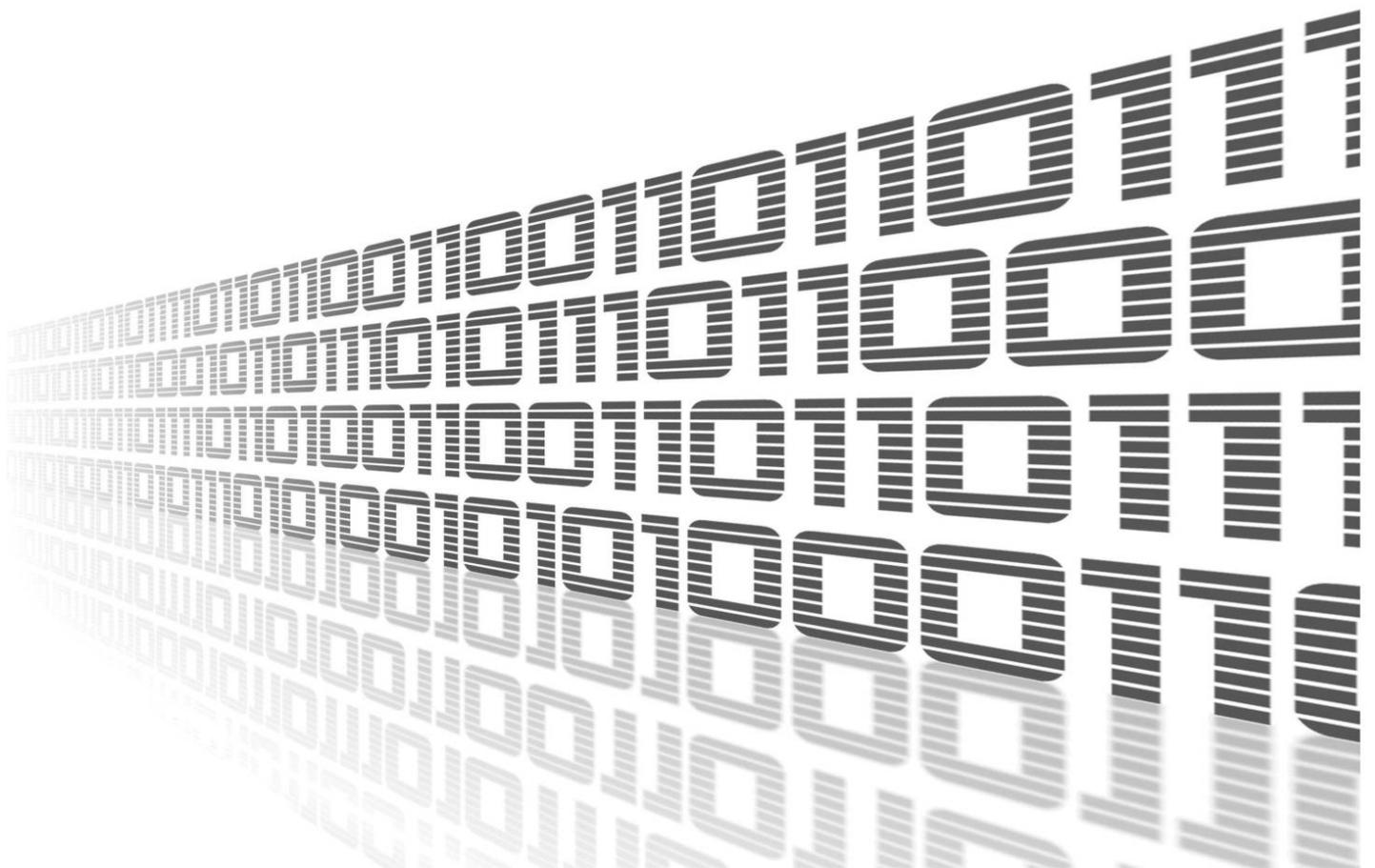




Backup APN



© 2025 Advantech Czech s.r.o. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photography, recording, or any information storage and retrieval system without written consent. Information in this manual is subject to change without notice, and it does not represent a commitment on the part of Advantech.

Advantech Czech s.r.o. shall not be liable for incidental or consequential damages resulting from the furnishing, performance, or use of this manual.

All brand names used in this manual are the registered trademarks of their respective owners. The use of trademarks or other designations in this publication is for reference purposes only and does not constitute an endorsement by the trademark holder.

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.

Contents

1. Backup APN	1
1.1 Introduction	1
1.2 Web Interface	1
1.3 Status	2
1.3.1 Overview	2
1.3.2 System Log	3
1.4 Configuration	4
1.4.1 Global	4
2. Related Documents	6

List of Figures

1 Menu	1
2 Status Overview	2
3 System Log	3
4 Global Configuration	4

List of Tables

1 Configuration Example Items Description	5
---	---

1. Backup APN

1.1 Introduction



This router app is not installed on *Advantech* routers by default. See the *Configuration Manual* for instructions on how to upload a Router App to the router. For more information, refer to the *Configuration Manual*, chapter *Customization* → *Router Apps*.

The Backup APN Router App allows you to configure a backup (secondary) APN for each available SIM slot. This module provides a mechanism to handle APN connection failures.

1.2 Web Interface

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

The left side of the GUI contains a menu with *Status*, *Configuration*, and *Information* sections. The *Customization* section contains only the *Return* item, which navigates back from the module's web page to the router's main configuration pages. The main menu of the module's GUI is shown in Figure 1.

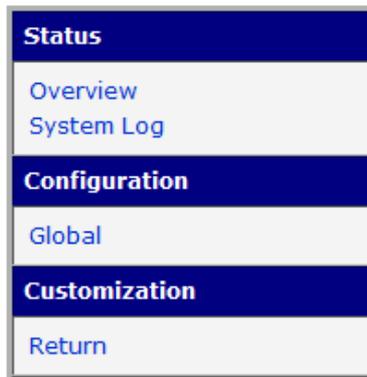


Figure 1: Menu

1.3 Status

1.3.1 Overview

An overview of the current status can be viewed by clicking on the *Overview* item in the main menu of the module's web interface. At the top of this page is a list of services and information indicating whether each service is active or not.

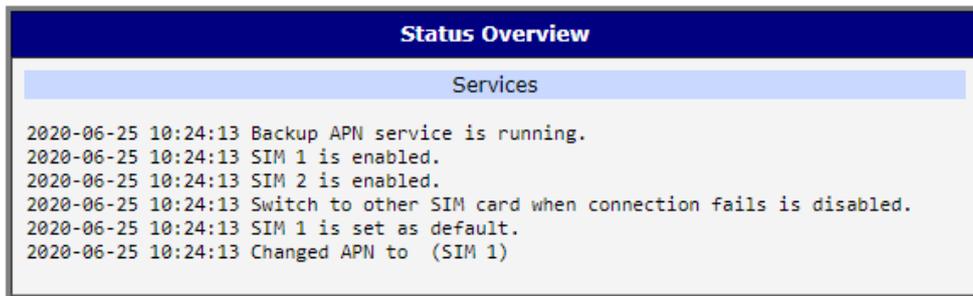
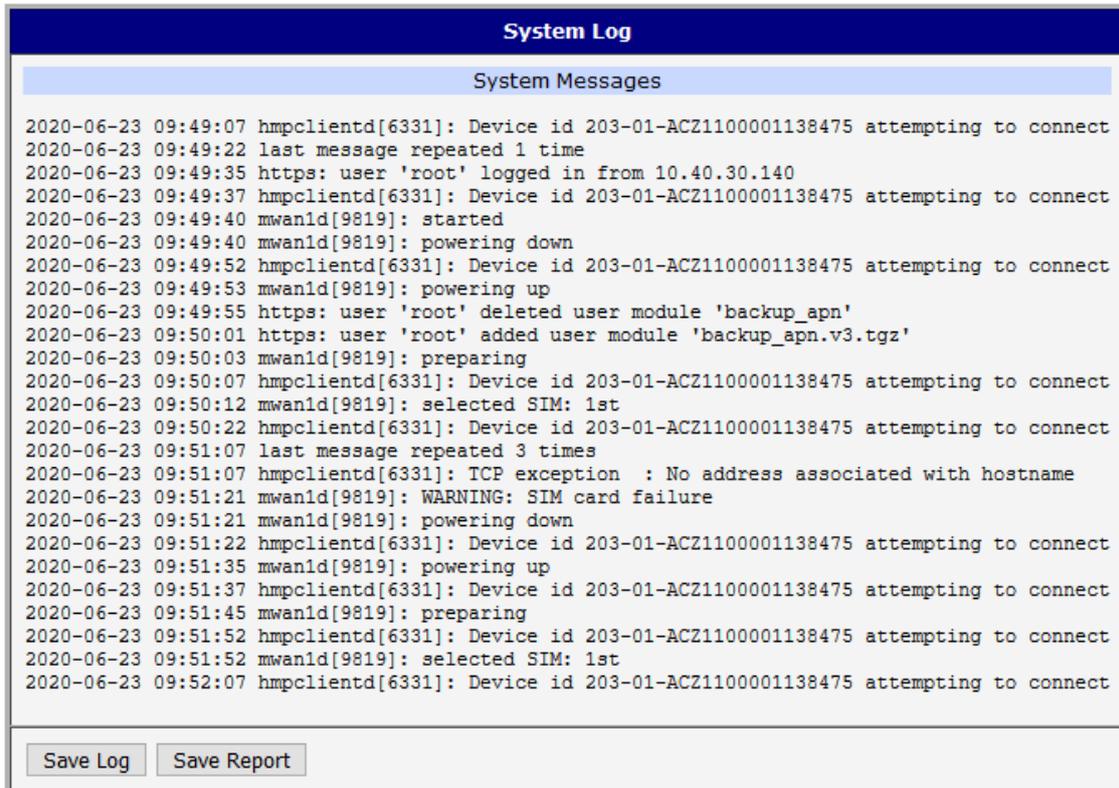


Figure 2: Status Overview

1.3.2 System Log

In case of any connection problems, the system log can be viewed by clicking the *System Log* menu item. Detailed reports from individual applications running on the router are displayed. Use the *Save Log* button to save the system log to a connected computer (the text file will have the .log extension). The second button, *Save Report*, is used for creating a detailed report (containing statistical data, routing and process tables, system log, and configuration in a single .txt file for support purposes).

The default length of the system log is 1000 lines. After reaching 1000 lines, a new file is created for storing the system log. Once the second file reaches 1000 lines, the first file is overwritten with the new one.



```
System Log
System Messages
2020-06-23 09:49:07 hmpclientd[6331]: Device id 203-01-ACZ1100001138475 attempting to connect
2020-06-23 09:49:22 last message repeated 1 time
2020-06-23 09:49:35 https: user 'root' logged in from 10.40.30.140
2020-06-23 09:49:37 hmpclientd[6331]: Device id 203-01-ACZ1100001138475 attempting to connect
2020-06-23 09:49:40 mwanld[9819]: started
2020-06-23 09:49:40 mwanld[9819]: powering down
2020-06-23 09:49:52 hmpclientd[6331]: Device id 203-01-ACZ1100001138475 attempting to connect
2020-06-23 09:49:53 mwanld[9819]: powering up
2020-06-23 09:49:55 https: user 'root' deleted user module 'backup_apn'
2020-06-23 09:50:01 https: user 'root' added user module 'backup_apn.v3.tgz'
2020-06-23 09:50:03 mwanld[9819]: preparing
2020-06-23 09:50:07 hmpclientd[6331]: Device id 203-01-ACZ1100001138475 attempting to connect
2020-06-23 09:50:12 mwanld[9819]: selected SIM: 1st
2020-06-23 09:50:22 hmpclientd[6331]: Device id 203-01-ACZ1100001138475 attempting to connect
2020-06-23 09:51:07 last message repeated 3 times
2020-06-23 09:51:07 hmpclientd[6331]: TCP exception : No address associated with hostname
2020-06-23 09:51:21 mwanld[9819]: WARNING: SIM card failure
2020-06-23 09:51:21 mwanld[9819]: powering down
2020-06-23 09:51:22 hmpclientd[6331]: Device id 203-01-ACZ1100001138475 attempting to connect
2020-06-23 09:51:35 mwanld[9819]: powering up
2020-06-23 09:51:37 hmpclientd[6331]: Device id 203-01-ACZ1100001138475 attempting to connect
2020-06-23 09:51:45 mwanld[9819]: preparing
2020-06-23 09:51:52 hmpclientd[6331]: Device id 203-01-ACZ1100001138475 attempting to connect
2020-06-23 09:51:52 mwanld[9819]: selected SIM: 1st
2020-06-23 09:52:07 hmpclientd[6331]: Device id 203-01-ACZ1100001138475 attempting to connect
Save Log Save Report
```

Figure 3: System Log

1.4 Configuration

1.4.1 Global

The module's configuration can be adjusted on the *Global* page, located under the *Configuration* menu section. All configuration items for the *Global* configuration page are described in the table below.

Each SIM slot has its own configuration section on the *Global* page. The example below shows a router with two SIM card slots.

Global Configuration

Enable Backup APN service

SIM 1 Primary APN*

SIM 1 Primary Username*

SIM 1 Primary Password*

SIM 1 Secondary APN*

SIM 1 Secondary Username*

SIM 1 Secondary Password*

SIM 2 Primary APN*

SIM 2 Primary Username*

SIM 2 Primary Password*

SIM 2 Secondary APN*

SIM 2 Secondary Username*

SIM 2 Secondary Password*

APN Failure Timeout sec

Secondary APN Timeout min

** can be blank*

Figure 4: Global Configuration

Item	Description
Enable Backup APN service	When enabled, the Backup APN functionality of the module is activated.
SIM 1 Primary APN	Enter the primary APN for SIM 1.
SIM 1 Primary Username	Enter the username for the primary APN of SIM 1.
SIM 1 Primary Password	Enter the password for the primary APN of SIM 1.
SIM 1 Secondary APN	Enter the secondary (backup) APN for SIM 1.
SIM 1 Secondary Username	Enter the username for the secondary (backup) APN of SIM 1.
SIM 1 Secondary Password	Enter the password for the secondary (backup) APN of SIM 1.
SIM 2 Primary APN	Enter the primary APN for SIM 2.
SIM 2 Primary Username	Enter the username for the primary APN of SIM 2.

Continued on the next page

Continued from previous page

Item	Description
SIM 2 Primary Password	Enter the password for the primary APN of SIM 2.
SIM 2 Secondary APN	Enter the secondary (backup) APN for SIM 2.
SIM 2 Secondary Username	Enter the username for the secondary (backup) APN of SIM 2.
SIM 2 Secondary Password	Enter the password for the secondary (backup) APN of SIM 2.
APN Failure Timeout	Enter the timeout (in seconds) after which the module switches from the failed primary APN to the secondary (backup) APN.
Secondary APN Timeout	Enter the timeout (in minutes) after which the module attempts to switch back to the primary APN.

Table 1: Configuration Example Items Description



When enabled, the *Mobile WAN* settings from the router's main configuration are overridden, and the credentials from this module's *Global* configuration table are used. For proper operation, ensure that the *Switch to other SIM card when connection fails* option in the main *Mobile WAN* settings is disabled.

2. 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.