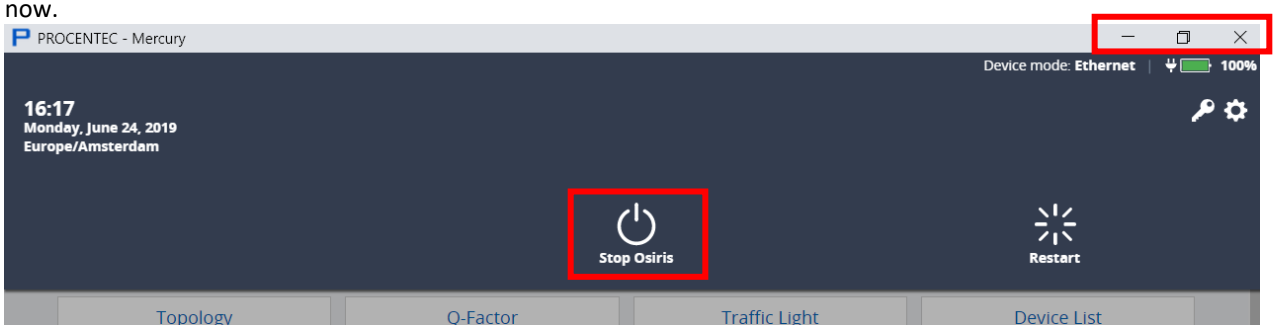
1.1.83 (21-06-2019):

New Window layout on Mercury:

Osiris now runs in a dedicated window. It’s possible to minimize, restore down and Stop Osiris with the dedicated Window Control Buttons.

A “Stop Osiris” button is now added that allows to easily stop Osiris and close all the windows.

The window automatically adapts when the touch keyboard is used, the text field being edited is always visible now.



Added features:

- Osiris is now capable to detect and display the type of Ethernet/IP devices in the Device list and Device Details.
- Osiris is now capable to detect Ethernet/IP Firmware versions and warn in case two devices have different firmware.
- EtherTAP – Message Analysis: a counter of the amount of used/available .pcap files is now added.

Fixed issues:

- PROFIBUS: Improvements on 12Mbit/s networks.
- Fixes on strange behavior when clearing all data.
- Minor system fixes/improvements.

1.1.77 (7-12-2018):

Added features:

EtherTAP – Message Analysis Tile:
It's now possible to do passive analysis on Osiris by connecting the PROCENTEC EtherTAP (10/100 or 1G) to Atlas and Mercury. Delphi will help you understand the displayed information.

- PROFINET Overview: Osiris will analyze the PROFINET communication on the EtherTAP link and display the amount of devices in Data Exchange, Cycle times, Jitter, Dropped packets and Alarms.
- PROFINET Alarms: alarms detected in the EtherTAP link will be collected with timestamp. Is possible to sort and filter them.
- PROFINET Message Recording: Osiris can now generate Wireshark traces (.pcapng) in case of Dropped Packets, Jitter and Alarms.
- PROFINET Message Analysis issues will appear in the Notification tab and will trigger traffic light.
- Ethernet Overview: Ethernet network load and errors are displayed with timestamp.
- Ethernet Trending: Ethernet network load and errors are displayed in graphical trending.
- PROFINET and Ethernet Analysis is added to the report.

SNMP Community Strings

- It's now possible to add up to ten custom SNMP Community Strings in Atlas

Exclude devices when outside of Scan range:

- It's now possible to exclude devices that are not in the scan range but still answering to Osiris' requests (i.e. DCP). These devices will not appear in device list, topology, etc.

- PROFIBUS: It's possible to visualize A&B signal in the scope page.

Fixed issues:

- Ethernet: Improvements in building the topology.
- PROFIBUS: Improvements in scope visualization.
- PROFIBUS: Wrong baudrate detected occasionally when starting a measurement.
- Login area is now visible on Mercury when Windows keyboard is open.
- User is notified and Osiris will automatically shut down when the battery level of Mercury is critical.
- Fixed a bug where saving Ethernet settings was not working.

1.1.70 (7-12-2018):

Added features:

- Is now possible to scan up to ten different scan ranges.
- Remote VPN connection by IXON is now possible via a separate license.
- It's now possible to send Emails to SMTP servers.
- Added Factory Reset option in Mercury.
- Battery level shown when using Mercury.

Fixed issues:

- Improvements in building the topology.

- Generation of Topology and Commissioning wizard are now 5x faster.
- Diagnostics dumps are now possible also for PROFIBUS measurements .
- The user gets a clear message when trying to update with an older package than is currently installed.
- User is notified to don’t turn off the device while it is updating.
- Windows Virtual Keyboard not popping-up has been fixed.
- USB control in the UI is removed when using Mercury.
- Clearing data doesn't remove trending data anymore.
- Osiris will now stop when Mercury is in sleep mode
- Improvements on factory reset.
- Sometimes I&M0 information is missing.
- When a device is lost Q-factor now goes to 0 properly.

1.1.64 (30-08-2018):

Added features:

- It's now possible to connect to an SMTPS server with an empty username and/or password
- Engineers can no longer change the email settings
- When exporting the CSV of the notifications, a spinner is shown to indicate the CSV is being generated
- The user is given a warning when the scan range is outside of the subnet of the factory interface
- The Measurement menu now includes a Change measurement settings button so new networks can easily be set up
- Show status of running measurement on homepage
- Commissioning of PROFINET networks now available via separate license
- The Topology will now scale to fit the screen after switching views
- User can now enforce a reset of the current measurement (formerly done by unplugging)
- Ignored devices are now included in the Report
- Measurements are resumed after an (accidental) power off or reboot
- Custom views can now be deleted
- The horizontal menu next to the PROCENTEC logo has been compacted for smaller screens

Fixed issues:

- The main menu in the Industrial Ethernet have been upgraded with unique icons
- Negative response times no longer occur
- The Notifications can now be exported to CSV without a running measurement
- Downloading large CSV exports of Notifications no longer fails in Chrome
- The Traffic Light Reset button has been removed
- Going back to Dashboard is way faster now
- Clicking Clear in the Notification list now clears all the messages instead of the last 50
- The Clear Measurement function no longer has effect on the number of exported Notification
- Fixed a bug in topology building for certain switches
- Sometimes the wrong vendor name was shown
- Topology seems pinned when switching from tree to galaxy view
- Ignoring devices is slow
- Topology 'Node Search' not working on touchscreen
- Ethernet report needs a spinner while loading
- Ignoring a device makes it briefly disappear and appear again in the galaxy
- Wireless links not always represented by a dashed line
- Imploded tree view
- Port numbers on topology links are incorrect
- Some Topology devices appear without an node icon
- Enabling opening node search on touch devices
- Drag nodes on a touch screen easily
- Password field shouldn't be able to be left empty
- Fixes on Idle level measurement
- Dashboard network summary is not showing bus-parameters
- Can't select layout when going to Topology page, have to press F5
- Switching between layouts in the topology doesn't work correctly
- Topology won't load after clearing data
- The clear data button should be hidden for operator
- Grid issue making it impossible to consistently snap nodes to the correct locations

1.1.53 (30-03-2018):

Added features:

- Users can create custom topology's. Devices can be dragged to positions and these positions are saved on the Atlas, even after a power down
- Device errors can be ignored now
- New licenses can be uploaded
- Persistent notification logging: notifications survive a reboot
- The tree view is neater and the devices have fixed positions now
- Autocompleting topology search field
- Selected nodes are now highlighted with a yellow halo and connected lines are bold

Fixed issues:

- Removed false error on WiFi link
- Mention correct protocol on used port
- Namur icons on links in the Topology are now clickable
- Atlas was not self-connecting to the Internet. This interfered with time synchronization

1.1.47 (21-02-2017):

Added features:

- Email notifications for alarms

Fixed issues:

- It was impossible to remove the gateway and DNS settings. In some cases this could lead to internet connectivity problems. Which could lead to errors sending e-mail and errors synchronizing the clock with online NTP servers
- Ping packet loss is now an accumulating value
- Time handling has been improved

1.1.43 (09-11-2017):

Added features:

- Firmware difference are shown in the Topology
- Added ability to download diagnostics information
- The official Ethernet/IP icon is included in the Topology
- Double IP addresses clearly show up in the Device List and Topology
- The USB ports can be disabled in the Settings
- The Trending page shows a message when there is not enough data yet
- The Alarm List is exportable
- When the Topology is loading, a spinner is shown
- NTP (Network Time Protocol) support is added. When this feature is used, a list of time servers can be supplied
- Ethernet/IP is detected and shown as a supported protocol in the device list, topology and report
- Non-Chrome users are advised to use Chrome for the best user experience
- Setting the date and time manually
- Displays a message when the Atlas is restarting. When the Atlas is operational again, the user is automatically sent to the login screen
- The device list is exportable as a CSV file

- Firmware differences are included in the report
- Atlas has its own icon in the Topology
- The Setup Wizard includes a cancel button
- New translations: Korean, Polish and Russian
- Uploading of new update packages using the web interface
- Before doing an update, Atlas warns not to power off the device
- A notification is shown in the System Bar when updates are ready to install
- Devices that do not provide proper information (via SNMP) for the topology are marked with blue NAMUR NE107 icon.
- Provide feedback on update process from USB-stick using the LEDs on the Atlas
- Added to the report:
    - Generation date
    - General info
    - Device data
    - Q-factor
    - Traffic light

Fixed issues:

- It's no longer possible to add the same tile to the Custom Dashboard twice
- The system recovers from freezes
- The system takes less CPU load
- Resolved issue when switching from Manual to DHCP in the network settings
- The Topology and device list where incorrectly built in case the Atlas' factory and office port where indirectly connected to each other
- Resolved a crash in the webserver
- Modbus TCP devices are recognized again
- Fixed a bug in the Q-Factors worst and best value
- The correct Atlas version is now shown on the login page and settings modal
- Q-Factor shows in/out errors while they are not reported in the Link details of the Topology
- Network name not always immediately present in Dashboard
- WiFi and Fiber optic are not yet distinctively visualized

1.0.35-2 (27-10-2017):

Contains a hotfix to correct the time in case of battery issues

1.0.35 (20-07-2017):

This version incorrectly reports its version as 1.0.34

Fixed issues:

- For the firmware update via USB-stick it sometimes requires to insert the USB-stick twice before the update is copied from the USB-stick
- Internal certificate is sometimes cleared after power-cycle
- Interface types Wireless and Fiber optic are not displayed in Topology
- OPC UA shows ??? instead of network name and contact details
- Limited visible number of notifications to 50

1.0.32 (01-06-2017):

First released version of firmware to run on Atlas, including:

- 3 User roles: admin, engineer, operator
- Dashboard
- Device list

- Topology
- Traffic light
- Q-Factor
- Trending of Q-Factor
- OPC UA Server
- Settings
- Setup Wizard
- Online help
- Firmware update by means of USB-stick