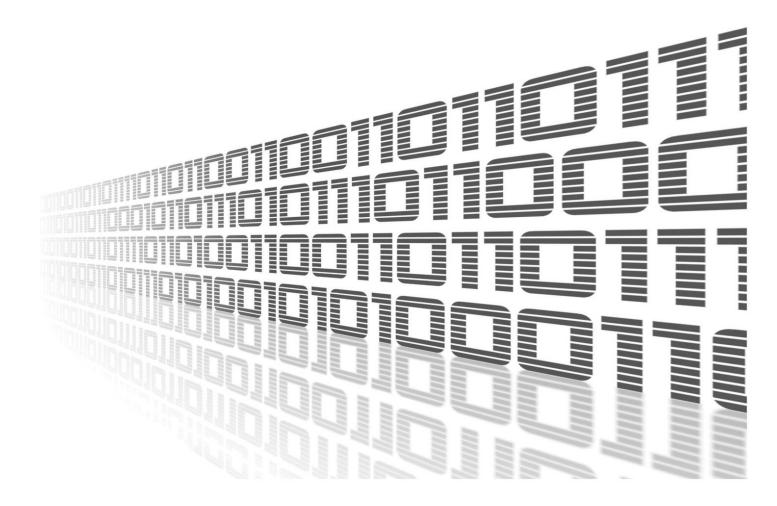




Event Notificator



Advantech Czech s.r.o., Sokolska 71, 562 04 Usti nad Orlici, Czech Republic Document No. APP-0106-EN, revision from 7th February, 2025.



Used symbols



Danger – Information regarding user safety or potential damage to the router.



Attention – Problems that can arise in specific situations.



Information – Useful tips or information of special interest.

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1. Changelog



This Router App has been tested on a router with firmware version 6.3.10. After updating your router's firmware to a higher version, check if you are using the latest version of this Router App. If not, it is important to update the app as well to ensure compatibility.

1.1 Event Notificator Changelog

v1.0.0 (2021-06-10)

• First release (8 event types, notifications through e-mail and SNMP traps).

v1.1.0 (2022-11-03)

· Reworked license information

v2.0.0 (2024-02-21)

- Added support for SNMP v2c and v3 protocols
- The Enterprise OID attribute transmitted with SNMP v1 Trap requests now specifies router series which makes Event Notificator SNMP requests consistent with those generated by the built-in SNMP notification service
- · Added description and summary files
- Recompiled with ModulesSDK 2.1.0

v2.1.0 (2024-04-16)

Added SMS notification support

v2.2.0 (2024-05-31)

- Added integrity checks for the -S1 platforms
- · Modified to work without unsafe-inline in HTTP header

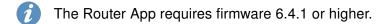
v2.2.1 (2025-01-31)

- Added a CSRF protection
- Fixed event notificator after password message has been changed
- Modified to use the password fieds from SDK 2.2.3
- · Limited settings editing for administrators only
- Improved memory safety and code reuse in event_notificator
- · Allowed to specify SNMP trap port
- Increased cool down and number of attempts for SMS resend in event notificator
- Added small startup delay in event notificator to allow network get configured
- Fixed a harmless error during initialization on non-S1 platforms

2. Description of the module



This Router App is not included in the default router firmware. Installing of this Router App is described in the Configuration manual (see Chapter Related Documents).



The *Event Notificator* provides users with a method to receive notifications on selected events through email, SMS, and SNMP.

3. Web Interface

Once the installation of the module is complete, the module's GUI can be invoked by clicking the module name on the Router Apps page of router's web interface.

Left part of this GUI contains menu with Configuration menu section and Administration menu section. Administration menu section contains Test Event item and Return item, which switches back from the module's web page to the router's web configuration pages. The main menu of module's GUI is shown on Figure 2.

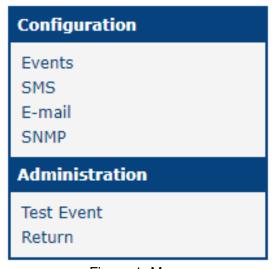


Figure 1: Menu

3.1 Configuration

3.1.1 Events

In the *Events* section you can enable whole module and select which traps will send e-mail notification to which Mail goups or SMS. Events itself are self explanatory.

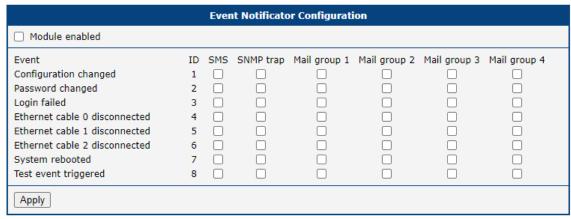


Figure 2: Configuration

3.1.2 SMS

In the SMS section you can fill the data about device to better locate the origin of event and add 8 telephone numbers to which the notifications are send. Telephone number should be entered without spaces. The advantage of using SMS is that the event notification SMS can be sent when an ethernet cable is disconnected. To be able to send SMS, the option **Module enabled** in the Event menu section have to be checked.

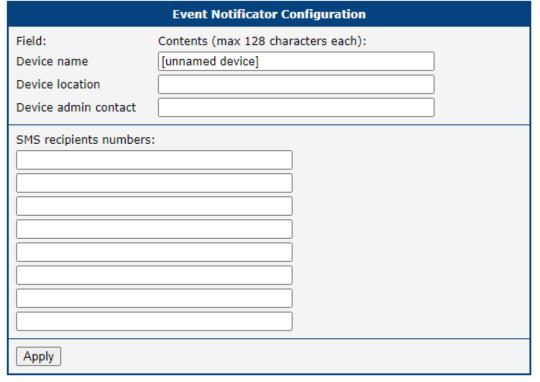


Figure 3: SMS

3.1.3 E-mail

In the e-mails section you can fill the data about device to better locate the origin of event and create up to 4 mail groups to which are notification send. Screenshot below is shortened with only 1 mail group just for quick example.

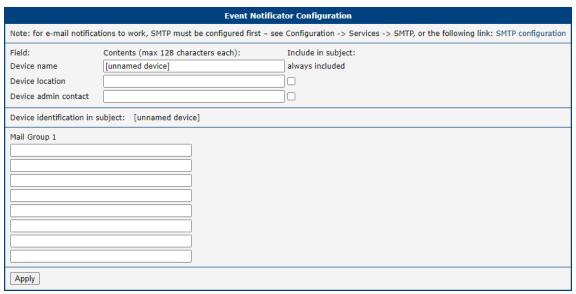


Figure 4: e-mails

3.1.4 SNMP

The SNMP configuration varies depending on the selected SNMP version. STMP server for sending Emails has to be properly configured in Configuration/Services/STMP for Email notification to work properly.

SNMP Version 1

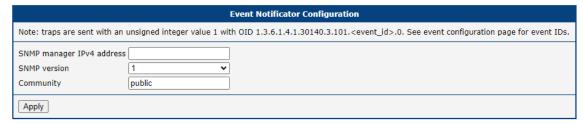


Figure 5: SNMP Version 1

Item	Description
SNMP manager	IP address of SNMP manager.
IPv4 address	
Community	String used as a form of security measure for controlling access to
	network management information

Table 1: SNMP Version 1 Configuration items description

SNMP Version 2c

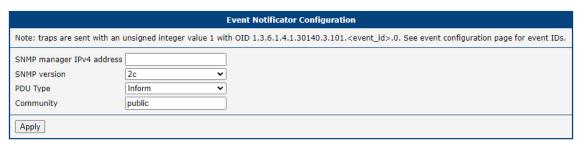


Figure 6: SNMP Version 2c

Item	Description
SNMP manager	IP address of SNMP manager.
IPv4 address	
PDU Type	Select PDU Type:
	Inform - Confirmed delivery.
	Trap - Unconfirmed notification.
Community	String used as a form of security measure for controlling access to network management information

Table 2: SNMP Version 2c Configuration items description

SNMP version 3

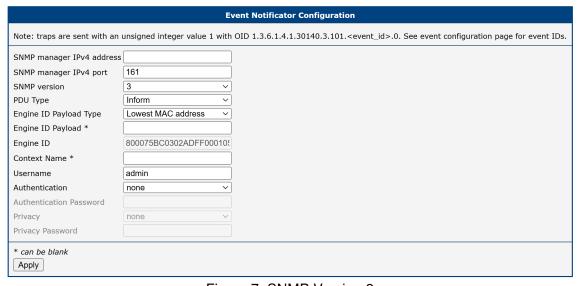


Figure 7: SNMP Version 3

Item	Description
SNMP manager	IP address of SNMP manager.
IPv4 address	
SNMP manager	Defines the communication port for monitoring and managing net-
IPv4 port	work devices over IPv4.
PDU Type	Select PDU Type:
	Inform - Confirmed delivery.
	Trap - Unconfirmed notification.
Engine ID Pay-	Select Engine ID Payload Type:
load Type	Lowest MAC Address (default value)
	ASCII Text
	Hexadecimal Value
Engine ID Pay-	When selected ASCII text of Hexadecimal Value in the Payload Type
load	enter desired value for further identification of Engine
Engine ID	ID of the Engine with added payload used as a unique identifier for
	SNMP entities generated from values selected above. It helps in
	distinguishing between different SNMP entities within the same net-
	work, allowing for secure communication and message processing.
	The Engine ID is used as part of the SNMPv3 message header for authentication and privacy purposes.
Context Name	String used to differentiate between different logical subsets of man-
(optional)	aged objects within an SNMP entity. Each context can have its own
(set of managed objects and access control settings. Contexts help
	in organizing and isolating management data, improving scalability,
	security, and efficiency of SNMP-based management systems.
Username	Username used for authentication purposes
Authentication	Select authentication from the list below
	• none
	• SHA-512
	• SHA-386
	• SHA-256
	• SHA-224
	• SHA
	• MD5
Authentication	Password for authentication selected above.
Password	
Privacy	Choose privacy. Options are none , DES and AES .
Privacy Pass-	When the Privacy above is selected to be DES or AES, enter the
word	password.

Table 3: SNMP Configuration items description

3.2 Administration

3.2.1 Test Event

Here you can trigger the test event. After triggering the test event here, notifications should be sent out through all the channels configured on the previous pages. You can use this to test whether your configuration is correct. Note that you have to both enable the notification method in the Events page, and properly set up details in the *e-mail* page and/or the *SNMP* page first.

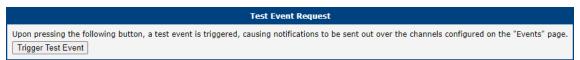


Figure 8: Test event

3.3 Troubleshooting

In case of any problems, check Status / System Log for any hints.

```
2024-05-03 07:23:59 dnsmasq[1215]: using nameserver 62.141.16.161#53
2024-05-03 07:58:30 https: user 'root' logged in from 192.168.1.42
2024-05-03 08:33:24 last message repeated 1 time
2024-05-03 08:33:32 https: user 'root' added user module 'event_notificator.v3.tgz'
2024-05-03 08:33:32 event_notificator[18277]: module disabled, not starting
2024-05-03 08:37:04 event_notificator[19143]: module disabled, not starting
2024-05-03 08:37:15 event_notificator[19202]: module disabled, not starting
2024-05-03 08:37:32 event_notificator[19286]: started
2024-05-03 08:37:32 event_notificator[19286]: Start too long after reboot to trigger reboot event
2024-05-03 09:26:00 https: user 'root' logged in from 192.168.1.42
```

Figure 9: Troubleshooting

4. Related Documents

You can obtain product-related documents on Engineering Portal at icr.advantech.com address.

To get your router's *Quick Start Guide*, *User Manual*, *Configuration Manual*, or *Firmware* go to the *Router Models* page, find the required model, and switch to the *Manuals* or *Firmware* tab, respectively.

The Router Apps installation packages and manuals are available on the Router Apps page.

For the *Development Documents*, go to the *Development* page.