TENVIS Technology Co., LTD

TENVIS

User Manual

For MJPEG Cameras

Version: US 2.0

Catalogue

Notice: Certain functions mentioned in this manual may vary according to camera's model. For example, pan and tilt function are for Pan/Tilt enabled cameras only.

Basic Setup

For basic installation, please turn to **Operation Guide for Windows Web Browser or Operation Guide for Mac Web Browser** of Quick Start Guide and follow the manual step by step.

Camera Settings

Click this Settings Button ![Settings] for camera Settings.

Notice: Certain functions mentioned in this manual may vary according to camera's model. For example, pan and tilt function are for Pan/Tilt enabled cameras only.

System

About

Basic Device Information & Customer Service Information.

Alias	IPCamera
Device Hardware Version	Ver 1.8
Device Firmware Version	Ver 1.8.0.7
P2P Serial Number	FN4XAXR64S7BH56PYFXJ
MAC Address	00-12-34-ff-f8-81
Wi-Fi Status	Connected<---->RD
Select Language	English ▾

Alias	Camera's name
P2P Serial Number	Camera's P2P serial number
Device Hardware Version	Camera's hardware version
Device Firmware Version	Camera's firmware version
MAC Address	LAN MAC address
Wi-Fi Status	Wi-Fi Status

System User

Adding and updating user accounts

	Username:	Password:
Administrator	admin	•••••
Operator		
Guest		

Defined user contains three different user levels.

Different access is granted to different user levels as specified in the following sheet.

	Live Video	Record	Snapshots	Video adjustment	Sound	Talkback	PT operation	Settings

Admin	√	√	√	√	√	√	√	√
Operator	√	√	√	√	√	√	√	×
Guest	√	√	√	×	√	√	×	×

Network

IP Config

The Camera's Basic Network Settings

Obtain IP address from DHCP server	Disable ⬤ Enable
IP Address	192.168.1.239
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
DNS Server1	8.8.8.8
Web Port	7777

Obtain IP address from DHCP server	Enable or disable obtaining IP address from DHCP server automatically. If it is enabled, IP address and other items cannot be changed manually.
IP Address	Camera's local network IP address, which is used to view the camera in the same local area network. Specify a unique IP address for your network camera.
Net Mask	Specify the mask for the subnet the network camera is located on
Default Gateway	Specify the IP address of the default gateway (router) used for connecting devices attached to different networks and network segments
DNS Server	DNS (Domain Name Service) provides the translation of host names to IP addresses of your network
Web Port	Camera's communications port which is set to send video and audio data

UPnp

Do port forwarding manually by UPnP	Disable ⬤ Enable
UPnP Status	Windows Find Successful ; Port Map Failed UPnp AddPortMap Error(the port may be used)!

Universal Plug and Play (UPnP) is an architecture for peer-to-peer network connectivity and it will connect to the IP camera from Internet more seamlessly

⚠️**Notice:**

As UPnP is also easily affected by router or firewall, sometimes it may show failed status. If this happens, please forward the camera's port on your router manually. Whether UPnP

succeeds or not, it will not affect the camera's remote access.

Wi-Fi

Configuring WI-FI connection

Connection Status	Check and change wireless network status
SSID	All the nearby wireless signals visible to the camera
Wi-Fi Password	The password or key of wireless network

For Set-up procedure please refer to **Wireless Setup**

DDNS

Configuring the camera's DDNS for remote view

Built-in DDNS Configuration	This IP Camera has been set with free default built-in DDNS. You can enable or disable it. If the DDNS status is "successful", you can view the camera from Internet after you forward the camera's port through your router.
Third-party DDNS Configuration	This camera supports third-party DDNS providers.

 Tips:

1. **What is DDNS?**

DDNS (Dynamic DNS) is a service that maps Internet domain names to IP addresses. Thus we do not need to know the changing IP address in order to view the camera through the relevant DDNS server.

Alarm Setting

Alarm Setting

Enable Alarm	Enable or disable the motion detection alarm
Sensitivity	The sensitivity of the motion detection alarm.
Warning Tone	It will get warning tone in Internet Explorer live video page
Email Alert	Sending alarm pictures to the specified email when the camera detects the movements
Upload Snapshots to FTP Server	Sending alarm pictures to FTP server set in advance when the camera detects movement.
Back to Preset	Moves camera to a preset position once the camera detects moving objects (this is only available for Pan/Tilt IP camera).
Upload Interval (Seconds)	Upload interval for uploading snapshots to FTP server
Schedule	Specified motion detection period with 15 minutes a unit and one week per cycle.
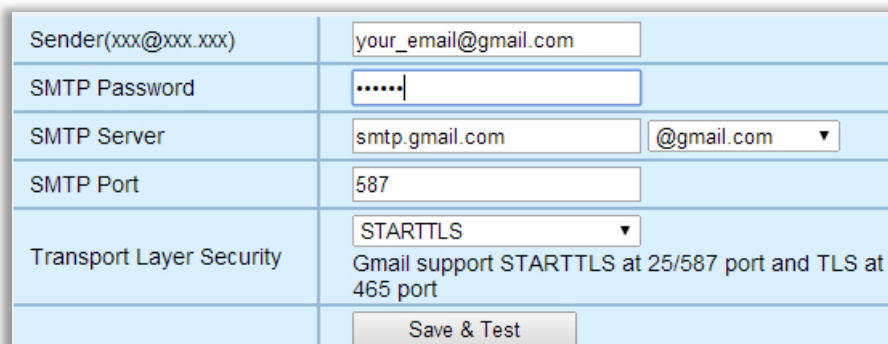
Email Setting

Once the motion detection alarm is enabled, camera will send snapshots to sender email box itself when it detects the moving objects.

Sender(xxx@xxx.xxx)	Email address for sending the alarm email
SMTP Server	Sending emails provider 's SMTP server address
SMTP Port	Service port of SMTP server
Transport Layer Security	Encryption protocol of SMTP Server
Need Authentication	Need to authenticate sender's right
SMTP Password	Sender email's login password

E-mail Alarm Configuration

Sender is your own email address. Since common email providers have a better service experience and the built-in email provider SMTP servers are easier to set up, you are strongly advised to use Gmail, Yahoo and other common email services as the sender email.

Sender is also the email to accept the email alerts.

SMTP Server: The SMTP (short for Simple Mail Transfer Protocol) works like a post assistant, handling the sending of emails from the camera to an email server. SMTP Server receives outgoing mail messages from users to the mail recipients they are intended for.

If your sender email provider is a public server, you can search the IP address of the email provider's SMTP server or DDNS from Google.

If your sender email provider is a private one, you can consult with the email provider's customer service.

SMTP Port: Service port of SMTP server which you can get with the above procedure

Transport Layer Security: Encryption protocol of SMTP Server and you can also get it from the above procedure

SMTP Password: The password you use to login to the SMTP server which is also the sender email password

Go back to alarm settings and enable **E-Mail Alert** to finfish the whole e-mail alert settings.

Notice:

1. Please try again if it shows "Can not connect to SMTP server!"
2. Please check the basic network settings of the camera if it failed the test.
3. There might be some delay for motion detection alarm since it is related to the network condition and the service quality of the sender email's provider. Thus it is beyond the control of IP camera.
4. If you still can not receive any email alert after getting the test email, please check your spam box and add your sender email address in the trust list of the recipient email once your find it in spam.

Tips:

The email alert is sent via sender email's provider server which is an SMTP server. Once the camera signs in to the SMTP server, the email alert will be delivered to the recipient email after getting SMTP server's authentication. Therefore, the sender email, recipient email and the SMTP server are all required.

FTP Setting

FTP, short for File Transfer Protocol, is used to transfer files between computers on a network. You can upload camera's alarm snapshots to your FTP storage. Thus, there is no need to keep the computer on when the motion detection alarm is triggered.

FTP Server	FTP server's address
FTP Port (default 21)	FTP server's port
FTP User	FTP server's username
FTP Password	FTP server's password
FTP Upload Folder	The upload folder of FTP

FTP Alarm Configuration

FTP Server: FTP server's IP address and DNS which could be required from FTP server provider.

FTP Port: Communication port of FTP server and the default port is 21.

FTP User: Username for you to sign in FTP server which could be required from FTP server provider.

FTP Password: Password for you to login FTP server which could be required from FTP server provider.

Then click Save and Test. Once it says "Succeed" that means the camera has set FTP settings successfully.
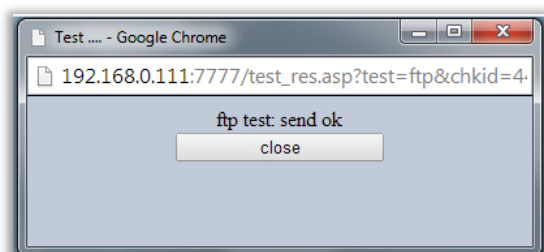
Go back to alarm settings and enable **Upload Snapshots to FTP Server** to finfish the whole FTP alert settings.

Enable Alarm	Disable ⬤ Enable
Sensitivity	3 Normal ▼
Alarm Mode	
Warning Tone	Disable ⬤ Enable
Alarm recording	Disable ⬤ Enable
E-Mail Alert	Disable ⬤ Enable
Upload Snapshots to FTP Server	Disable ⬤ Enable
Back to Preset	None ▼
Upload Interval (Seconds)	15
Schedule	
Schedule	Disable ⬤ Enable

⚠️**Notice:**

1. Please check the basic network settings of the camera if failed in test.

2. FTP server is offered by FTP provider. We do not provide FTP service. Web Hosting usually supports FTP.

3. Please make sure the camera is authorized to upload alarm pictures. For detailed information, please consult with the FTP server provider.

Multi-Camera

Multi-Camera

Camera 1	[local camera]	
Camera 2		✏ ✖
Local Search:	IPCAM44(192.168.2.94) ▼	
IP Address:	192.168.2.94	
Web Port	81	
Username:	admin	
Password:	●●●●●	
Camera 3		✏ ✖
Camera 4		✏ ✖
Camera 5		✏ ✖
Camera 6		✏ ✖
Camera 7		✏ ✖
Camera 8		✏ ✖
Camera 9		✏ ✖

Local Search	All MJPEG IP camera in your local network
IP Address: Port	Camera's IP address or you can fill in DDNS instead.
Port	Camera's port
Username	Camera's username

Password	Camera's password

If you want to view multiple cameras from Internet by DDNS, you could add the camera with DDNS.

⚠️**Notice:**
This configuration is only available for IE browser.

Advanced

NTP Setting

Camera's time setting

Current Time	Camera's time and you can click Sync With PC to match it to your computer's time
Time Zone	Time zone of the place that the camera is located
NTP Server	Time server of the network which is connected with the camera
Automatic Calibration Time Interval(by hour)	To get current time from time server automatically by an interval time.
Daylight saving time	Add the correct time such as 60 or 30 if your are under daylight saving time.

Tips:

1. Since the camera has no built in battery, the time saved in its memory may be lost when the camera reboots and reset to default.
2. **What is NTP server?**

NTP server is a server computer that reads the actual time from a reference clock and distributes this information to its clients using network. Your camera will get the exact time through an NTP sever by offering the time zone of its location.

Firmware Update

Update the device to the latest firmware version which can be found on our official website.

Restore to factory default	Restore the camera's settings to factory default
Reboot	Reboot the camera
Update Device Firmware	Update camera's firmware

Notice:

1. Please choose the appropriate firmware package based on your camera model.
2. Please ensure the camera is hard wired to your router via an ethernet cable.
3. Firmware updating… Please do not disconnect power supply or network connection while updating!
4. The entire update process takes about 1 minute. The camera will reboot once update complete
5. Please conduct firmware upgrade under professional guidance.

Recording Path

Recording is only available for IE browser.

Recording Path	Camera's destination folder to record to
Alarm Recording Path	Camera's destination folder to record to when the camera is alarming

Notice:

If it does not work, please run IE as administrator. Right click IE browser and pick Run as Administrator

Other Setting

On Screen Display	Show camera's information on video
Power indicator LED	Control camera's front green LED
Pan/Tilt speed	Set up camera's Pan/Tilt speed
Go preset position on booting	Enable or disable go preset position on booting

Tips:
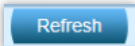
What are preset positions?

Preset positions are IP camera's memorized P/T positions. Once you set a preset position, you do not need to pan the camera to your preferred position. You simply press the preset button that corresponds to the preset you want to see and the camera will move to that position automatically.

Wireless Settings

1. Go to Wi-Fi setting page.

2. Click Rescan in Wireless Network and pick your preferred WI-FI SSID. Fill in the wireless network password. Click Save and wait for camera reboot.
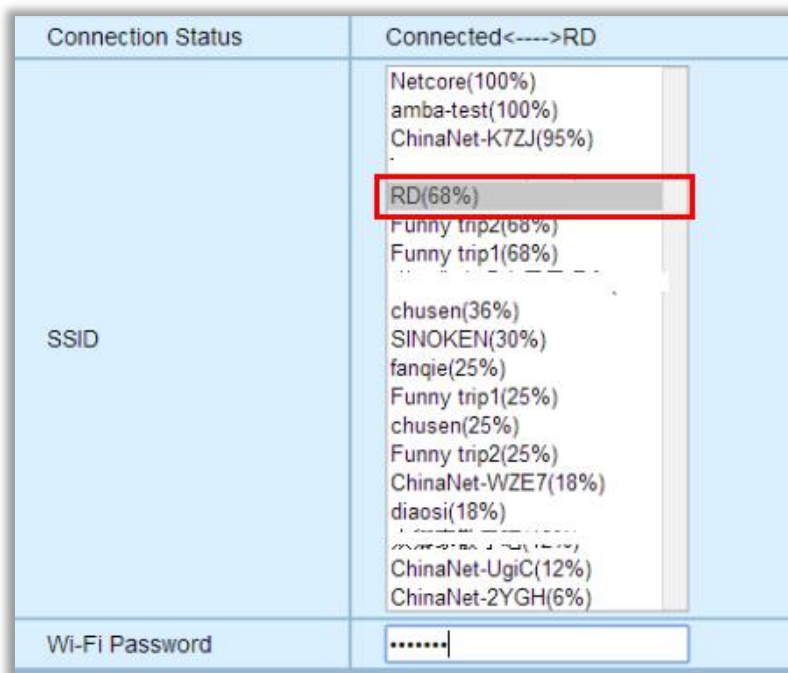
3. After reboot, if Connection Status shows the SSID that means the camera has connected to the wireless network successfully.
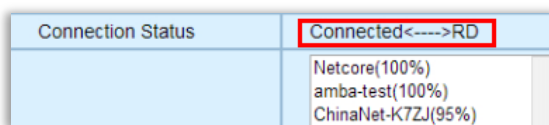
Tips:

For security concern, please set your Wi-Fi network as WEP encryption or OPEN.

Port Forwarding of Common Routers

Before you set up port forwarding manually, please check 2 things before you do it.

1. Make sure you know the router's brand, access URL, username and password. If you do not know them, please get help from the provider of the router, such as your ISP.

2. Find your camera's IP address and port. You can find them in your search tool.
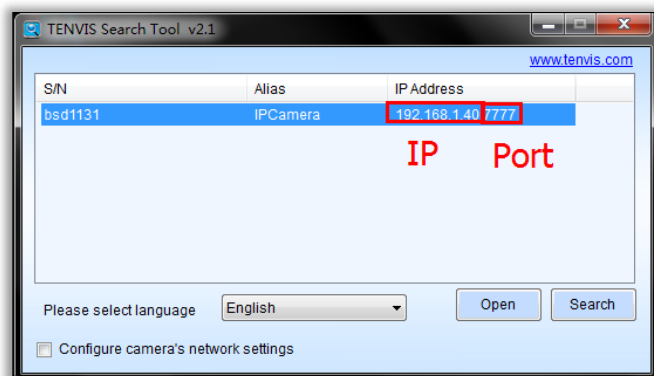
The IP and port of the camera is very important for port forwarding.

For 2wireRouter

1. Open a web browser like Internet Explorer, Chrome, Firefox & etc. Enter the internal IP address of your router in the address bar of your browser. The default URL is http://192.168.1.1
2. Click the **Firewall Settings** button, and then click **Add a new user-defined application**

3. Add a new user-defined application.

Application Name: It is just a name whatever you want for port forwarding,

Protocol: TCP

Port for range: port of the camera

Protocol timeout: 86400

Click **Add**.

4.   Sign the application for the IP Camera
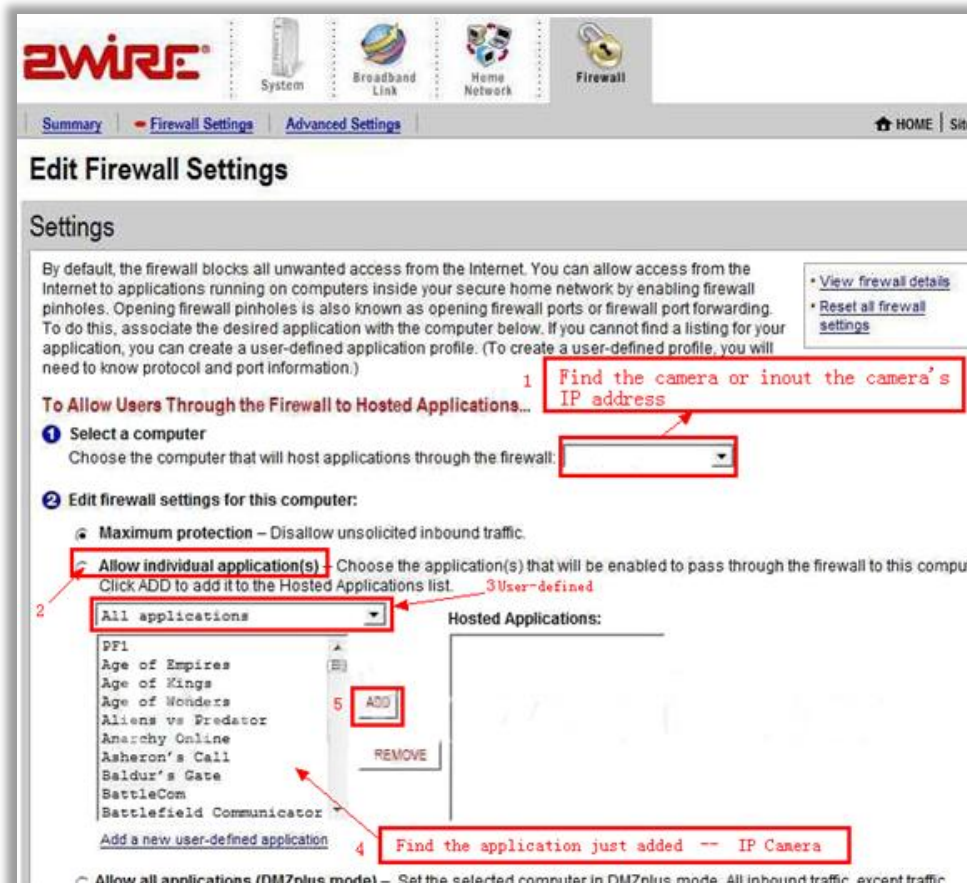
Select Computer

Select the IP camera in the list. You could choose the IP address or input the camera's IP address; it depends on the router's model.

Select **allow individual application**

Select **User-defined**

Find your application you just added.

Click **Add**

For Actiontec Routers

1.   Open a web browser like Internet Explorer or Chrome. Enter the internal IP address of your router in the address bar of your browser. For theses routers, in general, it is http://192.168.0.1

2.   Click **Advanced Port Forwarding**
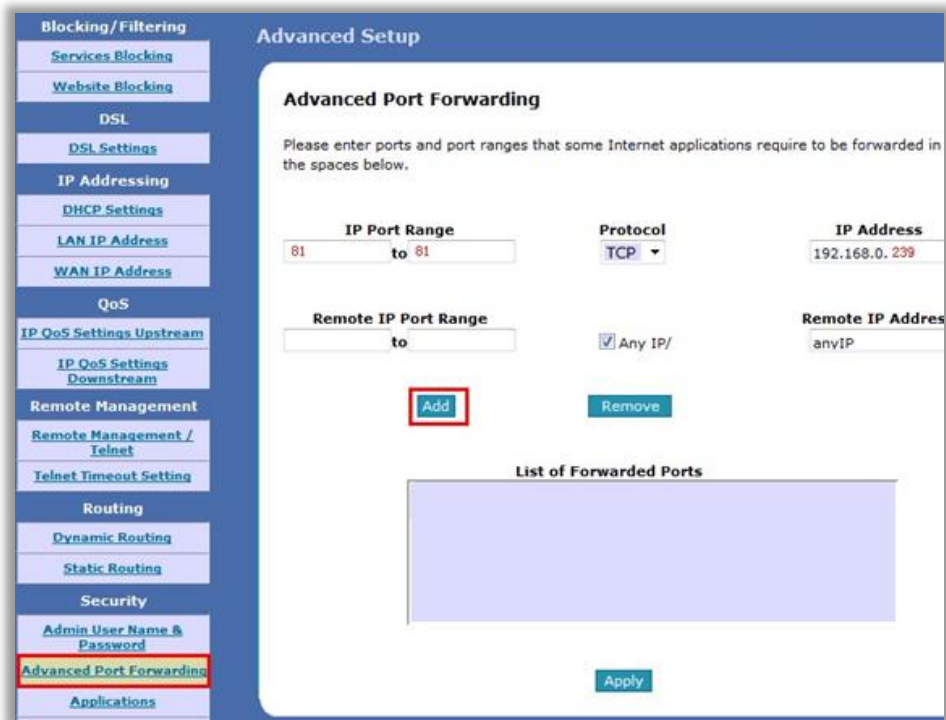
IP Port Range: The camera's port.
Protocol: TCP
IP Address: The camera's IP address.
Click **Apply**
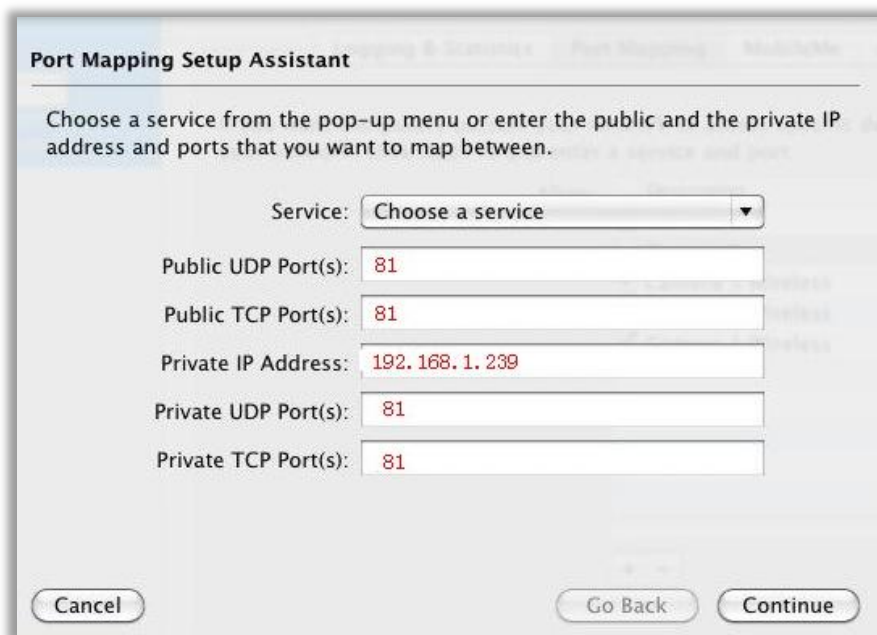
For Apple Airport Extreme or Time Capsule

1. Go to your finder and type in Airport in the search bar and find your Airport Utility program.
2. Find the Advanced Tab at the top and select it
3. Choose the Port Mapping option.
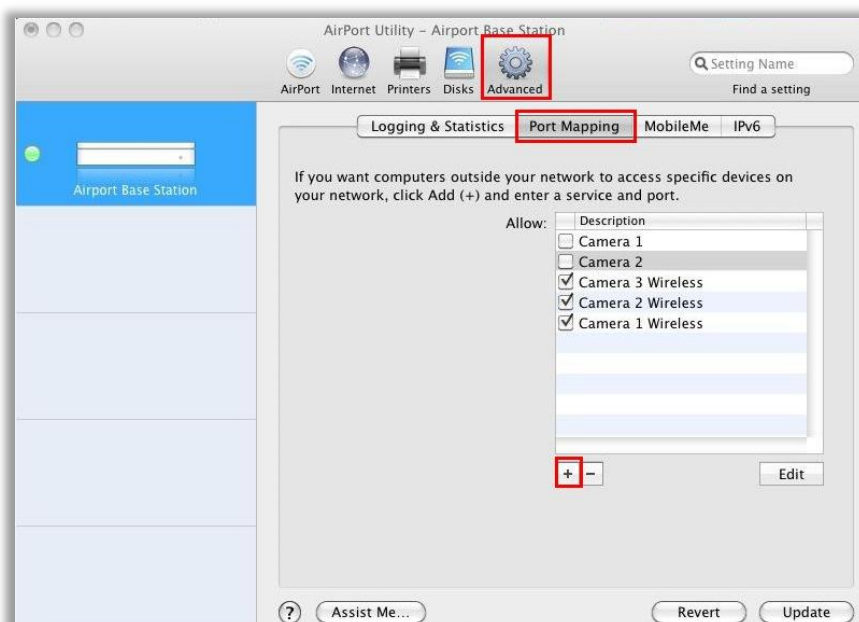
Add a service for IP camera.

Service: Choose a service
Public UDP Ports: the camera's port
Public TCP ports: the camera's port
Private IP Address: the camera's IP address
Private UDP ports: the camera's port
Private TCP ports: the camera's port
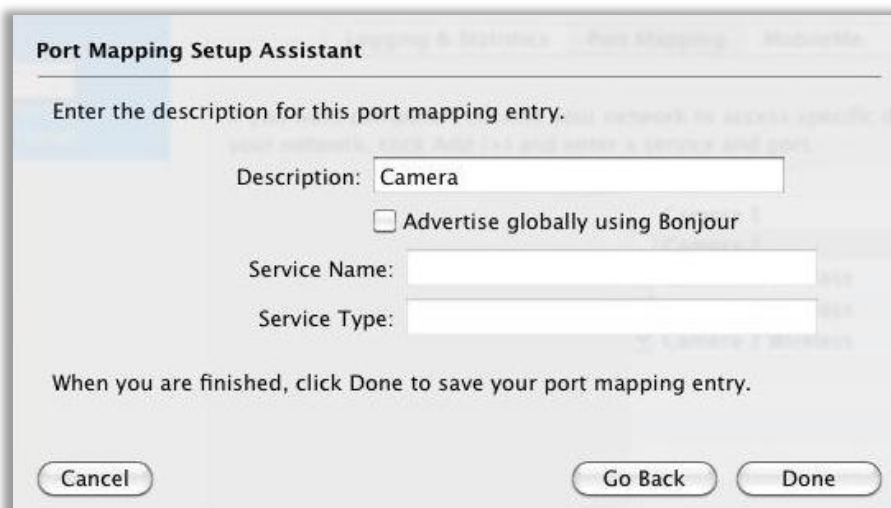
Tips:

Be sure to click on the Update button after making these changes to upload them to your Airport.

For BT BTHomeHub Routers

1. Open a web browser like Internet Explorer, Chrome, Firefox & etc. Enter the internal IP address of your router in the address bar of your browser. For BT routers, in general, it is http://192.168.1.254

2. Click **Advanced Settings** and Continue to Advanced Settings
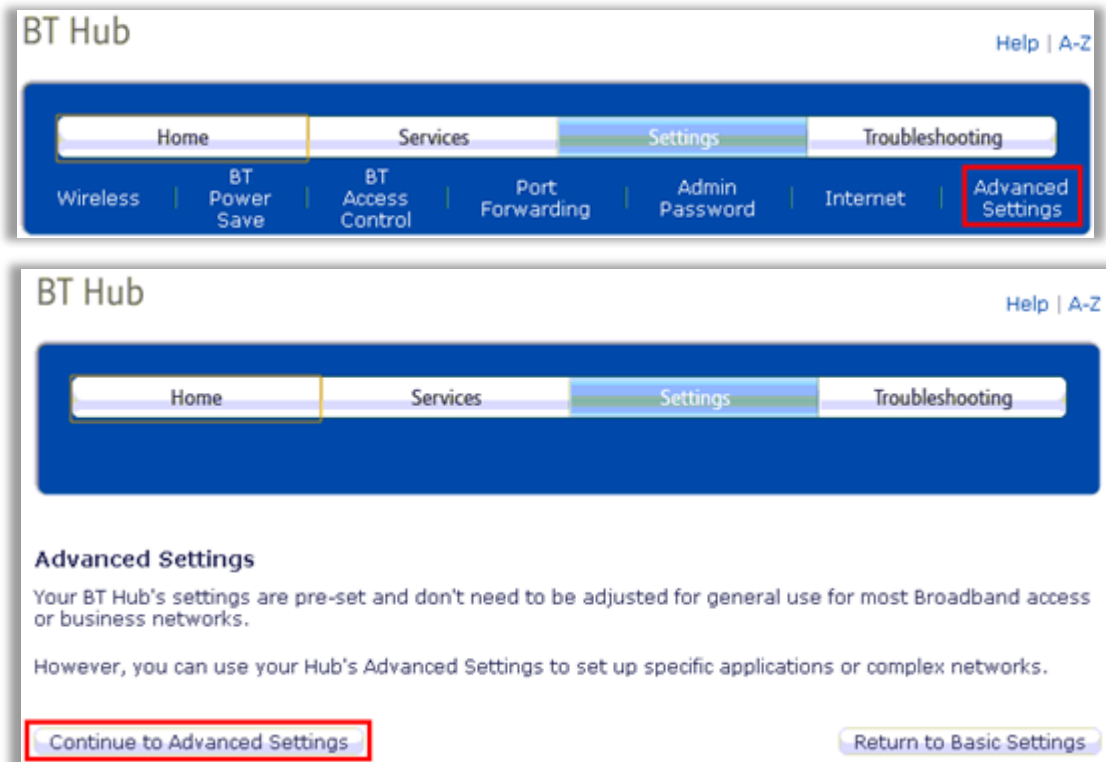
3. Click **Supported Applications** and **Add new game or application**

Game/Application name: It is just a name whatever you want for port forwarding,

Protocol: Any or TCP

Port Range: The port of the camera

4. Click Configuration; Select the application you just added in Game or Application List.

Select User Defended IP Address in the **Device** List.

Enter the camera's IP address into **Device IP Address**.

For D-link Routers

1. Open a web browser like Internet Explorer or Chrome. Enter the internal IP address of your router in the address bar of your browser. For D-link routers, in general, it is http://192.168.0.1

2. Click **Advanced - Virtual Server**

Name: It is just a name whatever you want for port forwarding,

Public: the camera's port

Private: the camera's port

Protocol: TCP

Schedule: Always

Inbound Filter: Allow All
Click **Save Settings**

For FRITZ!! Routers

1.   Open a web browser like Internet Explorer or Chrome. Enter the internal IP address of your router in the address bar of your browser to login your camera. By default the IP address should be set to http://192.168.178.1

2.   Click the Internet link and then click **Portfreigabe**. In the **portfreigabe**, click **Neue Portfreigabe.**

3.   Do port forwarding
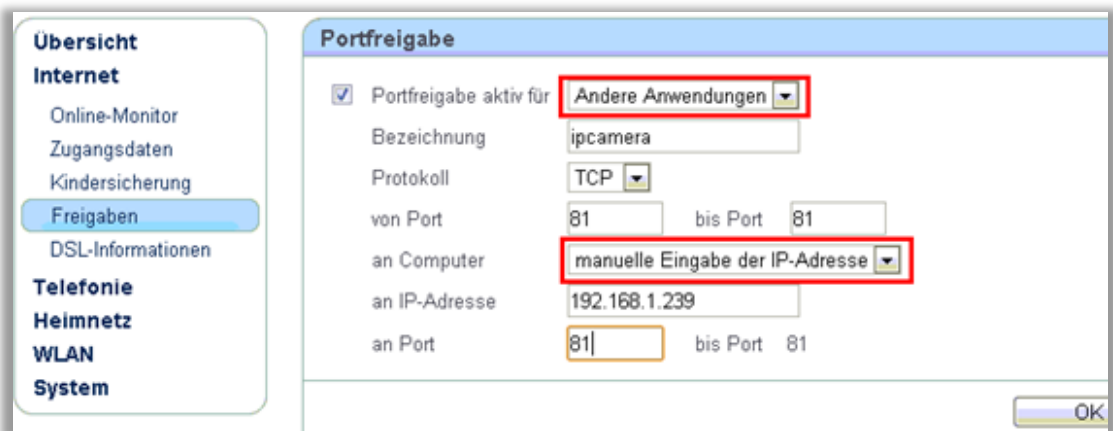
Select **Andere Anwendungen** from the **Portfreigabe aktiv fur** drop down box.

Bezeichnung: A name, whatever you want

Protokoll: **TCP**

von Port: The camera's port

bis Port:The camera's port

an Computer: **manuelle Eingabe der IP-Adresse**

an IP-Adresse: The camera's IP address

an Port: The camera's port

ForHuawei Routers

1.   Enter the internal IP address of your router in the address bar of web browser. For these

routers, in general, it is http://192.168.1.1

2. Click **Advanced - NAT**, and click **Port Mapping**

Name: Whatever you want, it is just a name, e.g. TENVIS IP Camera

Public: the camera's http port, e.g. 81

Private: the camera's http port, e.g. 81

Protocol: TCP

Schedule: Always

Inbound Filter: Allow All

Click **Save Settings**

For Linksys W Series Routers

1. Enter the internal IP address of your router in the address bar of web browser. For these Series routers, in general, it is http://192.168.1.1

2. Click **Application & Gaming** and click **Single Port Forwarding**

Application Game: It is just a name whatever you want for port forwarding,

External Port: the camera's port

Internal Port: the camera's port
Protocol: TCP
To IP address: the camera's IP address
Enabled: Enable

For Movistar Routers

1.   Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.1.1
2.   Click **Firewall - Port Forwarding**

Comment: It is just a name whatever you want for port forwarding,
Public Port: the camera's port
Local Port: the camera's port
Remote IP Address: N/A
Local IP Address: the camera's IP address
Click **Add**

For Netgear Routers 1

1.   Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.1.254
2.   Click **Port Forwarding/Port Triggering** or **Port Forwarding**. Select **Port Forwarding** and select **Add Custom Service**

Or

3. Do port forwarding

Or

Service Name: It is just a name whatever you want for port forwarding,

Starting Port: port of the camera

Ending Port: port of the camera

Service IP Address: IP of the camera

For Netgear Routers 2

1. Enter the internal IP address of your router in the address bar of your browser. For these routers, in general, it is http://192.168.1.254

2. Click the **Services** link and Click **Add Custom Service** button.

3. Add an IP camera service

Name: Whatever you want

Type: TCP

Start Port: The camera's port

End Port: The camera's port

4. Click the **Firewall Rules** link; and then click the **Inbound Services Add** button.

5. Add the user-defined IP Service in **Inbound Services**.

Service: Select the service you added in Service settings

Action: Allow always

Send to LAN Server: The IP of the IP Camera

Wan User: Any

Log: Always or None

For Netgear Routers 3

1.   Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.1.254

2.   Click the **Port Forwarding / Port Triggering** link and Click **Add Custom Service** button.

3.   Add a customer service for the camera

Name: It is just a name, whatever you want for port forwarding,

Type: TCP
Start Port: The camera's port
End Port: The camera's port
Server IP Address: The camera's IP address

For O2/ Thomson routers

1. Open http://192.168.1.254 in a web browser. If you are prompted for a login, the username is "Administrator" and the password is the serial number of your router (printed on its underside, excluding the bit in brackets).
2. Click **Toolbox > Game & Application Sharing > Create a new game or application.**

3. Enter the name of your application, e.g. IP Camera, click "Manual Entry of Port Maps", and then click Next.

4. Select the protocol of your application from the drop down list under Protocol option. Enter port number of your camera in the two text boxes under Port Range option, and then click Add. Repeat this step for all the ports you need to forward.

5.   Click **Assign a game or application to a local network device**.

Pick a task

> Assign a game or application to a local network device
> Create a new game or application

6.   Select your newly created application in "Game or Application", e.g. "IP Camera" select your device in Device or select User Define and input the camera's IP address, e.g. "192.168.1.239", then click Add.

Game or Application	Device	Log	
	No games or applications assigned.		
IP Camera ▼	User Define ▼	☐	Add
	IP 192.168.1.239		

For Sky/Sagmen Routers

1.   Enter the internal IP address of your router in the address bar of web browser. For Sky/Sagmen routers, in general, it is http://192.168.0.1
2.   Click **SECURITY - SERVICE, and click ADD CUSTOM SERVICE**

SETUP	SECURITY	MAINTENANCE	ADVANCED
LOGS | BLOCK SITES | FIREWALL RULES | SERVICES | SCHEDULE |

BROADBAND SETUP

SERVICES

Service Table

#	Service Type	Ports

↘ ADD CUSTOM SERVICE   ↘ EDIT SERVICE   ↘ DELETE SERVICE

3.   Add a Custom Service

Name: It is just a name whatever you want for port forwarding,

Start Port: the camera's port

Finish Port: the camera's port1

Type: TCP

Click **APPLY**

4. Click **SECURITY - FIREWALL RULES - INBOUND SERVICE**, add the service to the camera

Service: Select the service you just added.

Action: ALLOW always
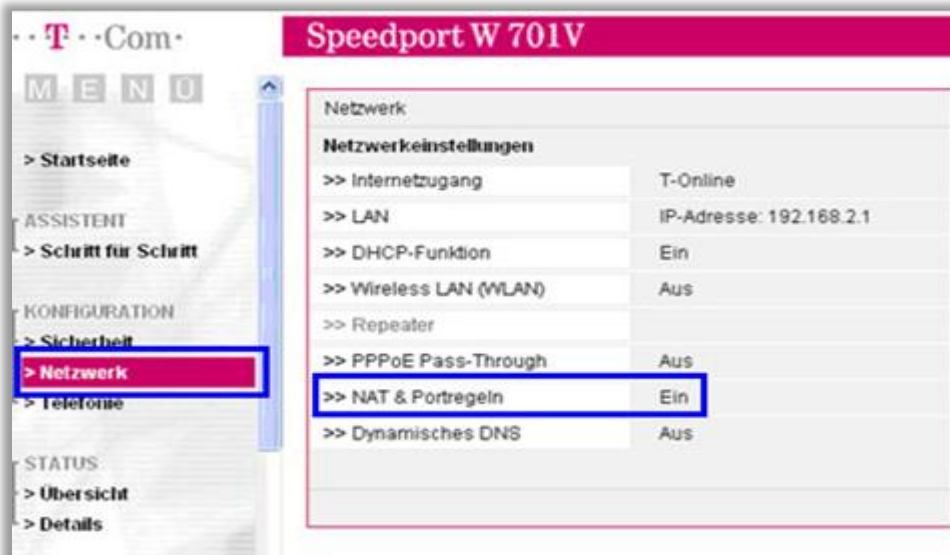
Send to LAN Server: The camera's IP address

WAN Users: Any

Log: Never

Click **APPLY**

For Speedport Routers 1

1. Login your router. Click **Netzwerk and NAT & Portregeln.**

2. Click **Neue Regel anlegen**

3. Set port forwarding.

Bezeichnung: A name for port forwarding
IP-Adresse: The camera's IP address
Protokoll: TCP
Ports: The camera's port
Ports: The camera's port

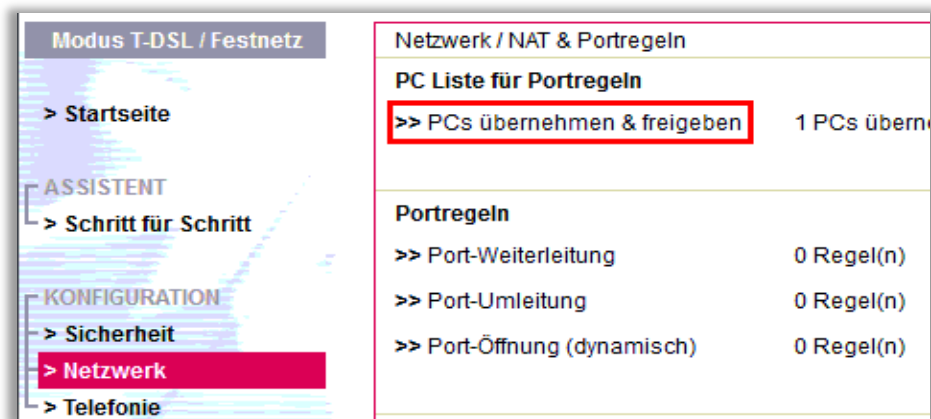4. Then the camera has been forwarded to Internet.
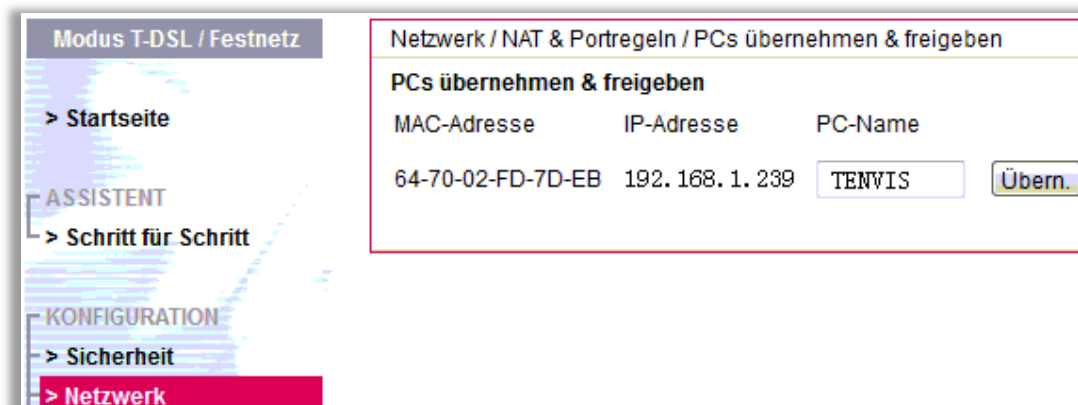

For Speedport (Deutsch) Routers 2

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.1.1
2. Click **Netzwert - Nat & Portregeln**, and click **ADD CUSTOM SERVICE**
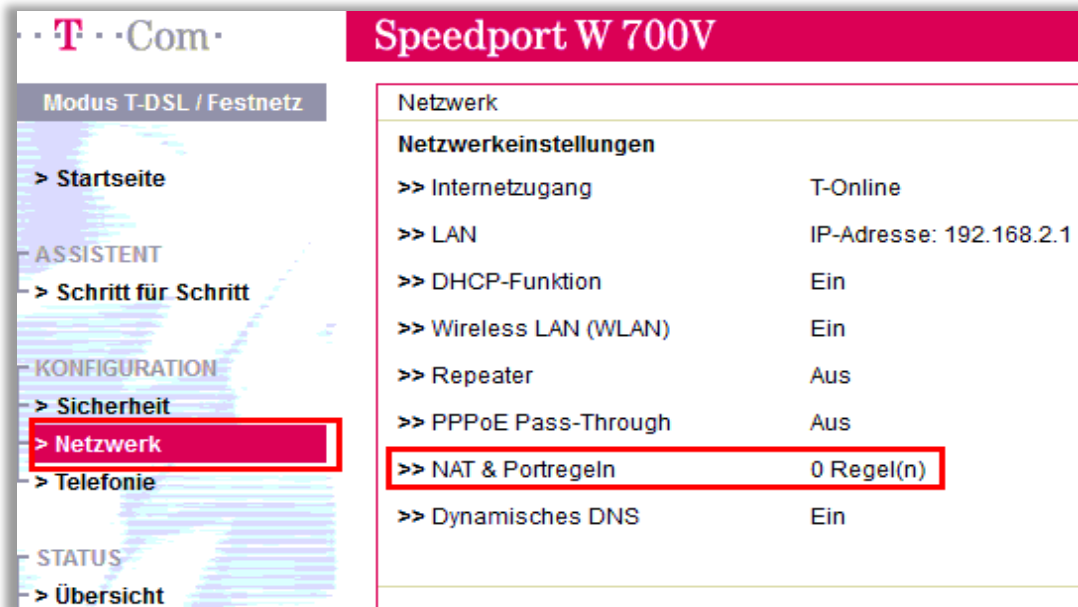
3. Click **PCs ubernehmen & freigeben**

4. Find your IP camera here and Add PC-Name to the camera

5. Click **SECURITY** - **FIREWALLRULES**, add the service to the camera

6. Select **Neue Regel definieren**

7. Set port forwarding

Bezeichnung: It is just a name whatever you want for port forwarding

Gultig fur PC: Select the camera you just added

TCP: The camera's port

For TP-Link Routers 1

1. Enter the internal IP address of your router in the address bar of your browser. For TP-link routers, in general, it is http://192.168.1.1

2. Click **Forwarding - Virtual Servers**

3. Set port forwarding

Service Port: the camera's port

Internal Port: the camera's port

IP Address: the camera's IP address

Protocol: ALL or TCP

Status: Enabled

Click **Save**

For TP-Link / Binatone Routers

1. Open a web browser like Internet Explorer or Chrome. Enter the internal IP address of your router in the address bar of your browser. For these routers, in general, it is http://192.168.1.1

2. Click **Advanced Setup - Virtual Servers**

3. Set port forwarding

Application: A name for port forwarding, e.g. TENVIS
Protocol: ALL or TCP
Start Port Number: the camera's http port, e.g. 81
End Port Number: the camera's http port, e.g. 81
Local IP Address: the camera's IP address, e.g.192.168.1.239
Click **Save**

For Virgin Routers 1

1.   Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.0.1 or http://192.168.0.254
2.   Click **Advanced - Port Forwarding**

Name: A name whatever you want for port forwarding
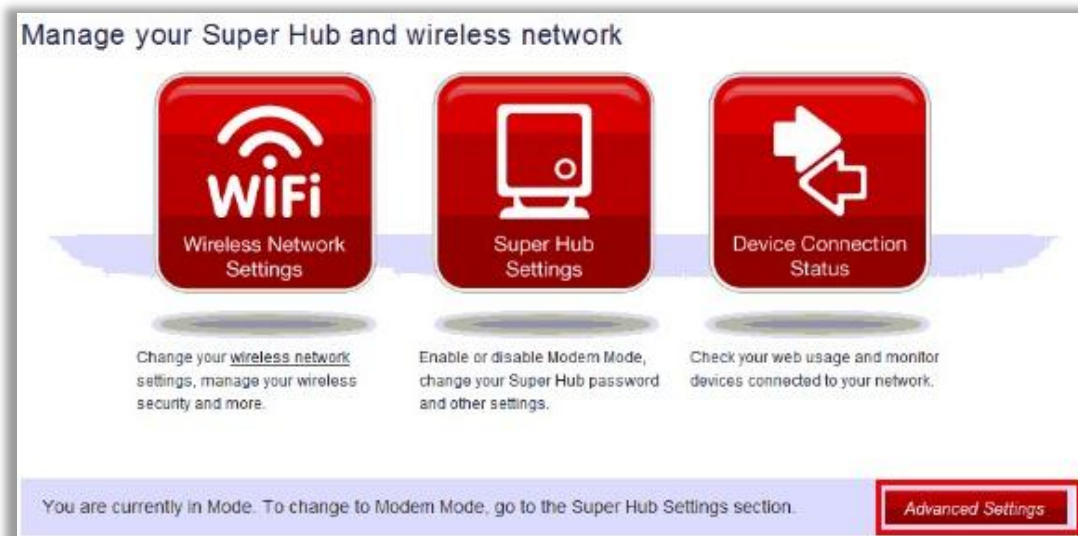**Start Port**: the camera's port
End Port: the camera's port
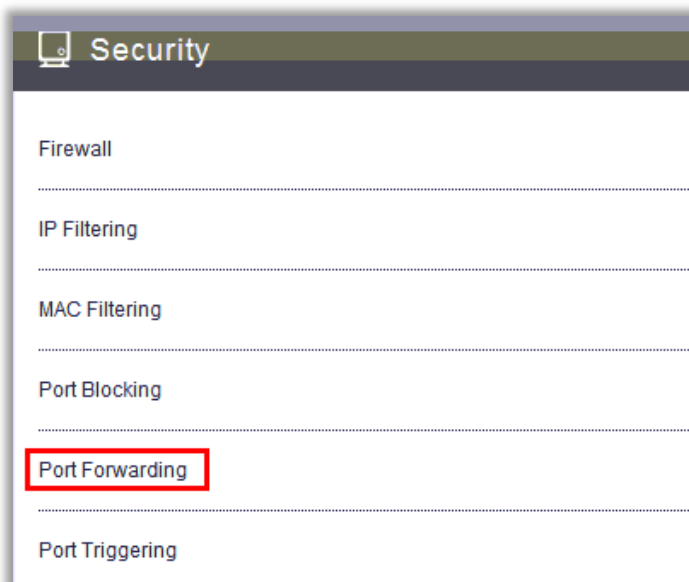**Local IP Address**: the camera's IP address
Click **Add**

For Virgin Routers 2

1.   Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.0.1
2.   Click **Advanced Settings**

3.   Select Port Forwarding

4.   Set Port Forwarding

Name: A name whatever you want for port forwarding

Start Port: the camera's port

End Port: the camera's port

Protocol: TCP

IP Address: the camera's IP address

Click **Add Rule**

For Webtell Routers

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.200.1
2. Click **Security - Service - Port Forwarding**

3. Click **new custom service**

4.   Add a new custom service

Service Name: A name whatever you want for port forwarding

Select the service you just added.

5.   And click **static NAT**
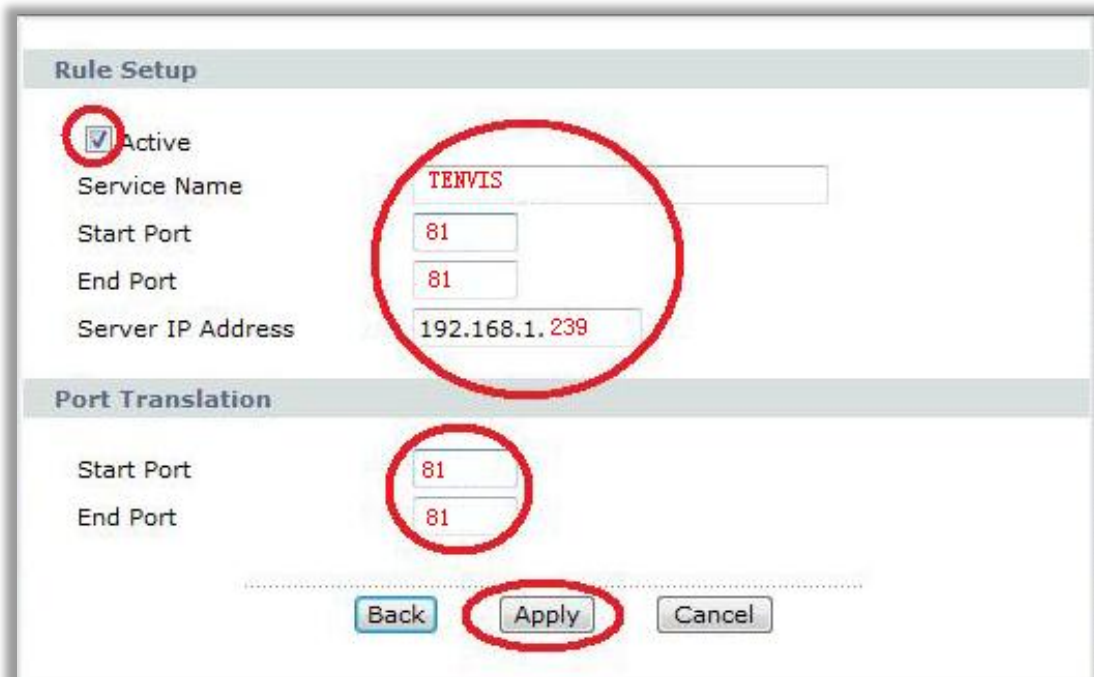
6. Enter the IP address of the camera, click **Enable**.

For Zyxel Routers

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.1.254
2. Click **Network - NAT**, and click **Port Forwarding**

3. Add a new rule

Service Name: It is just a name whatever you want for port forwarding

Start Port: the camera's port

End Port: the camera's port

IP Address: The camera's IP address

Click **Apply**