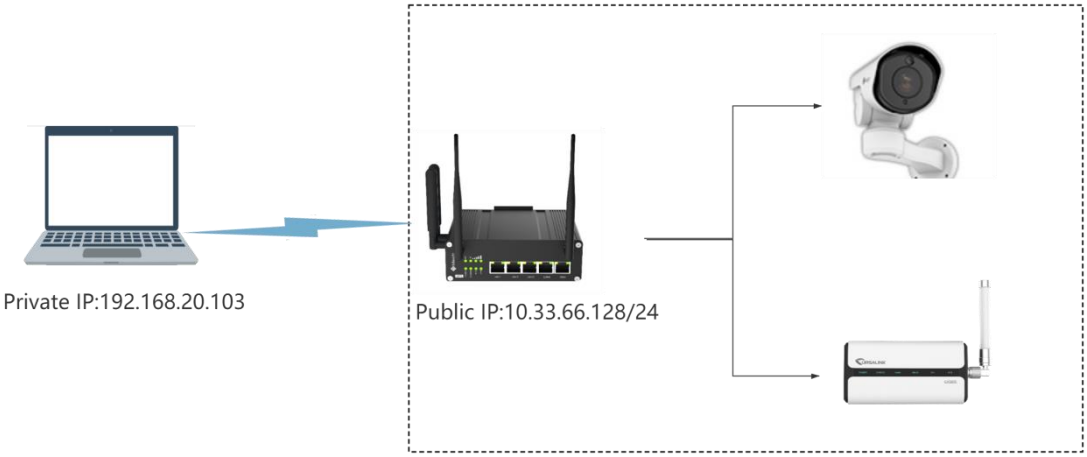
SILVERNET
WIRELESS-NETWORK-SOLUTIONS

How to configure IP Passthrough on iSite Router

DESCRIPTION

The IP passthrough function is available to SilverNet routers and CPE, which help users to access internal devices directly by public IP address of the router, to keep private networks secure environments. Below is an example how to use IP passthrough.



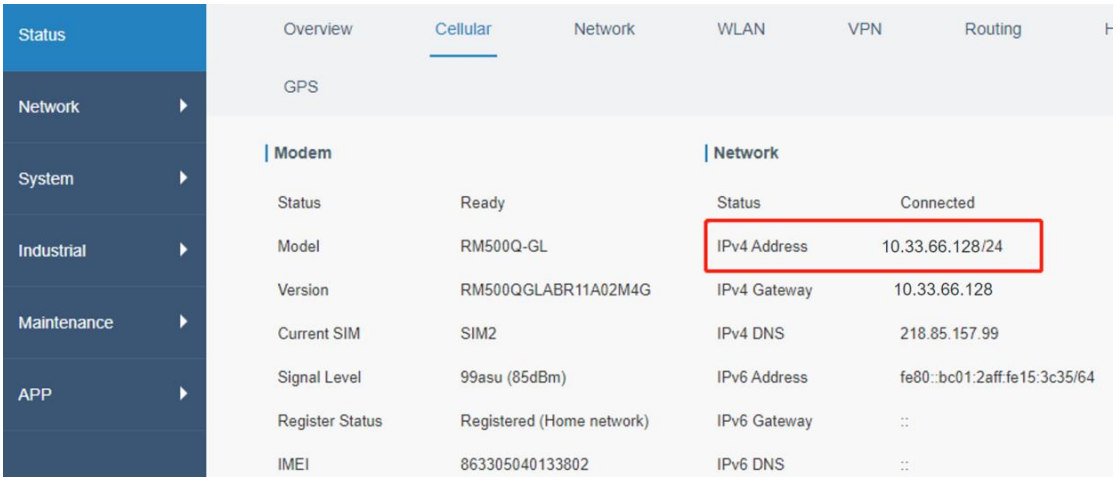
REQUIREMENT

- Any SilverNet router/CPE
- A camera and gateway connect to router subnet network

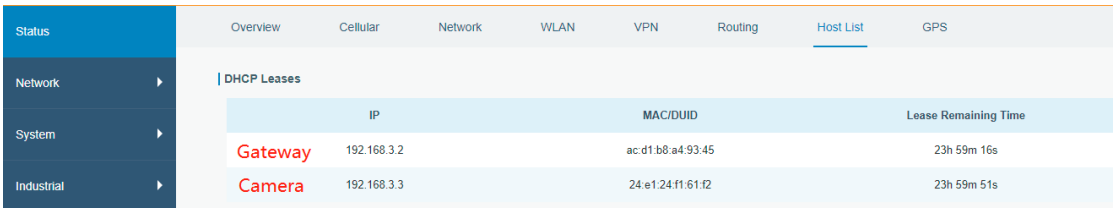
CONFIGURATION

1. Check related IP address of all devices before enabling IP Passthrough.

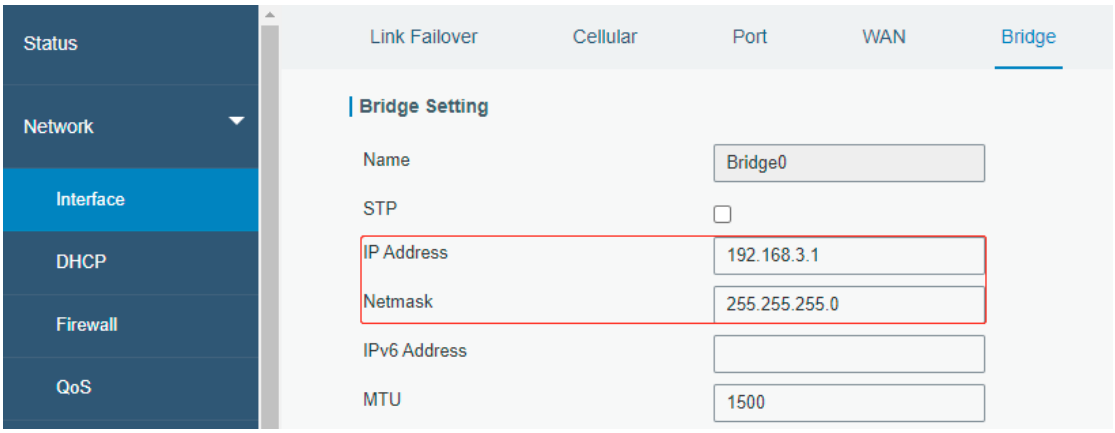
Login to the router's web GUI, go to **Status > Cellular,** check the current public IP address of the router.



Go to **Status > Host List,** we can get IP address of camera and gateway.



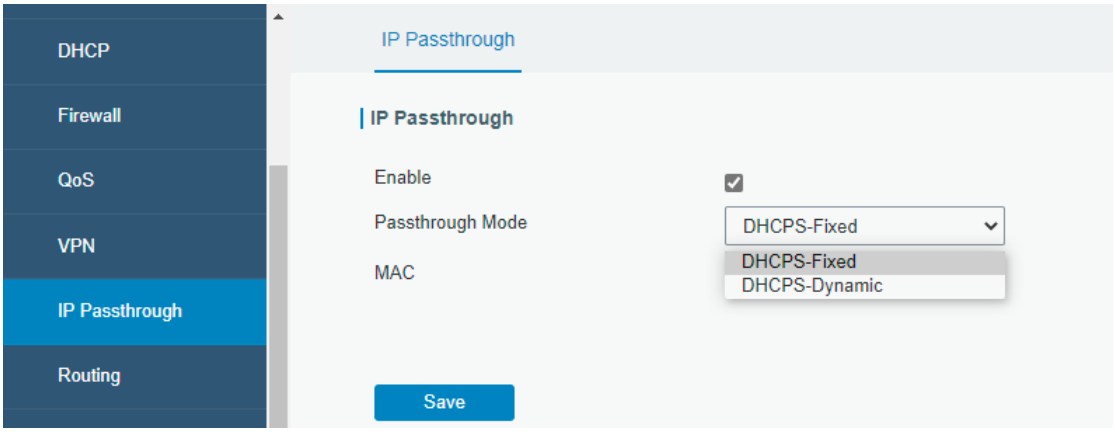
Go to **Network > Interface > Bridge,** to get bridge IP address of router.



2. Go to **Network > Firewall >IP Passthrough,** enable IP Passthrough and choose Passthrough Mode.

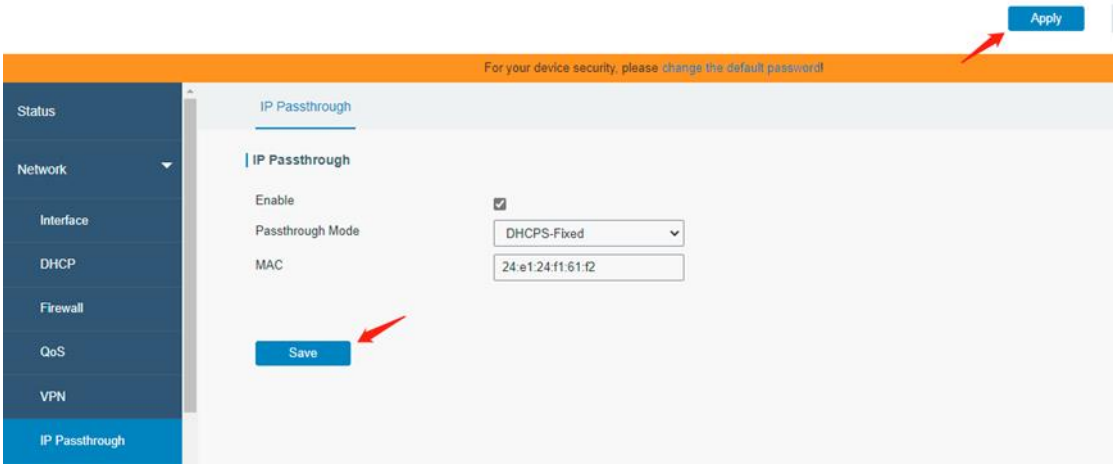
DHCPS-Fixed: Make the public IP address of router penetrate to the fixed device all the time, and users need to fill in corresponding device MAC address to bind.

DHCPS-Dynamic: With a change of IP address lease time, the public IP address of router will be dynamically assigned to the first subnet device which receive IP address from router.

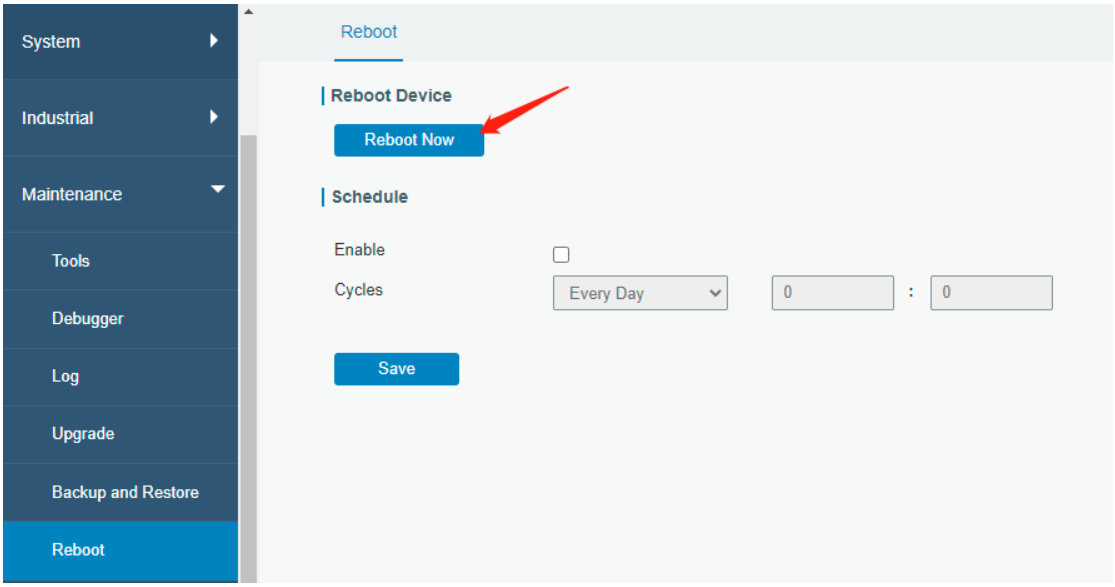


(1) DHCPS-Fixed Mode

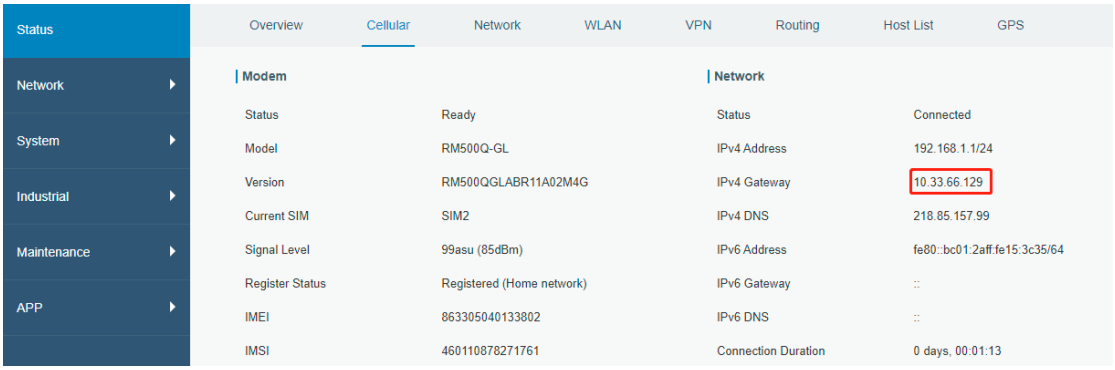
Input the camera MAC address here, click **Save** and **Apply**.



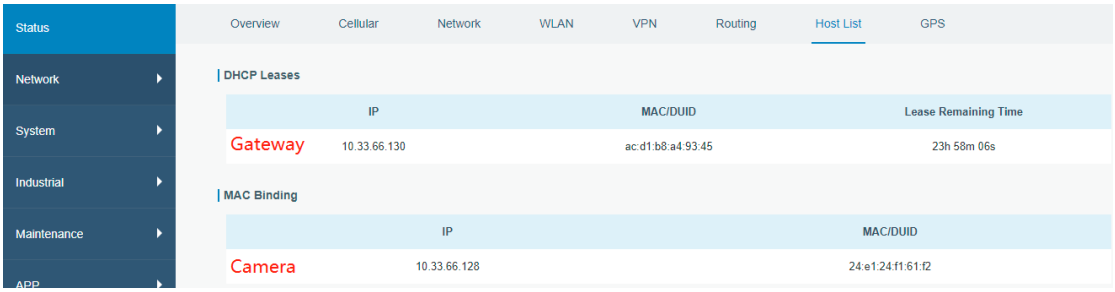
Then go to **Maintenance > Reboot**, reboot the router.



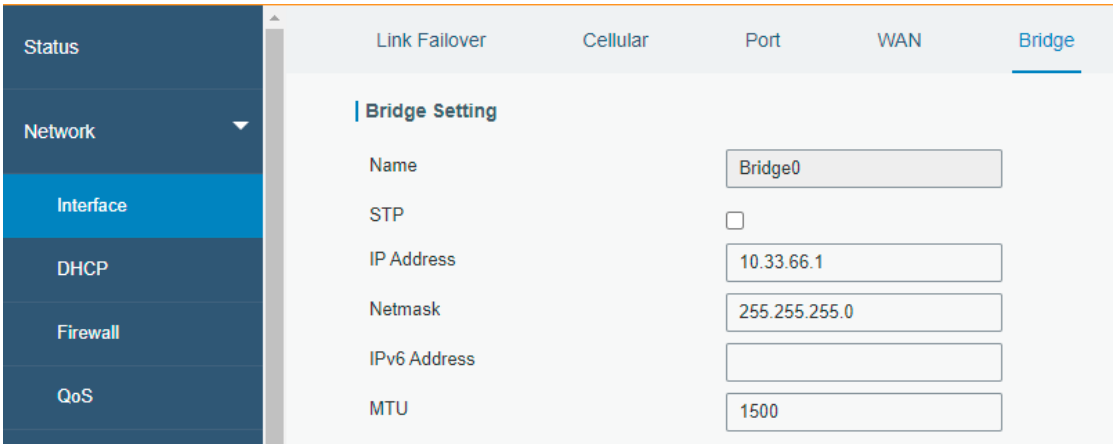
And we can see the IP address of cellular changes to a private IP address.



And now the IP address of camera changes to the fixed public IP address of router before.



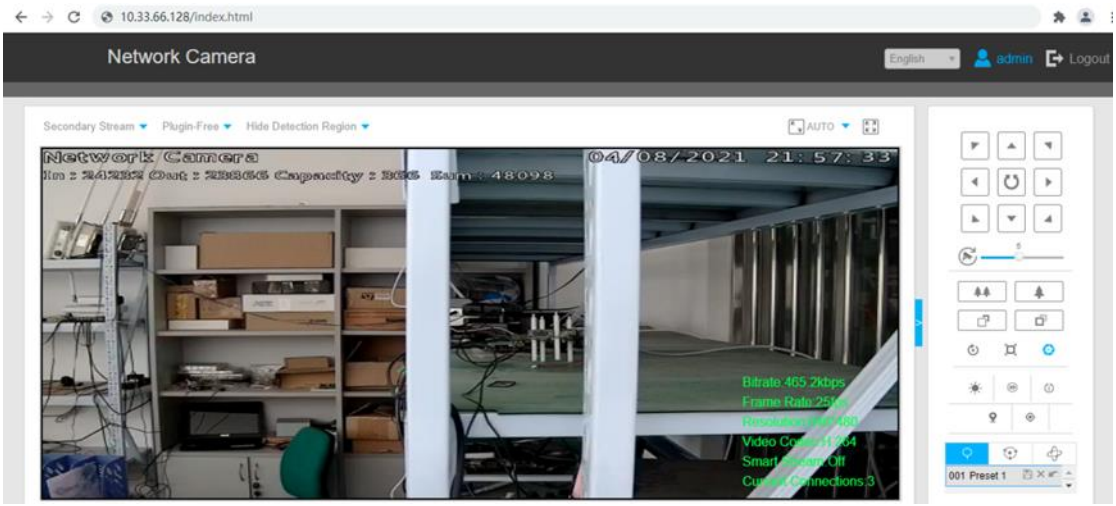
The bridge IP address change to same network segment with the Public address.



Go to **Maintenance > Log > Log Download,** download **System.log** file, open it we can find the IP address of the router after it rebooted is also fixed public address **10.33.66.128,** and then changed to private IP address **10.33.66.129** immediately**.**

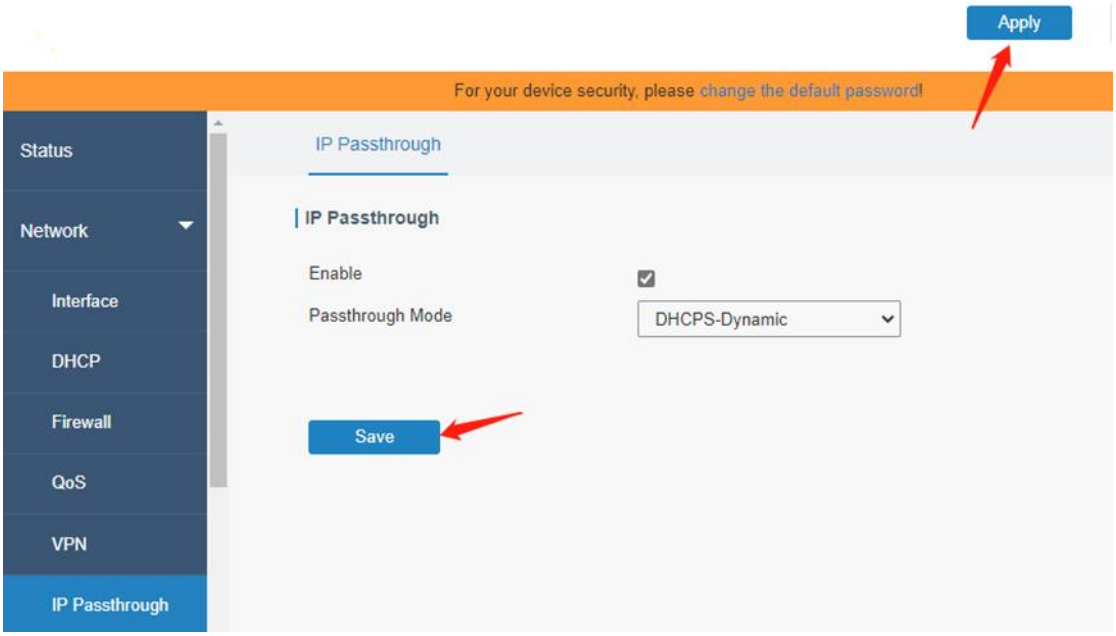
```
Wed Aug  4 21:01:46 2021 kern.info kernel: [  126.422343] net cellular2: link_state 0x0 -> 0x1
Wed Aug  4 21:01:46 2021 user.info /usr/sbin/modbus_rtu_over_tcp[4062]: Client reconnection. ip:192.168.23.161, port:502
Wed Aug  4 21:01:46 2021 user.info /usr/sbin/modbus_rtu_over_tcp[4062]: Client connection is failed. ip:192.168.23.161, port:502
Wed Aug  4 21:01:46 2021 daemon.debug zebra[2197]: ubus_cell_pppoe.c:884 cell_pppoe_set: ip=10.33.66.128
Wed Aug  4 21:01:46 2021 daemon.debug zebra[2197]: ubus_cell_pppoe.c:893 cell_pppoe_set: mask=255.255.255.0
Wed Aug  4 21:01:46 2021 daemon.debug zebra[2197]: ubus_cell_pppoe.c:902 cell_pppoe_set: gate=10.33.66.129
Wed Aug  4 21:01:46 2021 daemon.debug zebra[2197]: ubus_cell_pppoe.c:911 cell_pppoe_set: dns1=218.85.157.99
Wed Aug  4 21:01:46 2021 daemon.debug zebra[2197]: ubus_cell_pppoe.c:920 cell_pppoe_set: dns2=218.85.152.99
Wed Aug  4 21:01:46 2021 daemon.debug zebra[2197]: ip_passthrough_install:216 [eth0]remove default gate '192.168.22.1'!
Wed Aug  4 21:01:46 2021 daemon.info zebra[2197]: ip_passthrough.c:290 ip_passthrough_install: [Bridge0] addr=10.33.66.1, netmask=255.255.255.0
Wed Aug  4 21:01:47 2021 daemon.info dhcpd: Internet Systems Consortium DHCP Server 4.3.5
Wed Aug  4 21:01:47 2021 daemon.info dhcpd: Copyright 2004-2016 Internet Systems Consortium.
Wed Aug  4 21:01:47 2021 daemon.info dhcpd: All rights reserved.
```

When accessing **10.33.66.128,** the user will access this camera web GUI interface directly.



(2) DHCPS-Dynamic Mode

Choose **DHCPS-Dynamic** mode, click **Save** and **Apply**.



After, **Reboot** the gateway once more. We will find that the gateway obtains an IP address from the router more quickly, so now the IP address of the gateway will change to the fixed public IP address of router before.

When we access **10.33.66.128**, the user will access the gateway web GUI. But when the **Lease time** ends, the fixed public IP address of router (**10.33.66.128)** may be assigned to another device who obtains an IP address from router.