

ADVANTECH



DHCP Based on MAC OUI



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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.

 *Example* – Example of function, command or script.

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1. Changelog

1.1 DHCP Based on MAC OUI Changelog

v1.0.0 (2019-10-11)

- First release.

v1.1.0 (2020-10-01)

- Updated CSS and HTML code to match firmware 6.2.0+.

2. Description of the Router App



This router app is not contained in the standard router firmware. Uploading of this router app is described in the Configuration manual (see Chapter [Related Documents](#)).

This module handles IP address assignment for devices according to its MAC OUI (first 3 bytes of MAC address). For example when you have multiple devices from certain manufacturer, they usually have same MAC OUI and this module can help you with assignment of IP address for all of those devices.



For *DHCP based on MAC OUI* router app to work, you have to disable routers own DHCP protocol.

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 Status menu section and Customization menu section. Customization menu section contains only the 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 Global

All DHCP base on MAC OUI router app settings can be configured by clicking on the *Global* item in the main menu of module web interface. An overview of configurable items is given below.

The screenshot shows a web configuration page titled "Configuration". At the top, there is a blue header with the word "Configuration". Below the header, there is a checked checkbox labeled "Enable". Underneath, there is a dropdown menu for "Interface" currently showing "eth0". Below that are two input fields: "Free Pool Start" and "Free Pool End *". Following these are two columns of input fields: "MAC OUI *" and "IP Address *". There are eight rows of these input fields. Below the input fields, there is a note: "* can be blank". At the bottom of the configuration area, there is a note: "DHCP on the corresponding interface must be disabled in the router's configuration." and an "Apply" button.

Figure 2: Configuration

Item	Description
Enable	Enables usage of DHCP based on MAC OUI functionality. In this case please disable DHCP client in Router configuration.
Free Pool Start	Enter first IP address from range
Free Pool End	Enter last IP address from range
MAC OUI & IP Address pair	Enter up to 8 rules for IP address assignation according to MAC OUI

Table 1: Configuration items description

4. Related Documents

You can obtain product-related documents on *Engineering Portal* at icr.advantech.cz 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 [DevZone](#) page.