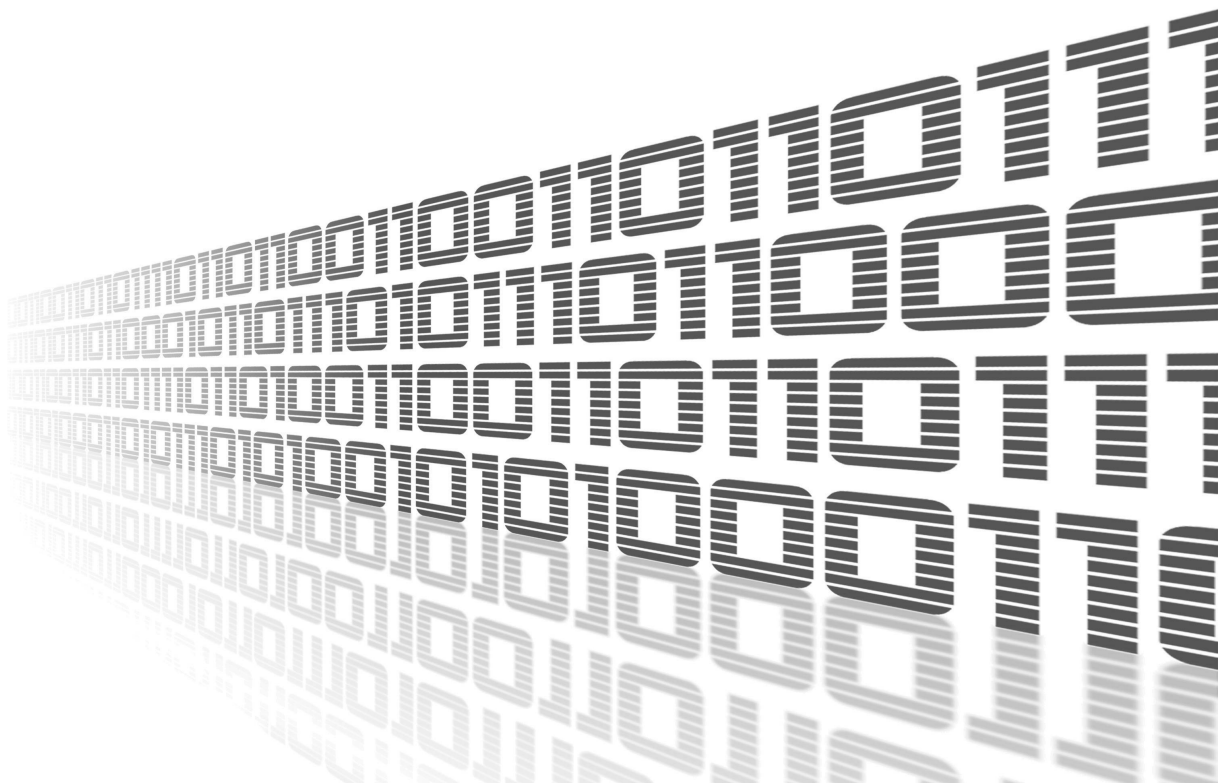




WiFi STA Relay

APPLICATION NOTE



Used symbols



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



Attention – Problems that may arise in specific situations.



Information or notice – Useful tips or information of special interest.



Example – example of function, command or script.



Contents

1	Introduction	1
2	Web Interface	2
2.1	Configuration	3
2.1.1	Global	3
2.2	Information	4
2.2.1	Licenses	4
3	Related Documents	5

List of Figures

1	Wifi STA Example	1
2	Menu	2
3	Configuration	3
4	Licenses	4

1. Introduction



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

WiFi STA Relay is router app used to relay and dynamically redirect incoming connections to a target host. Its main purpose in routers is to extend the wireless network. For example, when Router is in STA Wireless Station mode, it can be used to bridge WAN and LAN interfaces to create a larger Wireless network. This type of configuration connects devices from different networks into a single network, making it possible for the devices to communicate with each other while also providing the devices with an Internet connection.

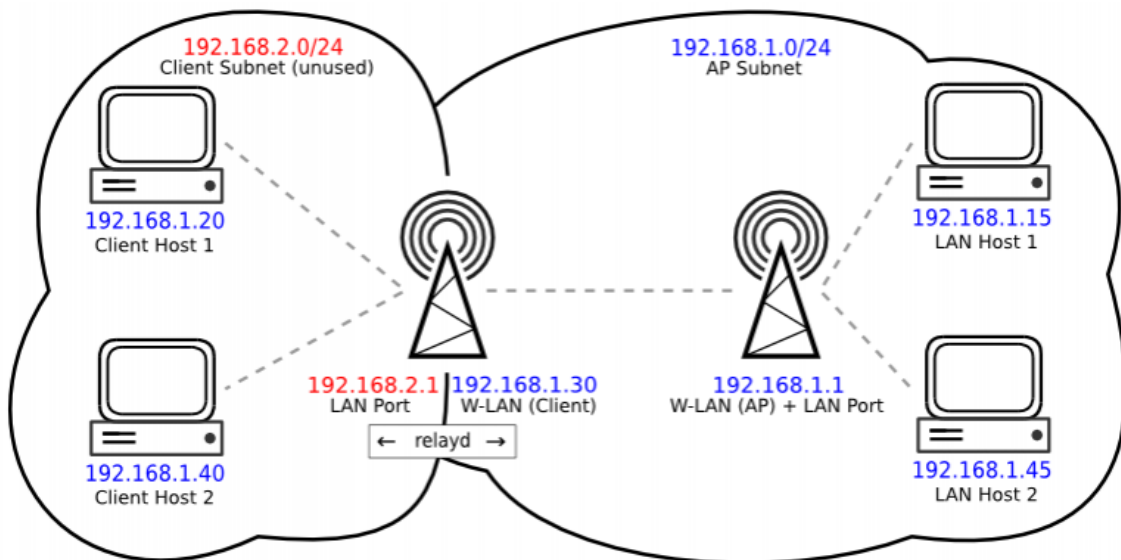


Figure 1: Wifi STA Example

This image shows an example setup. LAN interface of the Wi-Fi STA device **MUST** be on a different subnet for relayd to work (since it is routing traffic, it expects 2 different subnets).

Since both ethernet ports and Access Point Wi-Fi network are on the same LAN interface, all clients connecting to the Ethernet ports and to the Access Point Wi-Fi network of the Wi-Fi STA device will be routed by relayd and will be connected to your main network.

The LAN interface subnet will be used only as a “management” interface, as devices connecting to the Wi-Fi repeater will be on the main network’s subnet instead.

2. 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 App page of router's web interface.

Left part of this GUI contains menu with Status, Configuration menu section and Information 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 1.



Status
Overview
System Log
Configuration
Global
Information
Licenses
Customization
Return

Figure 2: Menu

2.1 Configuration

2.1.1 Global

All WiFi STA Relay 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.

Figure 3: Configuration

Item	Description
Enable WiFi STA Relay service	Enables WiFi STA Relay functionality.
Ethernet Interface	Select ethernet interface
Enable access from ethernet interface	Clients on ethernet gains access to the router
Disable DHCP parsing	Disabling DHCP options parsing prevents the introduction of a default route, that way the traffic addressed to not managed local networks is routed using the main routing table.
Set ARP source address for managed interfaces	Use the specified address as the arp src address for managed interfaces.

Table 1: Configuration items description

2.2 Information

2.2.1 Licenses

You can check the licenses on the Licenses Page in the Information section in the main menu.

WiFi STA Relay Licenses		
Project	License	More Information
relayd	GPLv2	License
ubox	Ubox	License

Figure 4: Licenses

3. 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.