SANGFOR

NGAF

IP and MAC Address Binding Configuration Guide

Version 8.0.8

Change Log

Date	Change Description
Nov 15, 2019	IP and MAC Address binding configuration guide.

Contents

1. Function Introduction

Describes how to set user binding IP or MAC address.

2. Application Scenarios

Configure user binding IP or MAC address, and configure configuration to let users who already bind with IP or MAC address are allow to access internet.

Bind the MAC address when the NGAF device is connected to the Layer 3 switch.

3. Description of Necessary Conditions

1. One NGAF device and one PC.

2. Deploy the network environment to ensure that the PC can access the NGAF device, and ensure that the data of the test PC will pass through NGAF.

3. If the intranet user is bind to the MAC address and the NGAF device is connected to the Layer 3 switch, you need to configure the Obtain MAC by SNMP on the NGAF.

4. Configuration Ideas

1. User who bind through an authentication policy can access to Internet.

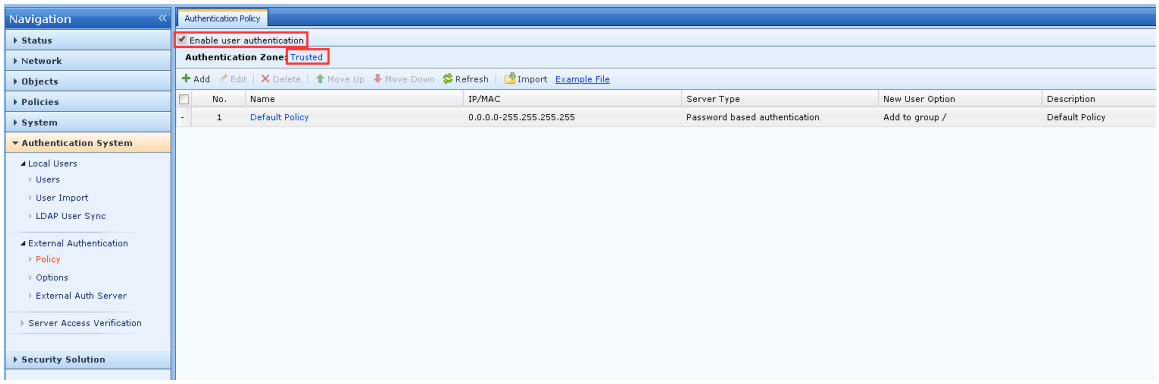
2. Users who implement binding by manually creating local users can access the Internet.

5. Configuration Mode and Screenshot

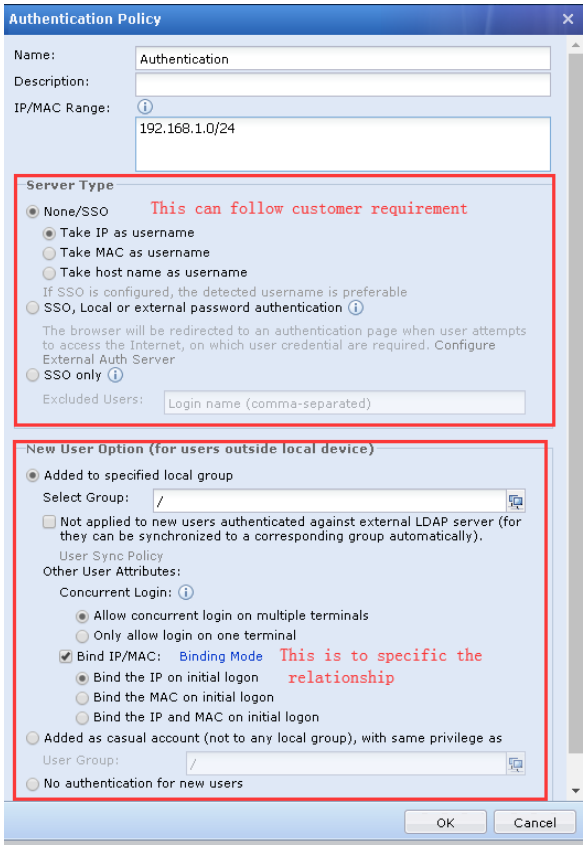
This requirement can be achieved by two methods, the specific configuration is as below:

5.1 Through the authentication policy

Go to **Authentication System > External Authentication > Policy**, then enable the **Enable user authentication** and choose the authentication zone:



2. Click on the **Add** button, then configure as figure below:

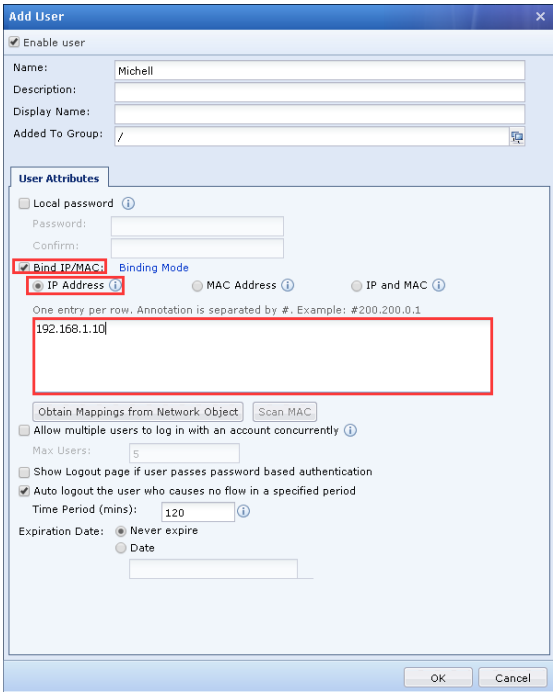


3. After configured step 1 & 2, authenticated users will automatically added to Default group (it can choose to add to another group). Go to **Authentication System > Users** to check added users. If the user in **Users** is identified as a local user, the user who is not in **Users** will be recognized as a new user when accessing the Internet next time.

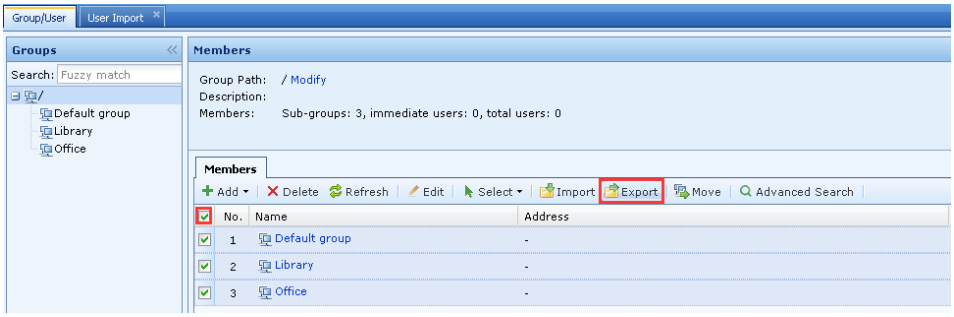
4. Then need to wait user completes the authentication, and after the corresponding binding relationship exists in the **Users**, modify the authentication policy, change the **New User Option** to **No authentication for new users**. User under local organizational structure when matching authentication policies will not recognized as new users. When new users go online, they will match **No authentication for new users.**

5.2 Implement through Creating Local User Manually

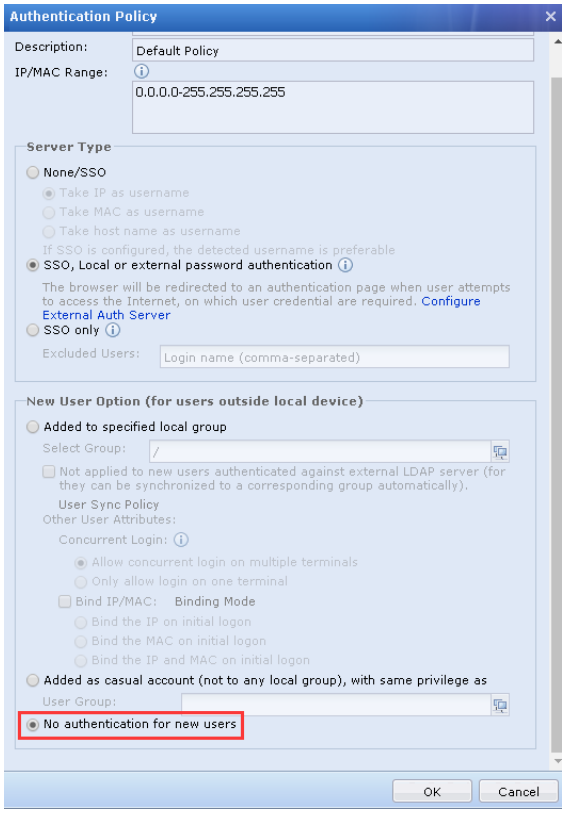
1. Go to **Authentication System** > **Users**, manually add groups and users and set the binding relationship as below:



2. If there are more users, you can export a table and edit the table according to the format. As shown below:



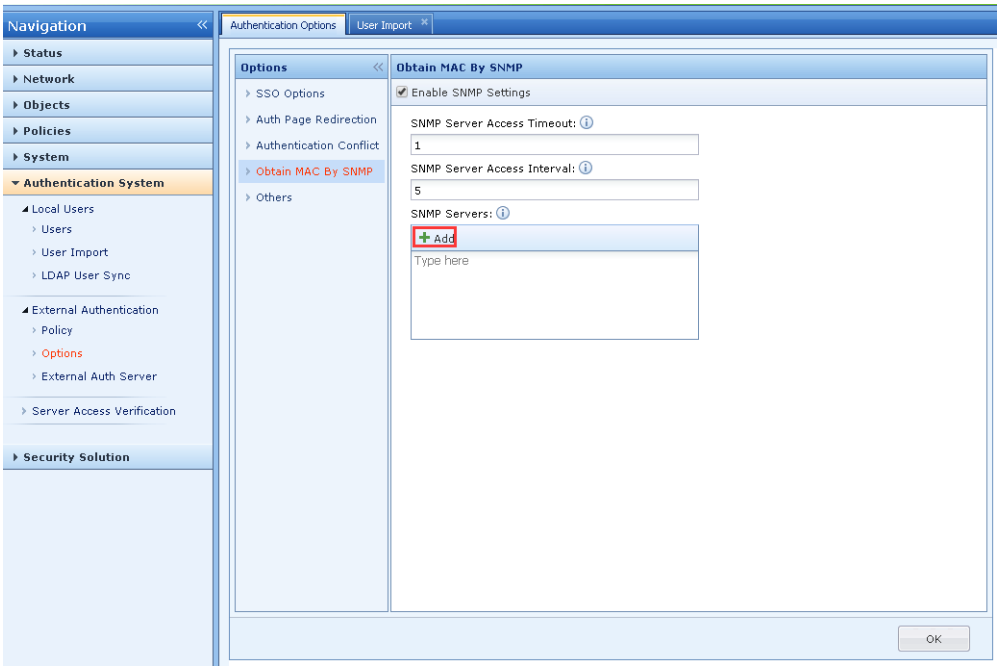
3. Go to **Authentication System > External Authentication > Policy**, choose the Default policy and change the option of **New User Option** to **No authentication for new users**.



5.3 Binding Mac When AF Connects to Layer 3 Switch

1. Configure SNMP on the Layer 3 switch. The protocol type choose all if possible. Get the oid value and community name of SNMP.

2. Go to **Authentication System > External Authentication > Options > Obtain MAC By SNMP** then click on the **Add** button to add the layer 3 switch IP as below:



3. After the configuration, test the user's real MAC address to test whether the user can access the Internet or not. If yes, refer to step 5.1 or 5.2. If unable to access internet might because of the Obtain MAC by SNMP failed.

6. Precautions

1. If the LAN users configured MAC address binding and NGAF is connected to layer 3 switch then it required to configure obtain MAC by SNMP on the NGAF.

2. If the user exists, automatic binding needs to delete the original user or manually re-bind it.