

UNIBOX

An Intelligent Network Controller

Knowledge Base:

Network Module



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Applicable Products

The administration guide applies to the following products –

- Unibox U-50
- UniBox U-100
- UniBox U-200
- UniBox U-500
- UniBox U-1000

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1) How to do ISP Configuration for Unibox (WAN Port Configuration)?

- ✓ Connect your Laptop/Desktop to Unibox LAN port. Make sure your laptop NIC is configured to obtain network setting automatically.
- ✓ Power on Unibox Device.
- ✓ Once the Unibox boot process is complete, its DHCP server will provide you with the Network settings (IP address). You can now access the UNIBOX using gateway IP. Use "IPCONFIG" for windows system in your command prompt to see gateway IP address. Use "ifconfig" if you are using LINUX.
- ✓ Open Unibox dashboard using gateway IP in Web browser.
- ✓ You will now see the Unibox User Interface in your browser. Login with default credentials i.e. Username: Admin, Password: Admin. Navigate to Port section under Network TAB. Click on the WAN tab available in your left Pane.
- ✓ Select the WAN port connection type from the drop down list. Unibox allows connection to ISP using Static, Dynamic, 3G or PPPoE configuration.
- ✓ If you select "Static" configuration, you need to enter network configuration details provided by you ISP e.g. IP address, Subnet mask and Gateway IP address.

 **Network :: WAN Port Settings**

WAN Port Settings

Type

IP Address *

Netmask *

Gateway *

- ✓ If you select "Dynamic" configuration, unibox Wan port get its Network configuration automatically from your ISP e.g. IP address, Subnet mask and Gateway IP address.

Network :: WAN Port Settings

WAN Port Settings

Type

WAN port configurations are obtained dynamically.

- ✓ If you select "3G" configuration, -----.

Network :: WAN Port Settings

WAN Port Settings

Type

3G modem can not be detected.
Please insert the dongle properly and press Detect.

- ✓ If you select "PPPoE" configuration, -----.

WAN Port Settings

Type

Username *

Password *

MRU *

MTU *

Auto Reconnect

- ✓ Once you configure your WAN port setting, click on "Submit" below to save configuration
- ✓ You can now navigate to DNS section and configure DNS Address .
- ✓ Provide your preferred DNS server IP addresses, primary and secondary.

- ✓ Your Unibox is now all set to get connected to your ISP and provide internet access to Unibox Users.
- ✓ Navigate to diagnostic tools section under Tools TAB, Click on Ping tab available in your left Pane. Provide IP address or Hostname of any Internet Server and click on the ping button to verify connectivity to the internet server. PING test is successful if your Unibox configuration is correct.
- ✓ Enjoy browsing internet now.

2) How to do Bridge port configuration for Unibox.?

- ✓ This can be done in two ways.
- ✓ **Through WAN port connection**- Connect your Device (laptop/desktop) to Unibox WAN port with device NIC IP address in subnet of Unibox WAN port.
- ✓ Open Unibox dashboard using WAN IP in Web browser.
- ✓ You will now see the Unibox User Interface in your browser. Login with default credentials i.e. Username: Admin, Password: Admin. Navigate to Port section under Network TAB. Click on the LAN tab available in your left Pane.
- ✓ You need to enter Bridge configuration details such as IP address and Subnet mask. Select the type of bridge setup by ticking radio button, once bridge port is configured click "submit" to save settings.
- ✓ Now users at LAN side will get IP address from the mentioned subnet range.



Network :: Bridge Port Settings

Bridge Port Settings

IP Address *	192 . 168 . 5 . 1
Netmask *	255 . 255 . 255 . 0
Bridge Setup	<input checked="" type="radio"/> Wired <input type="radio"/> Wireless <input type="radio"/> Both (No wireless card found.)

Submit

- ✓ **Through LAN port connection**- Connect your Device (laptop/desktop) to Unibox LAN and let the Unibox assign IP address to your device (Laptop/ Desktop)
- ✓ Open Unibox dashboard using Gateway IP in Web browser.
- ✓ You will now see the Unibox User Interface in your browser. Login with default credentials i.e. Username: Admin, Password: Admin. Navigate to Port section under Network TAB. Click on the LAN tab available in your left Pane.
- ✓ You need to enter Bridge configuration details such as IP address and Subnet mask. Select the type of bridge setup by ticking radio button, once bridge port is configured click "submit" to save settings.

- ✓ Now users at LAN side will get IP address from the mentioned subnet range.
- ✓ Now renew IP address of your device Laptop/Desktop and with new gateway IP take access of Unibox.

3) How to configure DHCP server for Unibox?

- ✓ Open Unibox dashboard in web browser.
- ✓ Navigate to DHCP section under Network TAB.
- ✓ The LAN IP address, LAN net mask and resultant Network configurations are migrated automatically after Bridge port settings. If you want to change the subnet mask of DHCP server then change it at bridge port configurations.

Network :: DHCP Setting

DHCP Setting

LAN IP Address *	<input type="text" value="172.10.10.1"/>
LAN Netmask *	<input type="text" value="255.255.0.0"/>
Resultant Network *	<input type="text" value="172.10.0.0"/>
Advanced Configuration	<input checked="" type="checkbox"/>
IP Pool Start *	172.10.10.1 + <input type="text" value="10"/> = 172.10.10.11
IP Pool End *	172.10.10.1 + <input type="text" value="1010"/> = 172.10.13.243 (IP Pool Size: 1000)
Lease Interval *	<input type="text" value="3600"/> seconds (Minimum value of Lease Interval is 600 seconds)
Domain Name	<input type="text"/>

DHCP with Advanced Configurations –

- ✓ This feature is used to separate IP pool into static and dynamic IP address virtually.
- ✓ To enable this feature tick the check box and mention number of static IP address in “IP pool start” ex. 20 then from ip address x.x.x.1 to x.x.x.20 this IP addresses will be reserved for the static and DHCP pool will start from x.x.x.21 to mentioned number of IP’s in IP POOL END field.
- ✓ EX. 200 then DHCP pool will be from x.x.x.21 to x.x.x.201.
- ✓ Lease Interval: this is time of IP lease assigned to device, should be added in seconds.
- ✓ Domain Name: Enter domain name of the resultant network. (Optional field).
- ✓ Click on submit to save configuration settings.

4) How to configure DNS settings for Unibox?

- ✓ Open Unibox Dashboard in web browser.
- ✓ Navigate to DNS section under Network TAB.

Network :: DNS Setting

DNS Setting

Primary DNS *	8 . 8 . 8 . 8
Secondary DNS	121 . 242 . 190 . 211

- ✓ Configure primary and secondary DNS with provided addresses.
- ✓ Click on submit to save configuration settings.

5) How to set NAT rules for Unibox OR How to forward remote access of devices under Unibox?

- ✓ This feature is used for port forwarding devices under Unibox for remote access.
- ✓ Open Unibox dashboard in web browser.
- ✓ Navigate to NAT section under network TAB.
- ✓ Click on New Nat Rule to add new rule.
- ✓ Enter the name of rule. Ex. SSH, HTTP etc.

Network :: New NAT Rule


NAT Table Information

Name *	<input type="text" value="SSH"/>
Protocol *	<input type="text" value="tcp"/>
External Port *	<input type="text" value="2222"/> (Enter port other than 80 and 22)
Internal Port *	<input type="text" value="22"/>
Internal IP *	<input type="text" value="192 . 168 . 1 . 48"/>

- ✓ Select type of protocol for communication.
- ✓ Mention external port number.
- ✓ Mention internal port number of the access protocol. Ex. Port 22 for SSH access, port 80 for HTTP access etc.
- ✓ Mention ip address of the device on which NAT rule is applied.
- ✓ Click on submit to save configuration changes.

6) How to Use Device Monitoring feature in Unibox.

- ✓ Open Unibox dashboard in web browser.
- ✓ Navigate to Device Monitoring section under network TAB.
- ✓ On the left pane you can see three options naming list devices, New devices and Configurations.
- ✓ List devices will show you the devices added for monitoring.
- ✓ New devices will take to configure or add new devices for monitoring.
- ✓ Configurations are for monitoring settings. Which we will see first.
- ✓ **Click on configurations to configure monitoring settings.**

 **Network :: Configurations**

Default Configurations

Monitoring Interval *

15 minutes ▾

Notify After *

2 Failure

Notify Frequency *

Once ▾

From Email *

monitoring@wifi-soft.cor

Notify Email *


alerts@wifi-soft.com

Submit

- ✓ Select the monitoring interval from drop down list.
- ✓ Select notify after failure from drop down list, which will generate alarm after number of selected failures to concern person.
- ✓ Mention Notify frequency from drop down list. Which is of two type:
Once: Alarm mail will be send once.
Multiple: Alarm mail will be sent for multiple times.
- ✓ Enter from email as which will be sender of the Alarm mail.
- ✓ Enter Notify email to which Alarm mails will be sent.

NEW DEVICE CONFIGURATION:

- ✓ Enter device name.
- ✓ Enter IP and MAC address of device.
- ✓ Tick enable monitoring check box to apply device monitoring settings.
- ✓ Click on submit to add new device for monitoring.

 **Network :: New Device**

New Device Information

Device Name *	<input type="text" value="IP camera"/>
IP Address*	<input type="text" value="192 . 168 . 1 . 22"/>
MAC Address	<input type="text" value="AB - CD - EF - 12 - 24 - YZ"/>
Latitude/Longitude	<input type="text"/> <input type="text"/>
Enable Monitoring	<input checked="" type="checkbox"/>
Monitoring Interval	<input type="text" value="15 minutes"/> ▾
Enable Notification	<input checked="" type="checkbox"/>
Notify After	<input type="text" value="2"/> Failure
Notify Frequency	<input type="text" value="Once"/> ▾
From Email	<input type="text" value="monitoring@wifi-soft.cor"/>
Notify Email	<input type="text" value="alerts@wifi-soft.com"/>
	<input type="button" value="Submit"/>