



# IAM

**How to bind user IP and Mac at the same time**

**Version 12.0.18**



## Change Log

Date	Change Description
July 23, 2019	Version 12.0.18 document release.

# CONTENT

Chapter 1 Content requirement.....	1
Chapter 2 Configuration and Snap shot .....	1
2.1 Open authentication.....	1
2.2 Password base authentication.....	3
2.3 Authetication with SSO.....	4
Chapter 3 Testing result .....	6
Chapter 4 Precaution.....	6

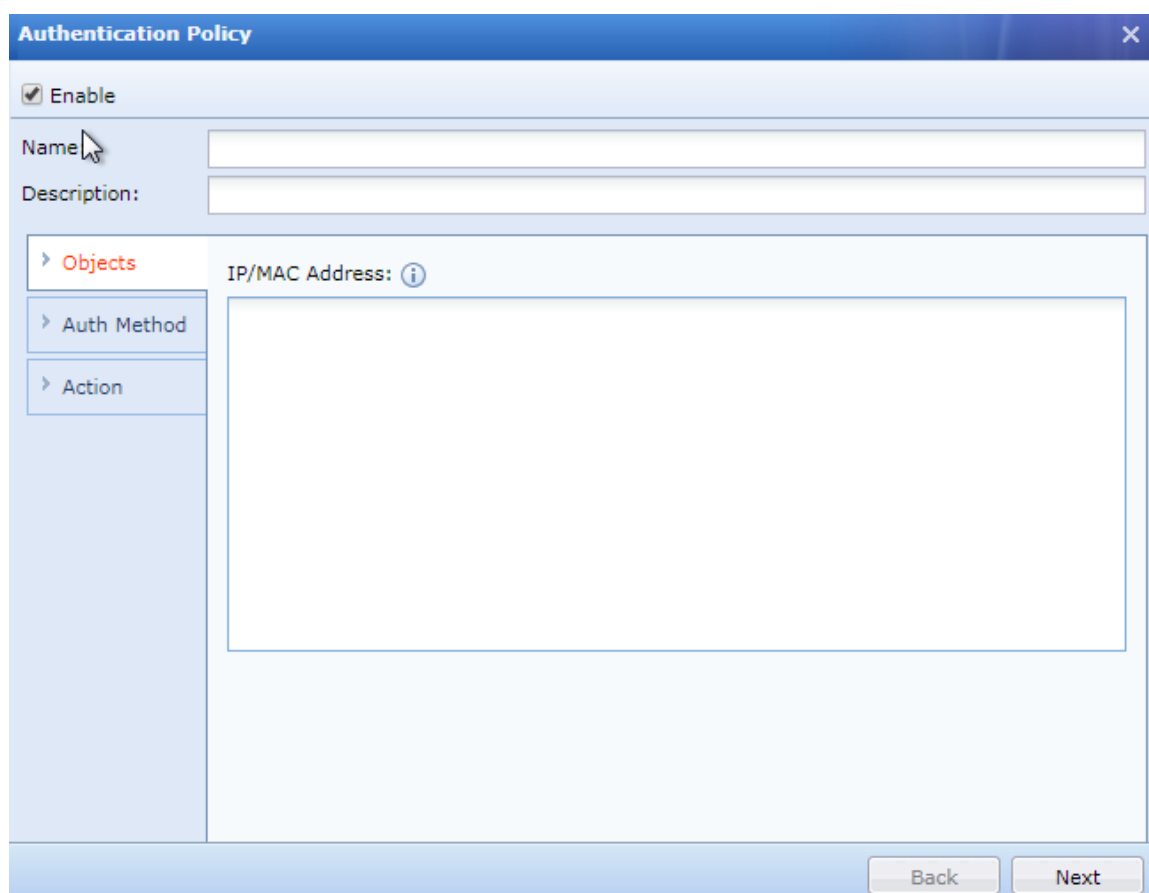
## Chapter 1 Content requirement

1. IAM device, network data can pass through the device
2. Internal networks are non-DHCP
3. If 3 layer network environment, need to configure layer 3 MAC recognition and and able to verify the ARP table.

## Chapter 2 Configuration and Snap shot

### 2.1 Open authentication

1. Fill in authentication IP or Mac address.



2. Authentication method choose Open authentication, user name can use IP address as username, also can use Mac address as user name. Not recommend to use PC as username (sometimes can not get the PC name)

**Authentication Policy**

☒ Enable

Name:

Description:

Objects

**Auth Method**

Action

Auth Method:

- ☒ Open authentication
- ☐ Password based
- ☐ Single Sign-On(SSO)
- ☐ None (requests are rejected always)

Username

- ☒ Auto assigned:
- ☐ Obtain during self registration:

Back Next

3. Select automatic bind IP and Mac address after authentication.

**Authentication Policy**

☒ Enable

Name:

Description:

**Objects**

Add Non-Local/Domain Users To Group:

☒ Add user account to local user database

☒ Automatic binding

☒ Bind IP to MAC address

☐ Bind user account to IP and MAC address

Binding: ☐ IP Address ☒ MAC Address

Validity Period: ☒ Never expire ☐ Days:

Advanced

Back Commit

## 2.2 Password base authentication

1. Fill in the IP range and Mac address.

**Authentication Policy**

☒ Enable

Name:

Description:

**Objects**

IP/MAC Address:

Back Next

2. Authentication method choose password based.

The screenshot shows the 'Authentication Policy' configuration window. The 'Enable' checkbox is checked. The 'Auth Method' section has three radio buttons: 'Open authentication', 'Password based' (which is selected and highlighted with a red box), and 'Single Sign-On(SSO)'. Below this, the 'Auth Server' dropdown is set to 'Local user database'. There are checkboxes for 'Self registration', 'Account login with WeChat', and 'Account Login with SMS Code'. The 'Captive Portal' section has a 'Captive Portal' dropdown set to 'Without Slideshow and Terms of Use' and a 'Login Redirection' link set to 'Previously visited webpage'. The 'Back' and 'Next' buttons are at the bottom right.

3. Select automatic bind IP and Mac address after authentication.

The screenshot shows the 'Authentication Policy' configuration window, specifically the 'Action' tab. The 'Automatic binding' checkbox is checked and highlighted with a red box. Below it, the 'Bind IP to MAC address' checkbox is also checked. There are other options like 'Add user account to local user database' and 'Bind user account to IP and MAC address'. The 'Purpose' section has three radio buttons: 'Auto authentication', 'Correlated login with account' (selected), and 'Auto authentication and correlated login with account'. The 'Binding' section has checkboxes for 'IP Address' and 'MAC Address' (checked). The 'Validity Period' section has radio buttons for 'Never expire' (selected) and 'Days'. The 'Login through new endpoint device needs approval' checkbox is unchecked. The 'Back' and 'Commit' buttons are at the bottom right.

## 2.3 Authentication with SSO

1. Fill in the IP range and Mac address

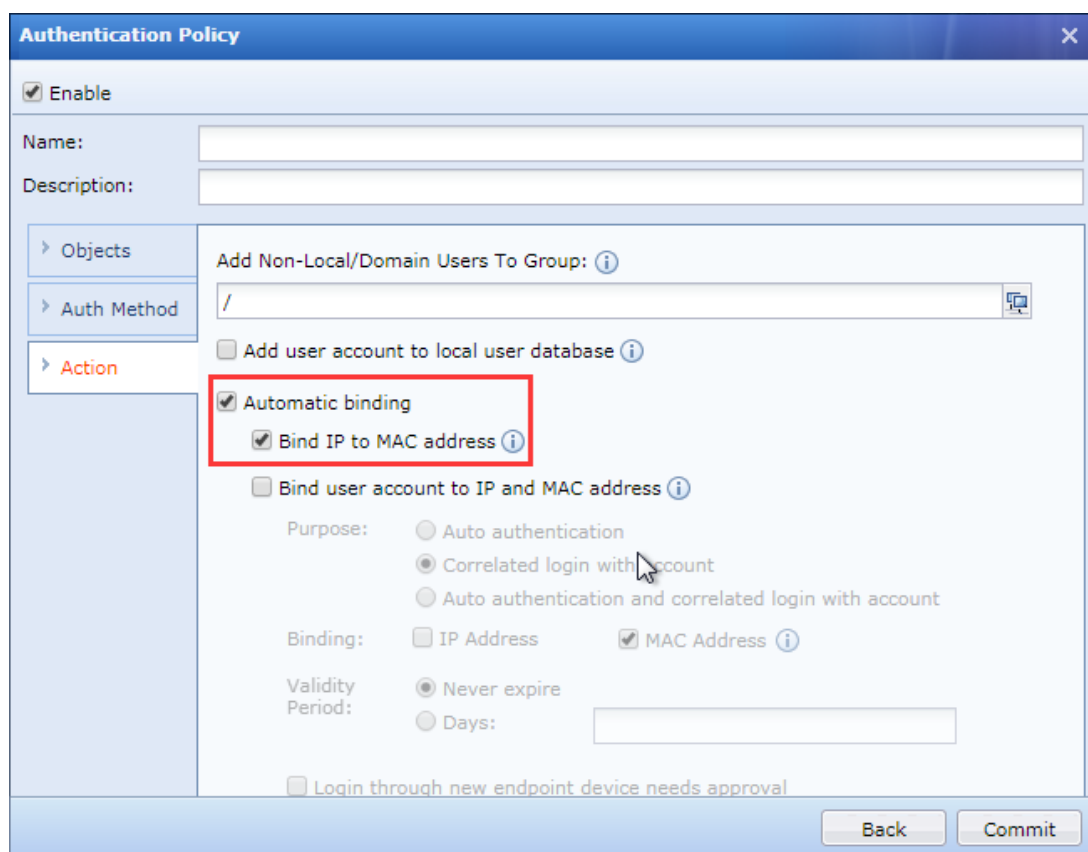
The screenshot shows the 'Authentication Policy' configuration window. The 'Enable' checkbox is checked. The 'Name' and 'Description' fields are empty. On the left, there are three expandable sections: 'Objects', 'Auth Method', and 'Action'. The 'Objects' section is expanded, showing a large empty box for 'IP/MAC Address' with an information icon. At the bottom right, there are 'Back' and 'Next' buttons.

2. Authentication method choose SSO, when fails SSO can choose either Open Authentication or password based to login.

The screenshot shows the 'Authentication Policy' configuration window, now on the 'Auth Method' tab. The 'Auth Method' section has three radio buttons: 'Open authentication', 'Password based', and 'Single Sign-On(SSO)'. The 'Single Sign-On(SSO)' option is selected and highlighted with a red rectangle. Below this, there is a section for 'SSO Enabled' with a link to 'SSO Settings'. Under 'For User Fails SSO', there are two radio buttons: 'Open authentication' and 'Password based'. The 'Password based' option is selected. Below this, there are three fields: 'Auth Server' (set to '10.10.10.3, Local user database'), 'Captive Portal' (set to 'Without Slideshow and Terms of Use' with a 'Preview' button), and 'Login Redirection' (set to 'Previously visited webpage'). At the bottom, there are 'Back' and 'Next' buttons.

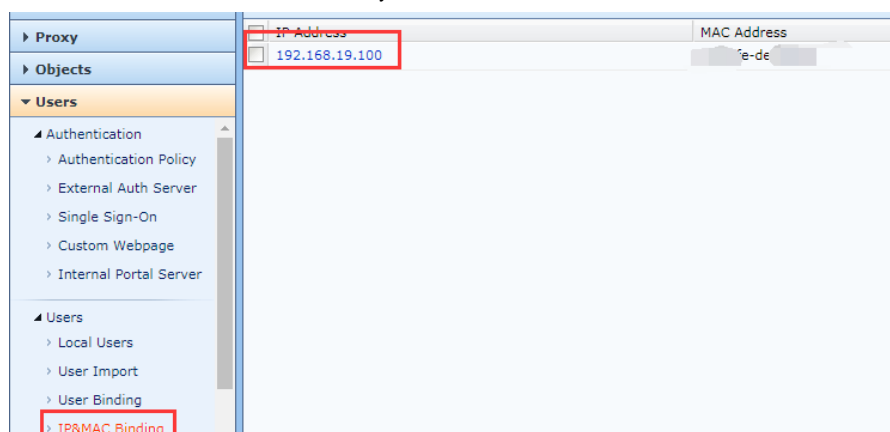
3. Select automatic bind IP and Mac address after authentication.





## Chapter 3 Testing result

1. Internal IP will bind IP/Mac automatically.



2. When IP/Mac address not matched, data will reject by IAM.

## Chapter 4 Precaution

1. Please do not use IP/Mac address bind when using DHCP environment.
2. For password authentication or single sign-on users, the user and IP/MAC binding relationship must be automatically entered. Only the user name will be log.



**SANGFOR**

Copyright © SANGFOR Technologies Inc. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of SANGFOR Technologies Inc.

SANGFOR is the trademark of SANGFOR Technologies Inc. All other trademarks and trade names mentioned in this document are the property of their respective holders.

Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied. The information in this document is subject to change without notice. To obtain the latest version, contact the international service center of SANGFOR Technologies Inc