

Template:Networking rutos manual hotspot 2.0 rut2 rut9

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Contents

- [1 Hotspot 2.0](#)
 - [1.1 Hotspot 2.0 Configuration](#)
 - [1.1.1 General Setup](#)
 - [1.1.2 OSU Provider](#)
 - [1.1.3 WAN Metrics](#)
 - [1.2 Venue Name Information](#)
 - [1.3 3GPP Cellular Network Information](#)
 - [1.4 Network Access Identifier \(NAI\) Realm Information](#)
 - [1.5 Operator Friendly Name](#)
 - [1.6 Connection Capability](#)

Hotspot 2.0

The **Hotspot 2.0** displays available WiFi interfaces. In order to begin configuring an interface click the 'Edit' button next to it:

[[File:Networking_rutos_manual_hotspot_2.0_interfaces_edit_button_wifi_v3_{{{wifi}}}.png|border|class=tilt-border]]

After this you should be redirected to the configuration page for that interface.

Hotspot 2.0 Configuration

The main **configuration parameters** of a Hotspot 2.0 interface will be discussed in this section.

A Hotspot 2.0 interface requires WPA2-EAP encryption. You can configure it in the *Network → Wireless* page (click 'Edit' next to an interface and find the `[[{{{name}}} Wireless#Wireless_Security|Wireless Security]]` section).

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General Setup

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Field

Value

Description

Enable	off on; default: off	Turns Hotspot 2.0 for this interface on or off.
Internet access	off on; default: off	Is used to inform the client device whether internet access is available.
Access Network Type	Private network Private network with guest access Chargeable public network Free public network Personal device network Emergency services only network Test or experimental; default: Private network	The access network type present in beacon and probe response frames. Mobile devices can use this information when selecting a hotspot.
HESSID	mac; default: none	Homogeneous ESS identifier (optional). This shall be identical to one of the BSSIDs in the homogeneous ESS.
Roaming consortium OI	3 or 5 octet hexstring; default: none	Only first three entries are available through Beacon and Probe Response frames.
Network authentication type	Not configured Acceptance of terms and conditions On-line enrollment supported http/https redirection DNS redirection; default: Not configured	Type of authentication used on this network.
IP Address type availability	Address type not available Public IPv4 address available Port restricted IPv4 address available Single NATed IPv4 address available Double NATed IPv4 address available Port restricted IPv4 address and single NATed IPv4 address available Port restricted IPv4 address and double NATed IPv4 address available Availability of the address type is not known; default: Availability of the address type is not known	Provides information about the IP address version and type that would be available to a mobile device after it authenticates to the network.
Domain name	domain name; default: none	The Domain Name ANQP-element provides a list of one or more domain names of the entity operating the hotspot network.
Venue group	various; default: Unspecified	Describes the venue in which the hotspot is located.
Venue type	various; default: Unspecified	Describes the venue in which the hotspot is located.

OSU Provider

Field	Value	Description
OSU ssid	string; default: none	Informs client devices about the SSID used for OSU connections.
OSU server URL	url; default: none	Is used to inform the client device whether internet access is available.

Name language code	string; default: none	Two or three character language code (ISO-639).
OSU friendly name	string; default: none	User-friendly name of an OSU service provider.
OSU NAI	string; default: none	OSU network access identifier.
OSU method list	OMA-DM SOAP-XML; default: none	Configures the supported OSU method(s) of the OSU provider.
Description language code	string; default: none	Two or three character language code (ISO-639).
Description	string; default: none	OSU service description.

WAN Metrics



Field	Value	Description
Link Status	Link up Link Down; default: Link up	Provides information about the WAN link that connects the hotspot to the Internet.
Downlink Speed	integer [1..4294967295]; default: none	Maximum downlink speed in Kbps.
Uplink Speed	integer [1..4294967295]; default: none	Maximum uplink speed in Kbps.

Venue Name Information

The **Venue Name Information** is used to configure one or more Venue Name values for Venue Name ANQP information. To add a new Venue configuration, click the 'Add' button.



You should see a new entry appear in the Venue Name Information list.



Field	Value	Description
Language Code	string; default: none	Two or three character language code (ISO-639).
Venue Name	string; default: none	Name of this venue.
Venue URL Information	url; default: none	Venue URL to provide additional information corresponding to Venue Name information (<u>the URL should contain protocol</u>).

3GPP Cellular Network Information

The **3GPP Cellular Network Information** section is used to uniquely identify mobile network operators. To add a new mobile operator instance, click the 'Add' button.



You should see a new entry appear in the 3GPP Cellular Network Information list.



Field	Value	Description
Mobile Country Code	integer; default: none	Mobile country code (3 decimal digits).
Mobile Network Code	integer; default: none	Mobile network code (2 or 3 decimal digits).

Network Access Identifier (NAI) Realm Information

The **Network Access Identifier (NAI) Realm Information** parameters provide information for stations using interworking network selection to allow automatic connection to a network based on credentials. To add a new NAI Realm Information configuration, click the 'Add' button.



You should see a new entry appear in the Network Access Identifier (NAI) Realm Information list.



Field	Value	Description
NAI Realm	url; default: Link up	The NAI Realm provides a list of NAI realms corresponding to the Home SPs that can authenticate a client device.
EAP Method	EAP-TLS EAP-TTLS PEAP EAP-FAST; default: Undefined	Identifies the EAP method supported by that NAI realm for authentication.
Authentication Parameter	Undefined Non EAP PAP Non EAP CHAP Non EAP MSCHAP Non EAP MSCHAPV2 Credential certificate Credential username/password; default: Undefined	EAP method authentication parameter.

Operator Friendly Name

The client device may obtain the **Operator Friendly Name** via GAS/ANQP queries to assist the user during manual hotspot selection. To add a new Operator Friendly Name configuration, click the 'Add' button.



You should see a new entry appear in the Operator Friendly Name list.



Field	Value	Description
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Language Code string; default: **Link up** Two or three character language code (ISO-639).
Operator's Name string; default: **none** Provides a friendly name for the Hotspot Operator.

Connection Capability

The **Connection Capability** section provides information on the status of commonly used communication protocols and ports. To add a new protocol/port configuration, click the 'Add' button.



You should see a new entry appear in the Connection Capability list.



Field	Value	Description
Protocol	ICMP TCP UDP; default: ICMP	Network protocol type.
Port Number	integer [0..65535]; default: none	TCP/UDP port number.
Status	Closed Open Unknown; default: Closed	Status to be displayed for the selected protocol/port combination.