

## Setting up a basic PtP link



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For this example, we have two **InfiNet Wireless R5000** units with the default factory configuration.

- **Step 1**

In order to access each of the units, we have to make sure that there is network connectivity between the PC used for the configurations and the units on their default Ethernet IP address which is 10.10.20.1/24.

- **Step 2**

Connect to the first unit using a Web browser and type any username and any password in the corresponding fields. Let's use in this example "test" for both username and password. After the authentication, a warning message pops up and requests us to change these initial authentication credentials:



Figure - Warning message – setup system login & password

- **Step 3**

In order to change the initial credentials, we have to go to "Basic Settings" → "System Settings" and fill in the "User Name" and "Password" fields with the permanent authentication credentials. Let's use in this example "Node1" user name and "Infi1" password for the first unit and "Node2" user name and "Infi2" password for the second unit.

In the same section, we set the "Device Name" parameter for each unit. Let's name in this example "Node1" the first unit and "Node2" the second unit:

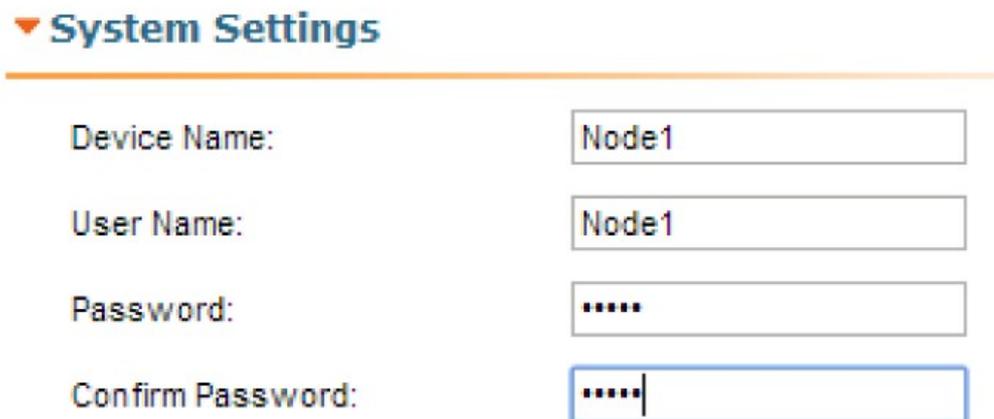


Figure - Edit system settings

- **Step 4**

In "Basic Settings" → "Network Settings" section, we can change the default IP address of the Ethernet interface. Let's add the IP 10.10.0.1/24 for the first unit and the IP 10.10.10.2/24 for the second unit:

The screenshot shows the 'Network Settings' section. Under the 'eth0' interface, the IP address is set to '10.10.10.1'. Below the IP address, a subnet mask configuration box is highlighted with an orange border, showing '10', '10', '10', '1' in individual input fields, followed by a '/24' field and 'X' and '+' buttons. Other interface settings for eth1 and rf5.0 are visible below, along with buttons for 'Create PRF', 'Create VLAN', 'Create LAG', 'Create SVI', 'Create Tunnel', and 'Create Tap'.

Figure - Add IP address on eth0 interface

- Step 5

In order to establish a wireless link between the two units, we have to set one of them as Master. By default, both units are configured as Slave.

In "Basic Settings" -> "Link Settings" section let's configure the following radio parameters for the first unit:

- Type: Master
- Polling: On
- DFS: Off
- Node ID: 1
- Channel width: 40 MHz
- Frequency: 5870 MHz

### ▼ Link Settings

#### ▼ rf5.0

The screenshot shows the 'Link Settings' for the 'rf5.0' interface. It is divided into two panels: 'General Settings' and 'Roaming Profiles are visible on Slave mode only'. In the 'General Settings' panel, 'Enable link' is checked. 'Type' is set to 'Master', 'Polling' is 'On', and 'DFS' is 'DFS Off'. Other settings include Tx Power (18 dBm), Node Name (Node1), Scrambling (checked), Authentication Mode (public), and Log Level (normal). In the 'Roaming Profiles' panel, 'Channel Width (MHz)' is 40, 'Frequency (MHz)' is 5870, 'Tx Bitrate (Kbps)' is 300000, 'Channel Type' is Dual, 'Network SID' is 10101010, and 'Node ID' is 1. The 'Security Key' field is empty. An 'Add Profile' button is at the bottom right.

Figure - Set the radio parameters for the Master unit

- Step 6

Now we can save all settings performed in "Basic Settings" menu by clicking the «Apply» button at the bottom of the page.

- Step 7

We have now to connect to the second unit to its default IP address and to perform the configuration below:

- In "System Settings" section
  - Device Name: Node2
  - User Name: Node2
  - Password: Infi2
- In "Network Settings" section

# Title

- eth0 IP address: 10.10.10.2/24
- In "Link Settings" section
  - Type: Slave
  - Node ID: 2
  - Channel width: 40 MHz
  - Frequency: 5870 MHz

We have to save all settings performed in "Basic Settings" menu by clicking the «Apply» button at the bottom of the page.

## • Step 8

We connect now back to the first unit at the assigned IP, and go to "Device Status" menu in order to check the link establishment between our two units and all real-time parameters provided by Web interface:

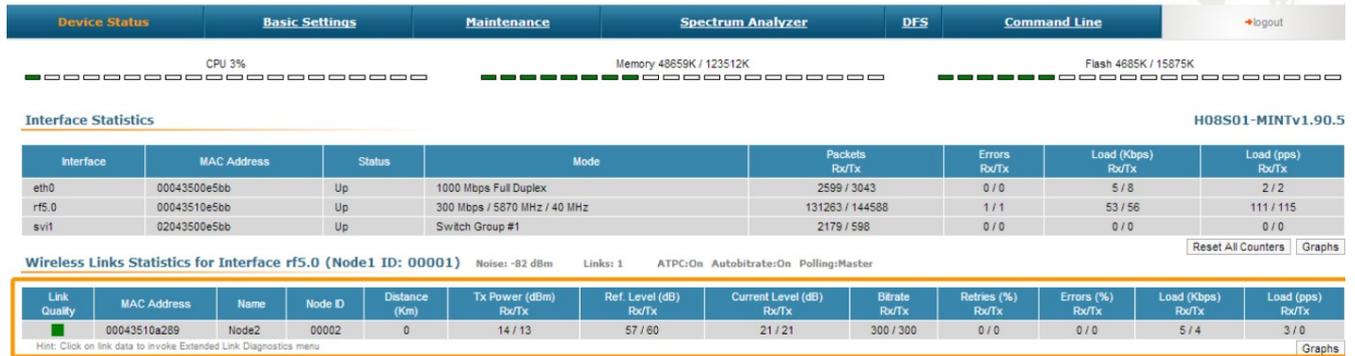


Figure - Wireless link establishment

## • Step 9

R5000 family devices allows to control data transfer using switch groups concept. We have to create a switch group 1, which will pass tagged and untagged traffic (this group is created by default). In the "MAC-Switch" section create a switch group 1 by clicking the "Create a switch group" button, add the Ethernet and Radio interfaces by clicking the "Ports" button.

### ▼ MAC Switch

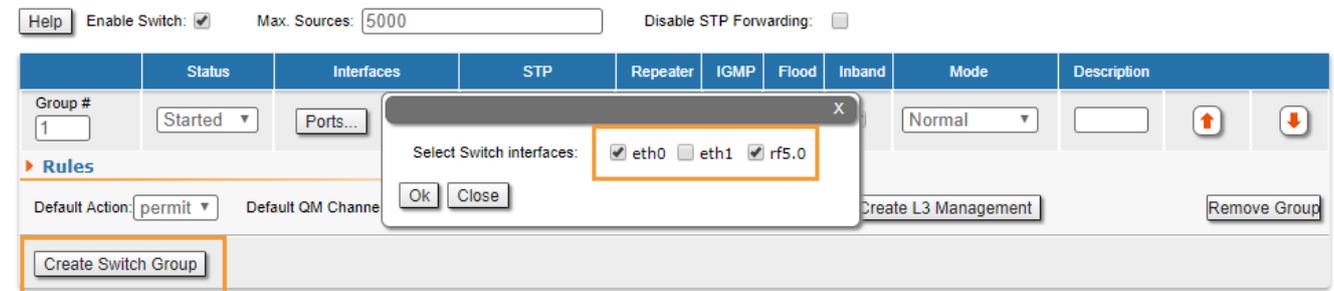


Figure - Switch group creation

## • Step 10 (optional)

To ensure device management not only via the wired segment, but also by radio, let's create an svi interface. Click the "Create L3 Management" button, and assign an IP address selected for device management. For more information about remote management, see the "Remote management of the R5000 units" article.

### ▼ MAC Switch



Figure - SVI interface creation

Network Settings

▶ eth0	<input type="text" value="10.10.20.1"/>	Up: <input checked="" type="checkbox"/>	Description: <input type="text"/>	DHCP: <input type="checkbox"/>	IPv4 MTU: <input type="text" value="1500"/>	Mode: <input type="text" value="auto"/>
▶ eth1	<input type="text"/>	Up: <input checked="" type="checkbox"/>	Description: <input type="text"/>	DHCP: <input type="checkbox"/>	IPv4 MTU: <input type="text" value="1500"/>	Mode: <input type="text" value="auto"/>
▶ rf5.0	<input type="text"/>	Up: <input checked="" type="checkbox"/>	Description: <input type="text"/>	DHCP: <input type="checkbox"/>	IPv4 MTU: <input type="text" value="1500"/>	
▼ svi1	<input type="text" value="192.168.103.35"/>	Up: <input checked="" type="checkbox"/>	Description: <input type="text"/>	DHCP: <input type="checkbox"/>	IPv4 MTU: <input type="text"/>	Switch group: <input type="text" value="1"/>

/

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Figure - Assign an IP address