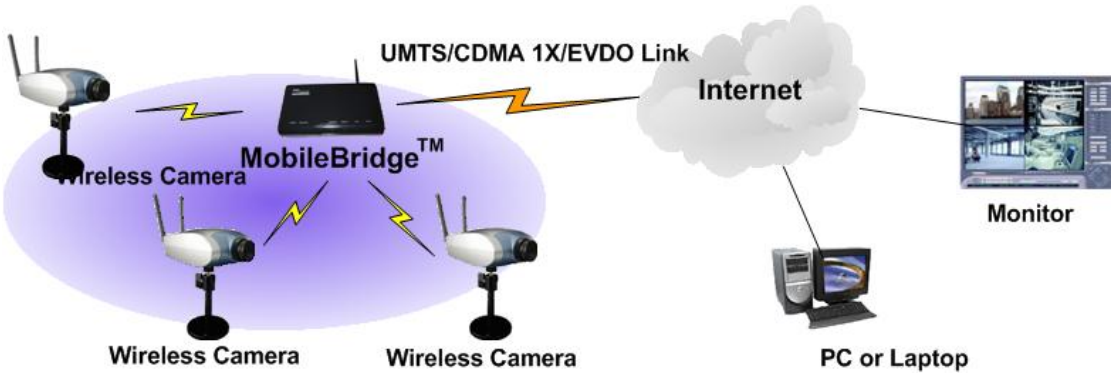
Remote Wireless Surveillance Solution

Top Global offers an easy to use, plug and play wireless surveillance solution for construction sites and remote locations/buildings monitoring. The solution could support multiple cameras and consists of WiFi cameras, MB8000 and 3G data card. This wireless surveillance total solution can be pre-configured in advance. The end user just needs to supply power for these devices at the field without the need of any network cable, the site can be monitored instantaneously and viewable from anywhere using a web browser on internet.

I set up a total wireless surveillance system in my office using the following devices:

1. WiFi cameras
2. Top Global MB8000
3. a 3G data card

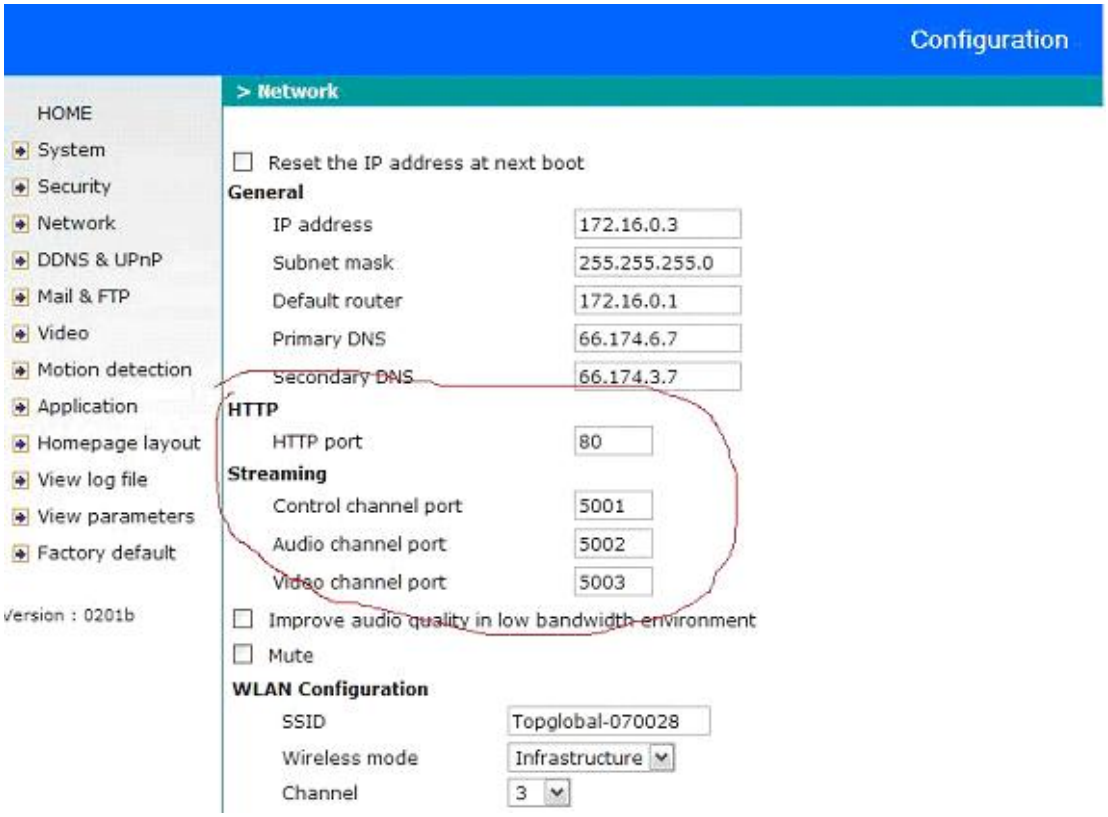
The network topology is as below:

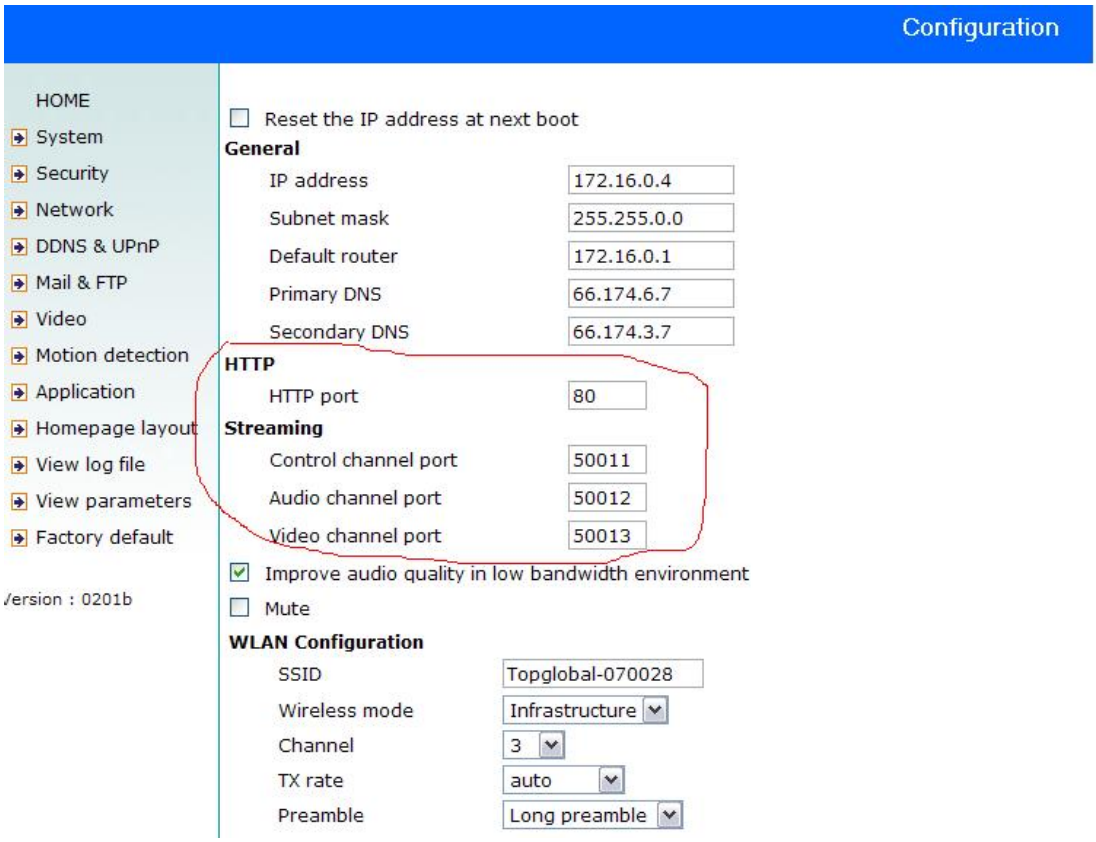


Top Global MB8000 has 2 wireless interfaces: one embedded WLAN interface and one PCMCIA slot with data card plugged in as WWAN interface. Setting right WLAN parameters (SSID, WEP…) in the WiFi camera, WiFi camera can be easily connected with MB8000. The data card is inserted into the PCMCIA slot of MB8000. MB8000 uses this data card to dial into the Mobile Operator's network and connects those WiFi cameras into internet.

There is a NAT in Top Global MB8000. From the internet, I can't visit the cameras within the private LAN. Fortunately MB8000 supports the IP port forwarding function. With this function, I can forward the TCP or UDP request coming from internet to the cameras within the private LAN of MB8000.

The WiFi camera supports the HTTP and Streaming video and audio. You can use IE to brows the video by inputting the camera IP address directly into the address bar. I set the WiFi camera with the following parameters:

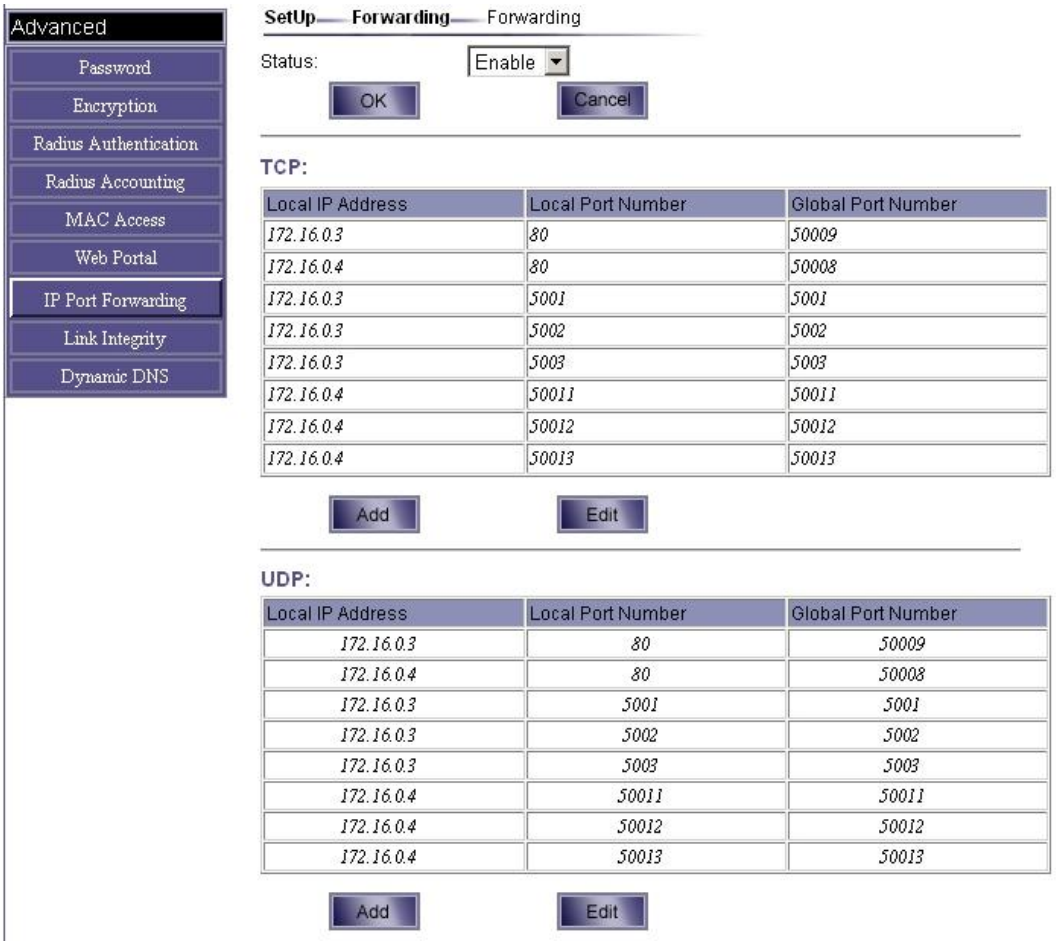




The key parameters are IP address and WLAN configuration. I assign 172.16.0.3/255.255.0.0 and 172.16.0.4/255.255.0.0 to the two cameras. And set the default router to the IP address of MB8000. I assign the SSID to “Topglobal-070028” which is also set in the WLAN configuration

of MB8000. Pay attention to the Http port and streaming ports of the cameras; we will map those ports to MB8000 ports one by one.

In the configuration of MB8000, I enable the NAT status and set the TCP and UDP map table in the Web GUI of MB8000 as below: Advanced->NAT



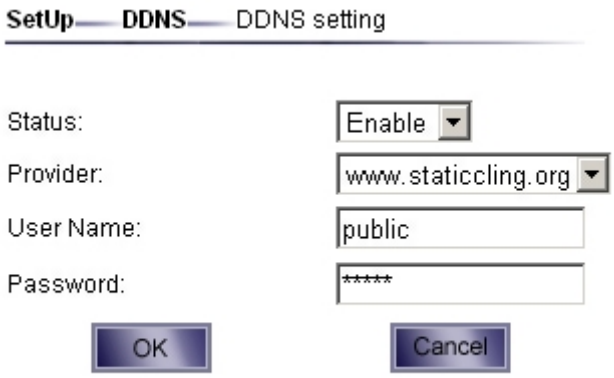
Pay attention that I map the 80 port of 172.16.0.3 into the port 50009 of MB8000 and 80 port of 172.16.0.4 into the port 50008 of MB8000. Also you can notice that we assign different ports of MB8000 for each streaming ports of the cameras. I map both TCP and UTP ports of the cameras so that we can get better performance in bad network environment.

After the upper configurations, I reboot MB8000 and the camera so that the configuration will take effect. After the MB8000 rebooting and dialing up, I check the MB8000 GUI to see it gets an IP address as: 70.219.244.97. Then I can use http://70.219.244.97:50009/ and http://70.219.244.97:50008/to brows the video in the two cameras.

As the IP address of MB8000 may vary each time when it dials up. You may fell inconvenient to check the IP address each time. MB8000 offers a Dynamic Domain Name System (DDNS) feature. DDNS lets you assign a fixed host and domain name to a dynamic Internet IP address. It is useful when you are hosting your own website, FTP server, or other server through dial up link. Before you can use this feature, you need to sign up for DDNS service at www.staticcling.org or www.opendns.be, currently MB8000 supports these two DDNS service

providers.

After you configured the right DDNS configuration, each time when MB8000 dial up, the Domain Name you applied in the DDNS service provider will be directed to the new IP address MB8000 got. You just need to remember the domain name of MB8000 to access the cameras.



This system is totally wireless! It can be set up easily and rapidly. You can even DIY make a surveillance monitor for your office with little cost and effort! Placing this in your car with power supplied from your car, you can drive this mobile wireless surveillance system to anywhere where you want to monitor.

It is a truly mobile and portable wireless surveillance solution for homeland security, disaster monitoring, telemedicine, construction site monitoring, as well as logistics/warehouse monitoring.

TOP Global USA, Inc.

ADDR：21072 Bake Parkway, Suite 106, Lake Forest, CA 92630, USA

TEL: +1 949 586 7046; +86-010-64390528

FAX: +86-010-64392901

http://www.topglobalusa.com/