

Message Notification Service

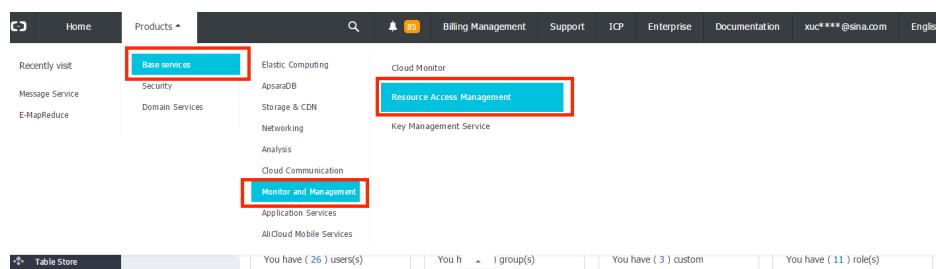
Access Control

Access Control

RAM user operations

Create a RAM user

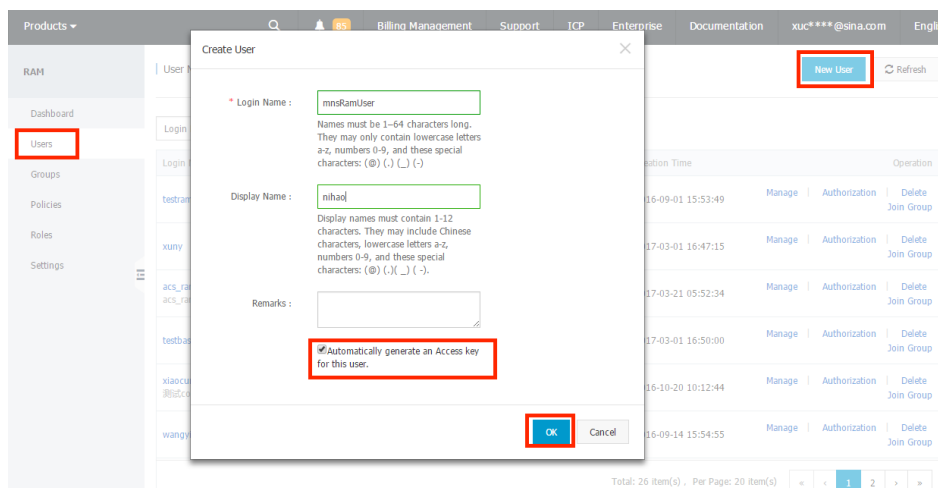
Log on to the Alibaba Cloud console, then click **Resource Access Management** from the left-side navigation bar to open the RAM console.



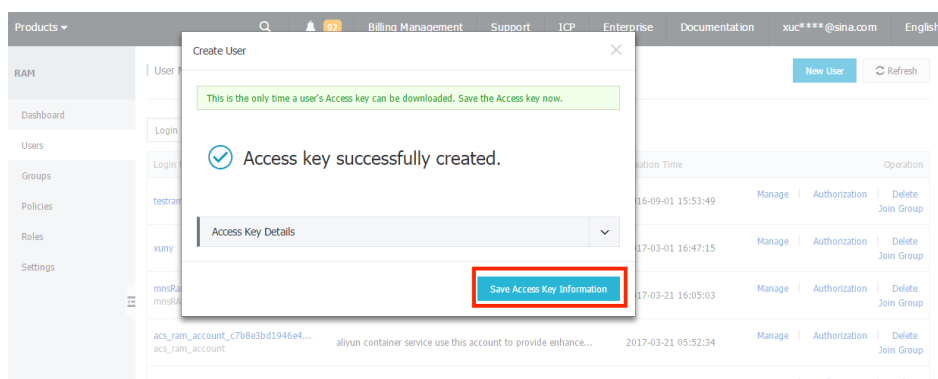
Click **Users** on the RAM console.

Click **New user** on the User Management page.

Input a login name and other details, tick on **Automatically generate an Access key for this User**, then click **OK**.



Click **Save Access Key Information** to download the AK file.

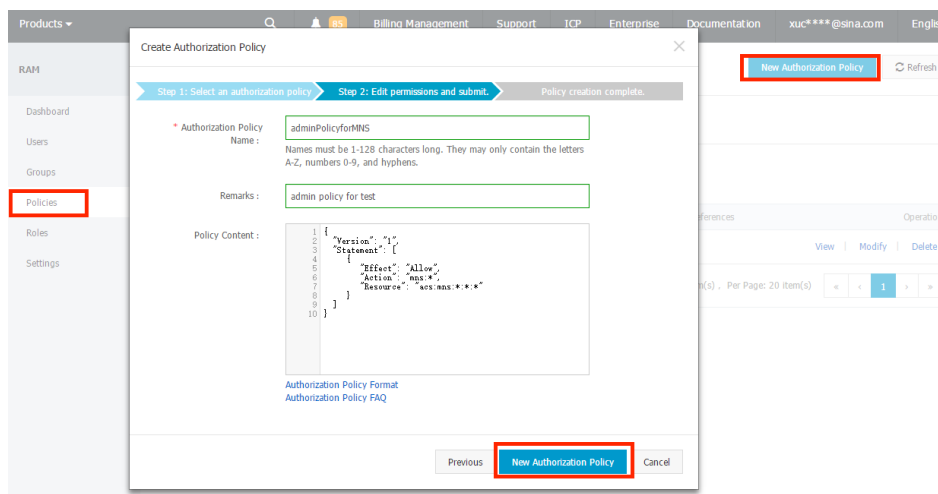


Create a RAM policy

Click through **policies > custom policy > New Authorization Policy** on the RAM console.

Select **Blank Template** in the pop-up dialog.

Edit the policy and fill in the Remarks , then click **New Authorization Policy**.



A sample policy for Message Service:

```
{
  "Statement": [
    {
      "Action": "mns:*",
      "Effect": "Allow",
      "Resource": "acs:mns:*:*"
    }
  ],
  "Version": "1"
}
```

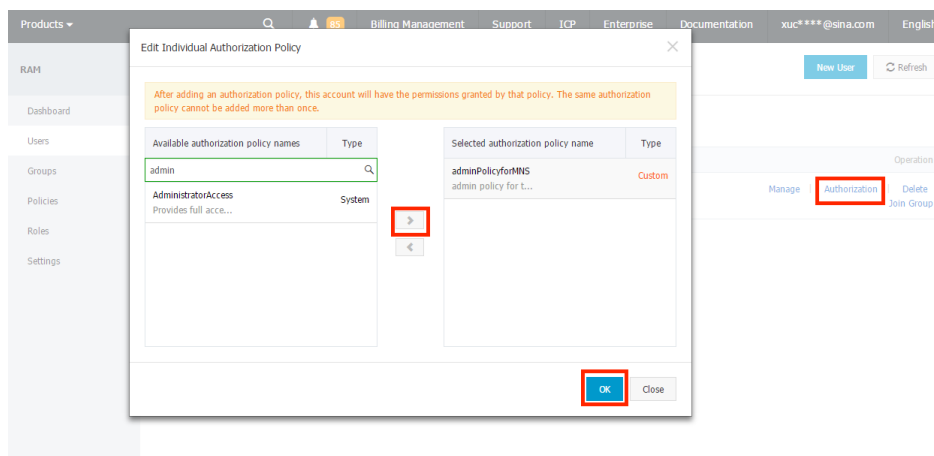
Please refer to the RAM document for more instructions of the policy format.

Authorize a RAM user With a policy

Click **Users** on the left-side bar on the RAM console.

Find the RAM user, click **Authorization** in the right action list.

Find the policy in pop-up dialog, and select it to right list, then click **OK**.



Test to access MNS by RAM user. Here is python SDK for example:

- i. Download the latest version of Python SDK.
- ii. Set sample.cfg Config file with AK() and the endpoint.
- iii. Run **\$python sample.py**.
- iv. The RAM user can access the Message Service if there is no error.

Policy samples

Sample 1: Add limitation on source IP for accessing Message Service.

Message Service allows access from 42.120.88.0/24 and 42.120.66.0/24.

```
{
  "Statement": [
    {
      "Action": "mns:*",
      "Effect": "Allow",
      "Resource": "acs:mns:*:*"
    }
  ],
  "Version": "1",
  "Condition": {
    "IpAddress": {
      "acs:SourceIp": ["42.120.88.0/24", "42.120.66.0/24"]
    }
  }
}
```

Sample2: Deny the source IP.

Message Service denies any operations which are not from source IP **42.120.88.0/24**.

```
{
  "Statement": [
    {
      "Action": "mns:*",
      "Effect": "Deny",
      "Resource": "acs:mns:*:*"
    }
  ],
  "Version": "1",
  "Condition": {
    "NotIpAddress": {
      "acs:SourceIp": ["42.120.88.0/24"]
    }
  }
}
```

Sample3: Readonly for RAM user.

Only query queue/topic operations are allowed.

```
{
  "Version": "1",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "mns:ListQueue",
        "mns:ListTopic",
        "mns:GetQueueAttributes",
        "mns:GetTopicAttributes"
      ],
      "Resource": "acs:mns:*:*"
    }
  ]
}
```

APIs to policy Action mapping

Message Service API	Policy Action	Resource
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ListQueue	mns:ListQueue	acs:mns:\$region:\$accountid:/queues
CreateQueue	mns:CreateQueue	acs:mns:\$region:\$accountid:/queues/\$queueName
DeleteQueue	mns>DeleteQueue	acs:mns:\$region:\$accountid:/queues/\$queueName
SetQueueAttributes	mns:SetQueueAttributes	acs:mns:\$region:\$accountid:/queues/\$queueName
GetQueueAttributes	mns:GetQueueAttributes	acs:mns:\$region:\$accountid:/queues/\$queueName
SendMessage/BatchSendMessage	mns:SendMessage	acs:mns:\$region:\$accountid:/queues/\$queueName/messages
ReceiveMessage/BatchReceiveMessage	mns:ReceiveMessage	acs:mns:\$region:\$accountid:/queues/\$queueName/messages
DeleteMessage	mns>DeleteMessage	acs:mns:\$region:\$accountid:/queues/\$queueName/messages
PeekMessage/BatchPeekMessage	mns:PeekMessage	acs:mns:\$region:\$accountid:/queues/\$queueName/messages
ChangeMessageVisibility	mns:ChangeMessageVisibility	acs:mns:\$region:\$accountid:/queues/\$queueName/messages
ListTopic	mns:ListTopic	acs:mns:\$region:\$accountid:/topics
CreateTopic	mns:CreateTopic	acs:mns:\$region:\$accountid:/topics/\$topicName
DeleteTopic	mns>DeleteTopic	acs:mns:\$region:\$accountid:/topics/\$topicName
SetTopicAttributes	mns:SetTopicAttributes	acs:mns:\$region:\$accountid:/topics/\$topicName
GetTopicAttributes	mns:GetTopicAttributes	acs:mns:\$region:\$accountid:/topics/\$topicName
ListSubscriptionByTopic	mns:ListSubscriptionByTopic	acs:mns:\$region:\$accountid:/topics/\$topicName/subscriptions
Subscribe	mns:Subscribe	acs:mns:\$region:\$accountid:/topics/\$topicName/subscriptions/\$subscriptionName
Unsubscribe	mns:Unsubscribe	acs:mns:\$region:\$accountid:/topics/\$topicName/subscriptions/\$subscriptionName

SetSubscriptionAttributes	mns:SetSubscriptionAttributes	acs:mns:\$region:\$accountid:/topics/\$topicName/subscriptions/\$subscriptionName
GetSubscriptionAttributes	mns:GetSubscriptionAttributes	acs:mns:\$region:\$accountid:/topics/\$topicName/subscriptions/\$subscriptionName
PublishMessage	mns:PublishMessage	acs:mns:\$region:\$accountid:/topics/\$topicName/messages