https://wiki.teltonika-networks.com/view/TRB500_Hotspot

TRB500 Hotspot

The information in this page is updated in accordance with firmware version **TRB5_R_00.07.08**

Note: Firmware versions before TRB5_R_00.07.04.4 will not be supported by devices from batch 09 and higher..

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Contents

Summary

On Teltonika Networks devices a **Hotspot** is a service that provides authentication, authorization and accounting for a network. This chapter is an overview of the Hotspot section for TRB500 devices.

Note: Hotspot is additional software that can be installed from the **System → Package Manager** page.

General

Hotspot Instances

The **Hotspot Instances** section displays the main parameters of your Hotspot. By default, a Hotspot instance does not exist on the device. To create a new instance and begin configuration:

1. select an 'Interface';
2. click the 'Add' button;

After this, a new Hotspot configuration window will appear.

General Settings

The **General Settings** window is where most of the Hotspot configuration takes place. Look to the sub-sections below for information on configuration fields found in the General Settings sections.

General

Field	Value	Description
Configuration profile	Cloud4wi | Default | Hotspotsystems | Purple portal; default: **Default**	Pre-configures Hotspot settings according to the selected service provider.
Enable	off | on; default: **on**	Turns the Hotspot instance on or off.
Hotspot Network	ip/netmask; default: **192.168.3.0/24**	IP address and subnet of the Hotspot network.
IP Address	ip; default: **192.168.3.254**	Defines the IP address of your Hotspot router in network.
Authentication mode	Local users | Radius | MAC authentication | Single sign-on| SMS OTP; default: **Local users**	Authentication mode defines how users will connect to the Hotspot.
Local users: Allow signup	off | **on**; default: **off**	Allows users to sign up to hotspot via landing page.
Local users: Expiration time	integer; default: **0**	User credential expiration time. Applies to users who signed up via landing page.
Local users: Users group	user group; default: **default**	The user group to which users signed up via landing page should be assigned to.
Radius: Enable MAC authentication	off | on; default: **off**	Enable MAC address authentication.

MAC authentication: Require password	off | on; default: **off**	Enables password requirement for MAC authentication.
MAC authentication: MAC auth password	string; default: **none**	Password for MAC authentication.
MAC authentication / Single sign-on/ SMS OTP: User group	select; default: **default**	Specifies the group of dynamically created users.
SMS OTP: Allow password duplicates	off | on; default: **off**	Allows more than one user to login with a same password.
SMS OTP: Expiration time	unsingned integer; default: **0**	User expiration time in sec (0 means unlimited).
Landing Page	Internal | External; default: **Internal**	Location of the landing page.
UAM Port	integer; default: **3990**	Port to bind for authenticating clients.
Password encoding	off | on; default: **none**	Password encoding with the challenge.
Landing page address	url; default: **none**	External landing page address (http://www.example.com).
UAM Secret	string; default: **none**	Shared secret between uamserver and hotspot.
Success page	Success Page | Original URL | Custom; default: **Success page**	Location to return to after successful authentication.
Custom	url; default: **none**	Address must contain protocol (http://www.example.com).

Advanced

Field	Value	Description
Additional interfaces	Available interfaces; default: **none**	Choose additional the interfaces you want to attach to this hotspot instance.
Enable MAC blocking	off | on; default: off	Blocks access to MAC addresses that have reached set amount of failed login attempts.
Logout address	ip; default: **1.0.0.0**	IP address to instantly logout a client accessing it.
Protocol	HTTP | HTTPS; default: **HTTP**	Protocol to be used for landing page.
Enable TOS	off | on; default: **off**	Enables Terms of Service (ToS) requirement. Client device will be able to access the Internet only after agreeing ToS.
Trial access	off | **on**; default: **off**	Enables trial internet access for a specific group.
Group	User group; default: **default**	Specifies the group of trial users.
Subdomain	string; default: **none**	Combined with Domain to make a DNS alias for the Hotspot IP address.
Domain	string; default: **none**	Combined with Subdomain to make a DNS alias for the Hotspot IP address.

HTTPS to landing page redirect	off | **on**; default: **off**	Redirect initial pre-landing page HTTPS requests to hotspot landing page.
Certificate files from device	off | on; default: **off**	Specified whether to upload key & certificate files from computer or to use files generated on this device via the *System → Administration →* ***Certificates*** page.
SSL key file	key file; default: **none**	Upload/select SSL key.
SSL certificate file	certificate file; default: **none**	Upload/select SSL certificate.
Primary DNS server	ip; default: **8.8.8.8**	Additional DNS servers that are to be used by the Hotspot.
Secondary DNS server	ip; default: **8.8.4.4**	Additional DNS servers that are to be used by the Hotspot.

Radius

Radius authentication mode uses an external RADIUS server, to which you have to provide an address to, instead of using the router's Local Authentication. If you are using Local authentication, this section is not visible.

Field	Value	Description
RADIUS server #1	ip; default: **none**	The IP address of the RADIUS server #1 that is to be used for Authenticating your wireless clients.
RADIUS server #2	ip; default: **none**	The IP address of the RADIUS server #2 that is to be used for Authenticating your wireless clients.
Authentication port	integer [0..65535]; default: **1812**	RADIUS server authentication port.
Accounting port	integer [0..65535]; default: **1813**	RADIUS server accounting port.
NAS identifier	string; default: **none**	NAS-Identifier is one of the basic RADIUS attributes.
Radius secret key	string; default: **none**	The secret key is a password used for authentication with the RADIUS server.
Swap octets	off | on; default: **off**	Swaps the meaning of input octets and output as it relates to RADIUS attributes.
Location name	string; default: **none**	Custom location name for your Hotspot.
Location ID	string; default: **none**	Custom location ID for your Hotspot.

Walled Garden

You can add a list of addresses that users connected to the Hotspot will be able to reach without any authentication. By default this list is empty. Simply write addresses into the Address List.

Format of address is **website.com** (does not include https://www).

Field	Value	Description
Address list	domain names (one record per line); default: **none**	List of addresses the client can access without first authenticating. One record per line. See placeholder for accepted formats.

URL Parameters

The **URL parameters** section becomes visible when **Landing page** is selected as **External** in General settings section.

Field	Value	Description
UAM IP	string; default: **none**	The IP Address of the Captive Portal gateway.
UAM port	string; default: **none**	The port on which the Captive Portal will serve web content.
Called	string; default: **none**	The MAC address of the IP Address of the Captive Portal gateway.
MAC	string; default: **none**	The MAC address of the client trying to gain Internet access.
IP	ip default: **none**	The IP Address of the client trying to gain Internet access.
NAS id	string; default: **none**	An identification for the Captive Portal used in the RADIUS request.
Session id	string; default: **none**	The unique identifer for session.
User url	string; default: **none**	The URL which the user tried to access before he were redirected to the Captive Portal's URL's pages.
Challenge	string; default: **none**	A challenge that should be used together with the user's password to create an encrypted phrase used to log on.
Custom 1	string; default: **none**	Add custom name and custom value which will be displayed in url parameters.
-	SSID | Hostname | FW version | --Custom--; default: **SSID**	-
Custom 2	string; default: **none**	Add custom name and custom value which will be displayed in url parameters.
-	SSID | Hostname | FW version | --Custom--; default: **SSID**	-

User Scripts

In this section you can add custom **Scripts** that will be executed after a session is authorized in the **Session up** section, after session has moved from authorized state to unauthorized in the **Session down** section and after a new user has been signed up in the **User signup** section.

Field	Value	Description
Session up	bash script; default: **none**	Script executed after a session is authorized. Executed with the environment variables (Please refer to the wiki).
Session down	bash script; default: **none**	Script executed after a session has moved from authorized state to unauthorized. Executed with the environment variables (Please refer to the wiki).
User signup	bash script; default: **none**	Script executed after a new user has been created during signup process. Executed with the environment variables (Please refer to the wiki).

Local Users

The **Local Users** section is used to create and manage users that can connect to the Hotspot. The elements comprising the Local Users page are explained in the list and figure below.

1. Entering a Username, Password and clicking the 'Add' button creates a new user.
2. The 'Group' dropdown menu assigns a user to another group.
3. The 'Edit' button lets you change a user's password or assign the user to another group.
4. The 'Delete[X]' button deletes a user.

Landing Page

This section is used to define how your Hotspot's **Landing Page** will look like to connecting users.

General Settings

General Settings section lets you choose the authentication protocol and theme that will be used in the Landing Page. You can download more themes using the Package Manager

Themes

The **Themes** section displays all available Landing Page themes. In order to download a theme, click the 'Download' button, in order to edit a theme, click the 'Edit' button next to it.

Images

The **Images** section allows you to upload custom images to different objects.

Style Settings

Pressing 'Edit' button next to style settings lets you edit how your landing page will look visually using CSS syntax.

View Settings

In **View Settings** you can access and modify default templates for various parts of landing page and edit their HTML code.

Custom Theme

To use custom theme you can download default theme and edit it's content. Then use 'Browse' button to upload it.

User Groups

User Groups provides the possibility to set different connection limits for different users. A group called 'default' is already created and does not have any limitations set by default. You can

1. create a new group by entering a custom Name and clicking 'Add'
2. or configure the existing rule by clicking the 'Edit' button next to it.

A group's settings page will look similar to this:

Field	Value	Description
Idle timeout	integer; default: **none**	A timeout in seconds after which idle users are automatically disconnected from the Hotspot. (0 means unlimited.)
Time limit	integer; default: **none**	Disables hotspot user after time limit in sec is reached. (0, meaning unlimited)
Download bandwidth	integer; default: **none**	Maximum download bandwidth that the users assigned to this template can achieve. Bandwidth can be specified in Mbit/s.
Upload bandwidth	integer; default: **none**	Maximum upload bandwidth that the users assigned to this template can achieve. Bandwidth can be specified in Mbit/s.

Download limit	integer; default: **none**	A received data limit that the users assigned to this template can reach. After the data limit is reached, the user will lose data connection. Download limit is specified in MB.
Upload limit	integer; default: **none**	A sent data limit that the users assigned to this template can reach. After the data limit is reached, the user will lose data connection. Upload limit is specified in MB.
Warning	integer; default: **none**	Send an SMS warning to hotspot user after warning value of download or upload data in MB is reached. Only works with SMS OTP authentication.
Period	Month | Week | Day; default: **Month**	The beginning of the period during which the restriction specified in this section will apply. After the period is over, all specified limits are reset.
Start day	integer [1..31] | Monday..Sunday | integer [1..24]; default: **1**	Choices changes depending on what 'Period' was chosen. Specifies which day of the month, week or hour of the day the limits will be reset.

User Management

The **User sessions** tab displays the status and session statistics of currently logged in users. You can also "kick" (deauthenticate) a user by clicking the 'Logout' button next to it.

The **Registered Hotspot Users** tab displays the data of unique users that have registered to the hotspot before.