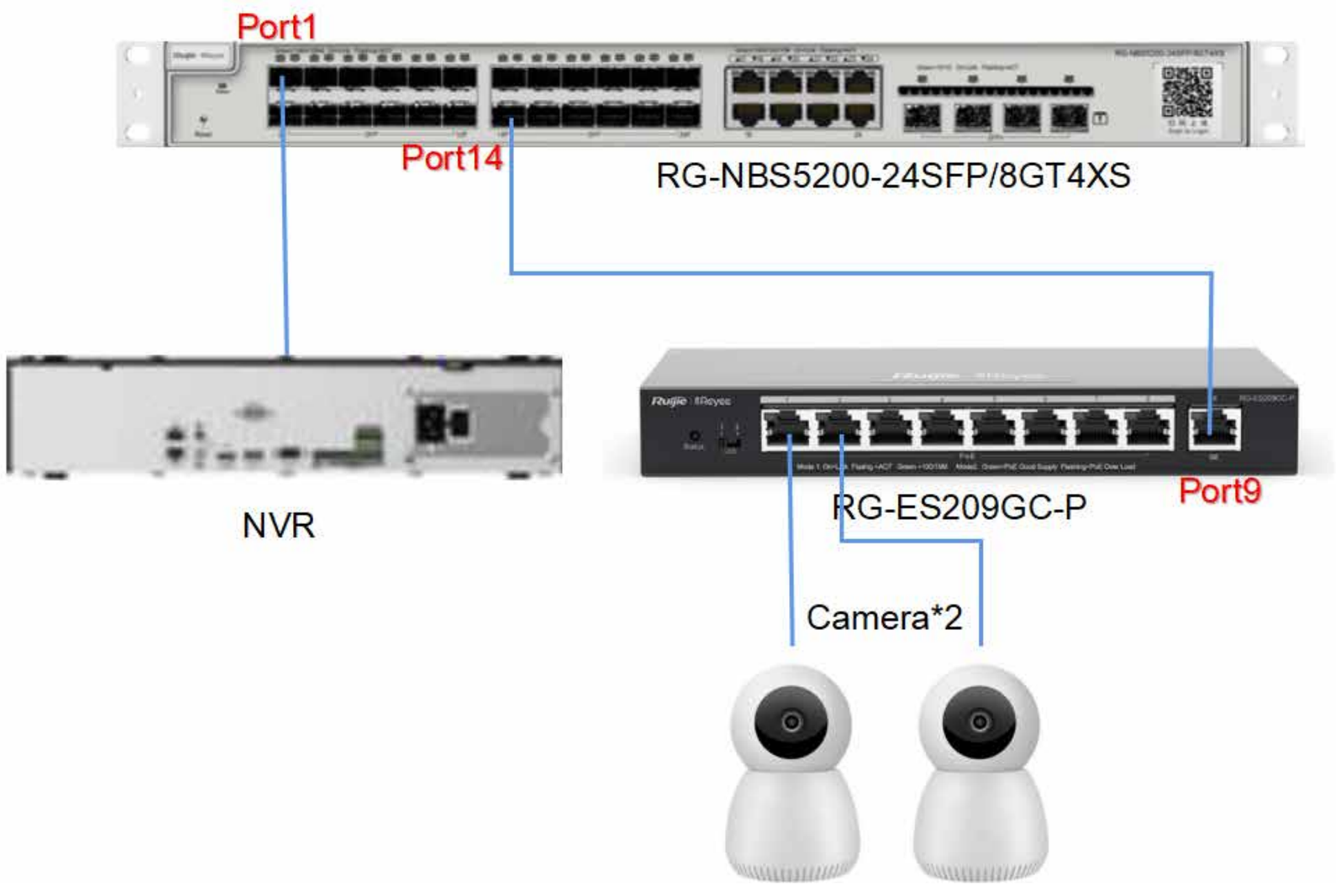
How to optimize the stuck of camera monitoring screen?

I. Applicable Scenario

When a large number of cameras are being monitored, the monitoring video screen may be stuck. In order to improve the video fluency, we can optimize the switch configuration to enable port isolation and storm control.

II. Network Topology



III. Configuration Points

1. In layer 2 networking, the NVR connects to port1 of the NBS core switch, and all the access switches are RG-ES200 Series switches. The port isolation should be configured on both NBS core switches and ES access switches.
2. The storm control should also be configured on both NBS core switches and ES access switches.

IV. Configuration Steps

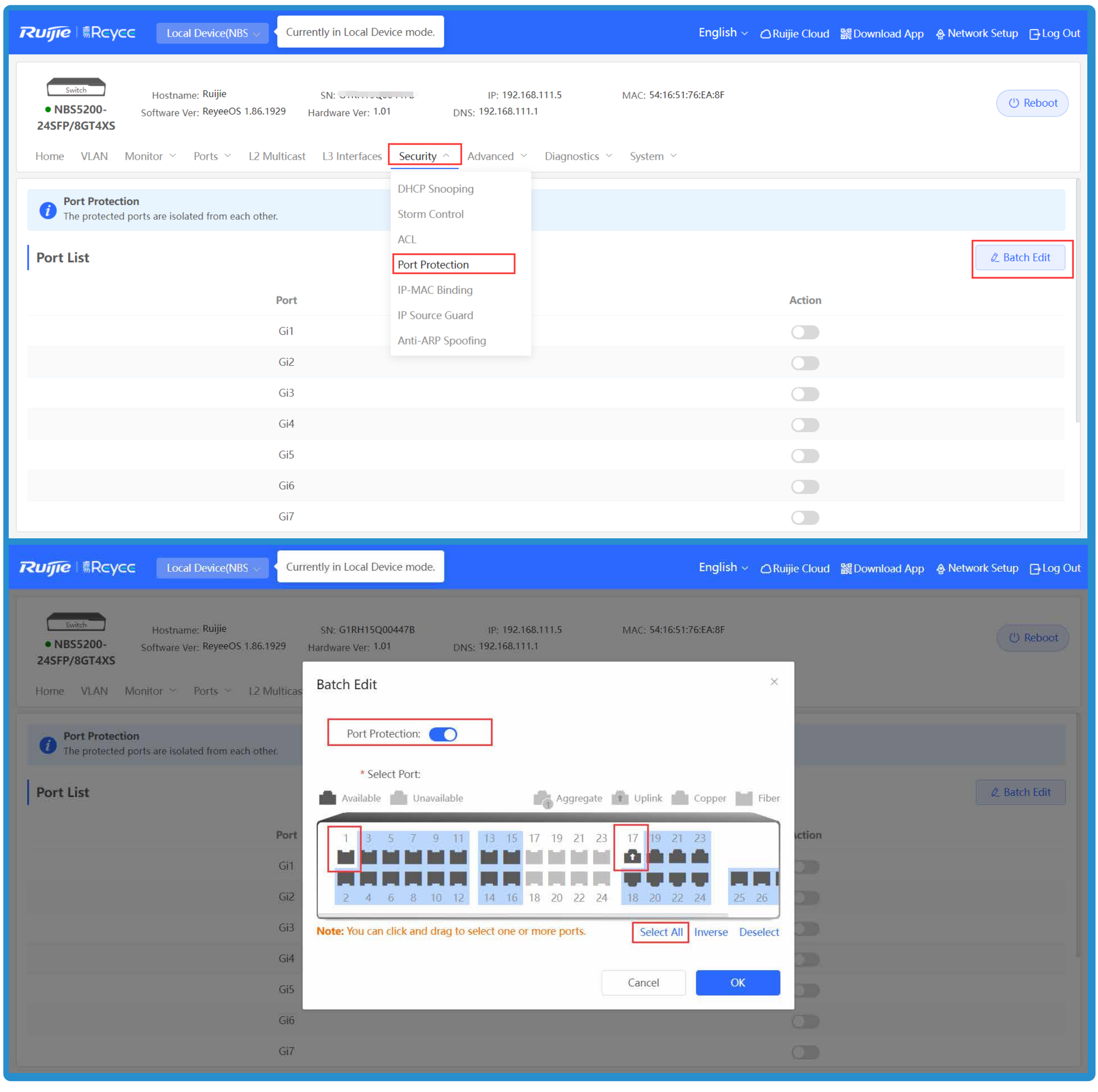
1 Configure Port Isolation.

Notice

If this function is incorrectly configured, the network may be disconnected. Please perform the remote operations with caution.

(1) NBS5100/5200 series switches configurations.

Log in to the Web page of the switch by using the default IP address 10.44.77.200/24 of the switch, and select **Security> Port Protection > Batch Edit** to enable the **Port Protection**. Selecting all ports except the port connecting to NVR and the uplink port, and then save the Settings.



After the configuration is complete, all interfaces cannot access each other except the port 1 and the uplink port. All other interfaces can access the port 1 and the uplink port, thus reducing useless information exchange between surveillance cameras.

IV. Configuration Steps

(2) ES200 series switches configurations.

Log in to the web page of the switch and select **Switch Settings > Port Isolation** to enable the port isolation.

Notice

The interface connecting to the core switch (select 9 here) needs to use the uplink interface in the prompt, because after port isolation is enabled, the downlink interface cannot communicate with each other, and the uplink interface can communicate with all interfaces.

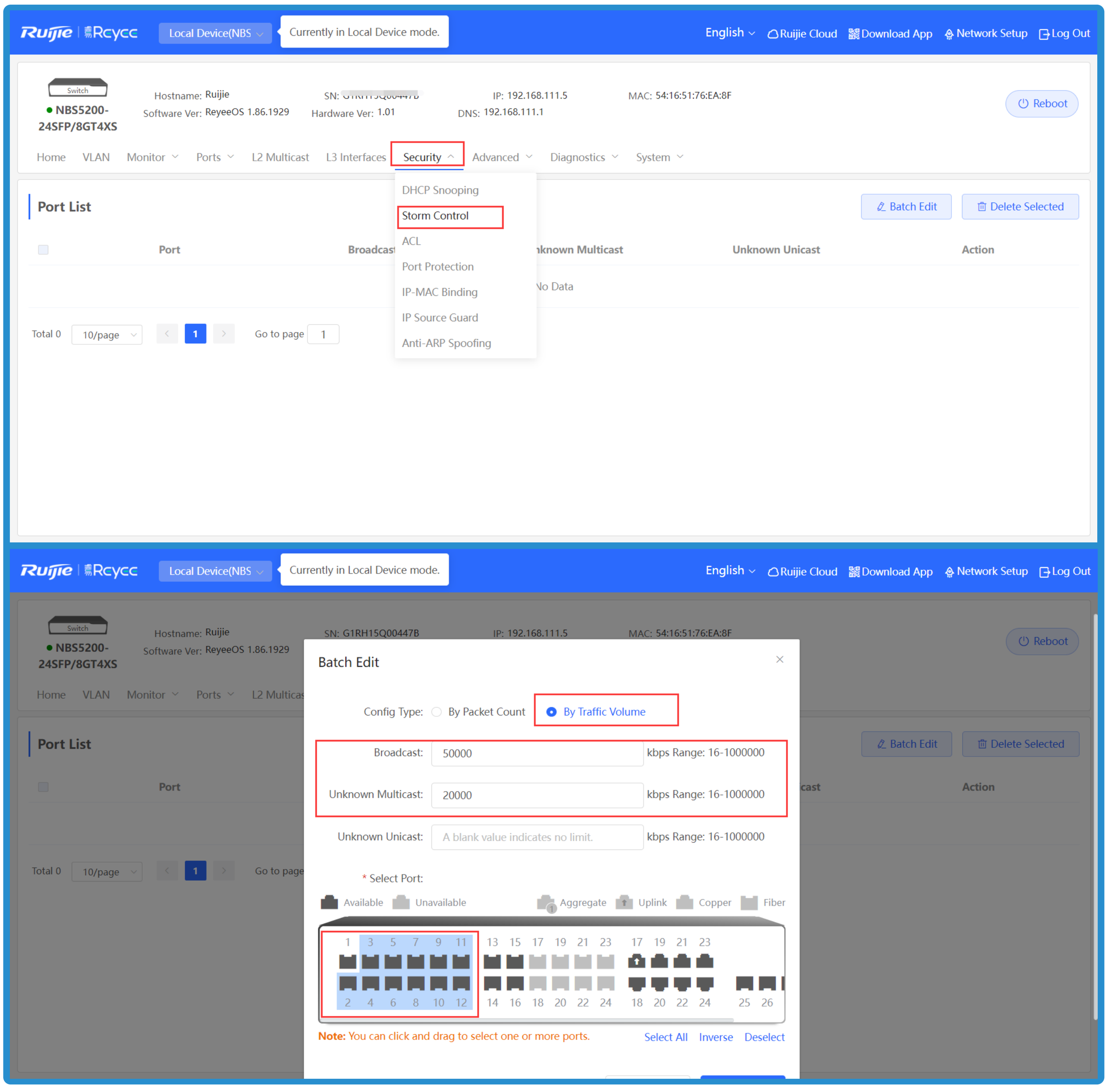
2 Configure Storm Control.

A broadcast storm on a switch affects data communication on the switch. Generally, cameras generate a large number of broadcast packets. You can limit the broadcast and forwarding speed of interfaces to reduce the impact.

(1) NBS5100/5200 series switches configuration.

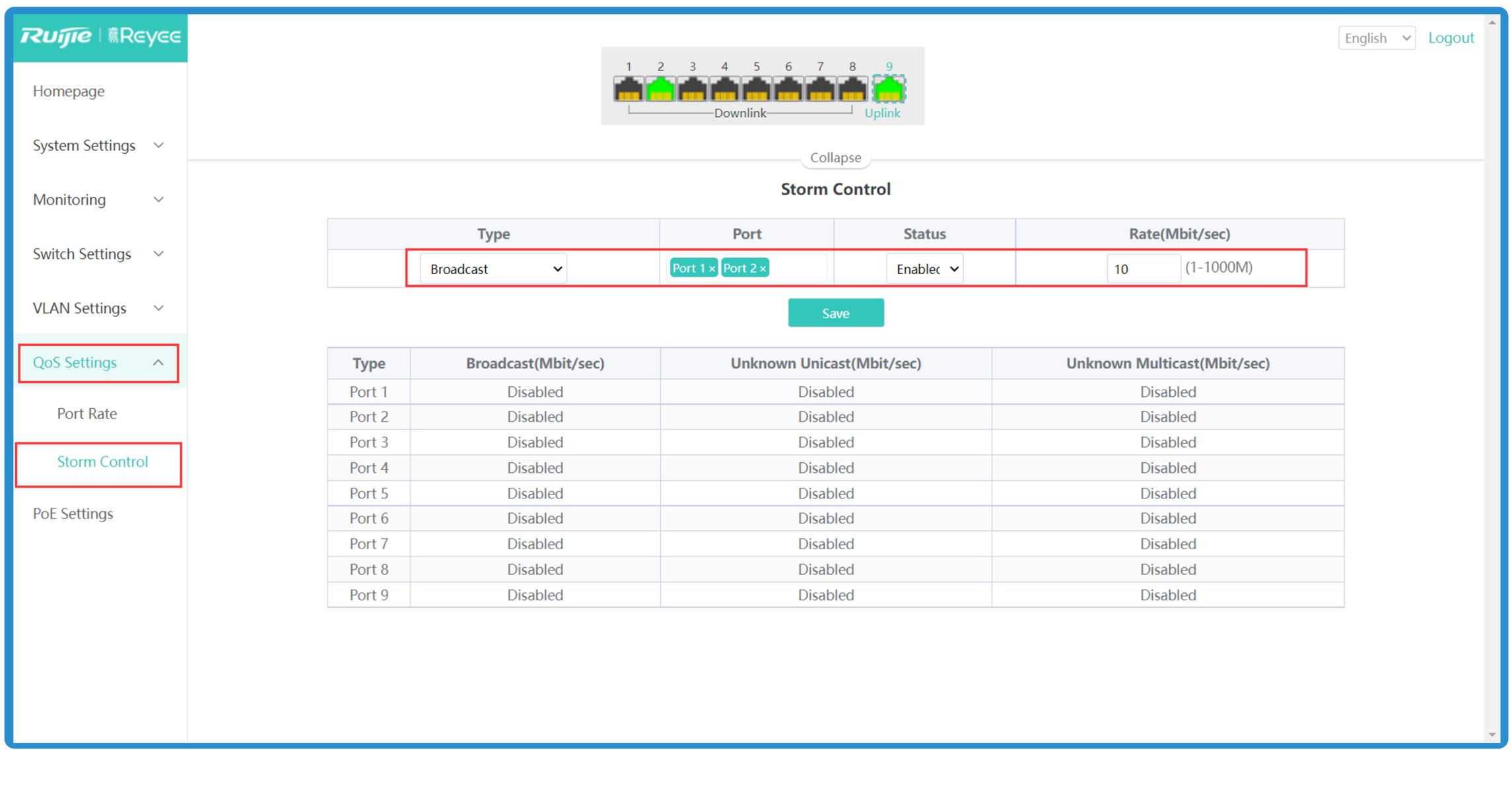
Log in to the web page of the switch, choose **Security > Storm Control > Batch Edit**, and select By Traffic Volume. The value is the actual traffic value. The limit parameter can be adjusted according to the actual situation.
(You can first set the parameter as 10M for one camera and then set the superposition configuration based on the number of cameras in one interface (5 cameras: 10*5=50M). If the improvement effect is not obvious after the configuration, you can adjust the value appropriately.)

IV. Configuration Steps



(2) ES200 series switches configuration.

Log in to the web page of the switch, choose **QoS Settings > Storm Control**, set the type to **Broadcast**, select ports 1–2 connected to the camera, enable storm control, and set the rate to 10, indicating that the broadcast forwarding is limited to 10 M/s.



IV. Configuration Steps

After the configuration is complete, you can continue to observe the monitoring screen.

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