SANGFOR

aCloud

aCMP Deployment Guide

Version 5.8.6

Change Log

Date	Change Description
Otc 15, 2018	Edition of aCMP deployment guide

CONTENT

Chapter 1 Introduction of aCMP

Sangfor enterprise cloud management platform- aCMP, use Sangfor's virtualzed resource pool that build thorugh hyper-converged architecture with third party virtualization platform through a streamlined or automated approach to deliver resources as service to business unit or business user, in order to achieve automation and maintenance in the platform.

Sangfor enterprise cloud management platform can achieve to manage third party virtualization platfrom like VMware, etc. The managment platform adpots distributed architecture design which consists of enterprise level cloud architecture cluster. Each node can provide corresponding management services, and any node failure will not cause interruption in the platform. Besides thats, aCMP can provide hierarchical and decentralized management for different platfrom users. Each platform can use manage corresponding resources allocated by the aCMP. For each resources allocated can be deployed with more granular control and management. This greatly meet the enterprise-level cloud platform and build the flexibility of multitenant use of IT resources in the cloud IT architecture.

Chapter 2 Testing Resource

Testing Material Name	Instruction
aCMP installation image	aCMP5.8.6 by importing ova image file to deploy in aCloud. Ova image file download link: http://community.sangfor.com/plugin.php?id=service:download&action=view&fid=47#/12/all
aServer Authorization Key	aCMP authorization needs to be authorized by the aServer authorization KEY
Authorization File	Apply for the corresponding authorization file through authorized KEY ID.

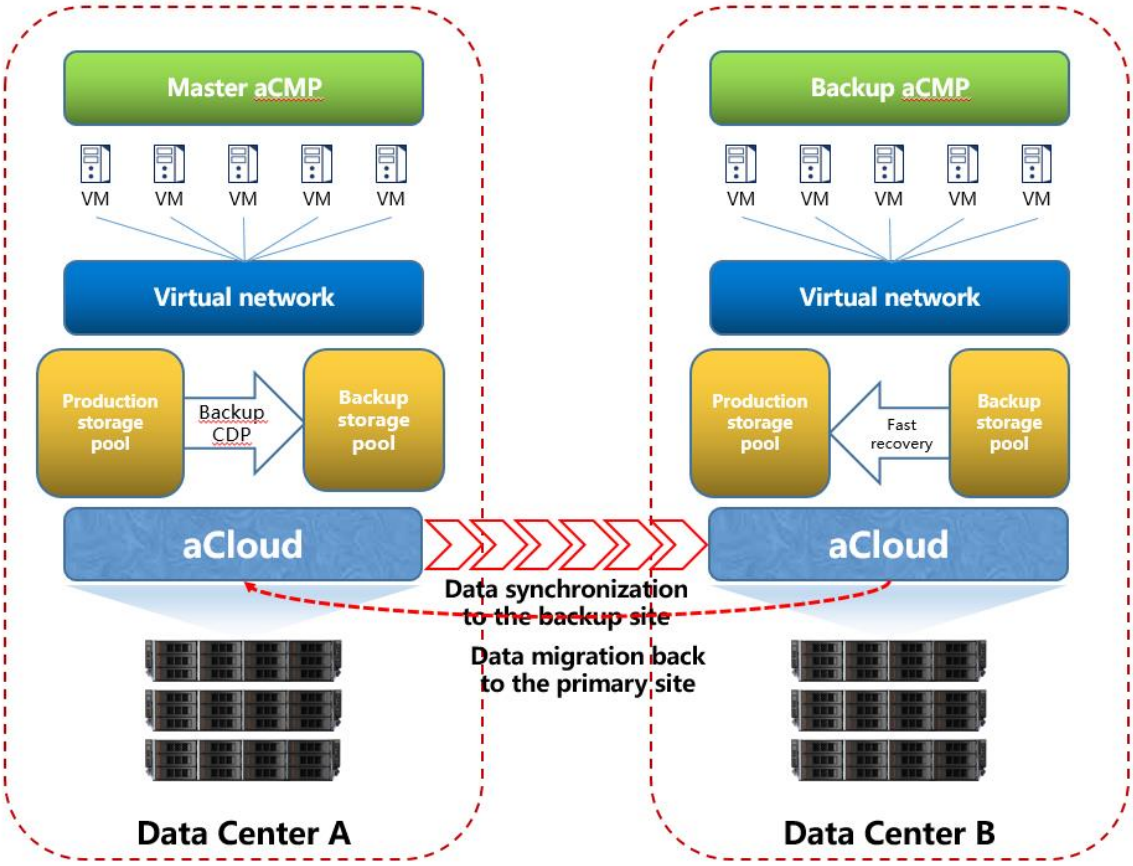
2.1 Deployment Requirement

aCMP5.8.6 only can deploy in aCloud5.8.6, it does not support deploy in third party platfrom (VMware)

Based on figure below, if aCMP requires simultaneous management of multiple cross-

regional aCloud clusters:

- Both cluster bandwidth must at least has 10Mb/s;
- If customer require remote open virtual machine, each virtual machine needs 2Mb/s;

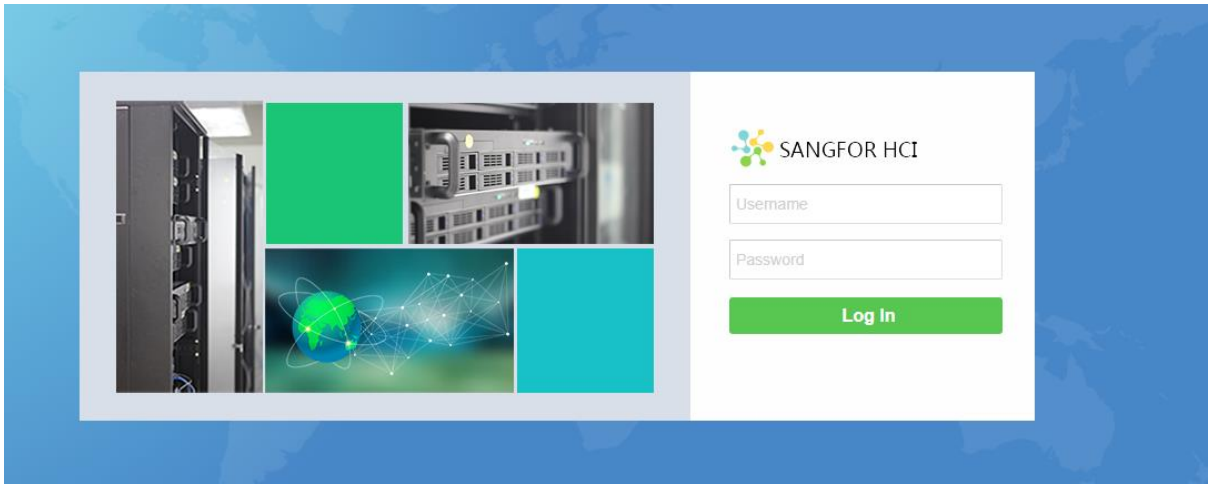


Chapter 3 aCMP deployment guide

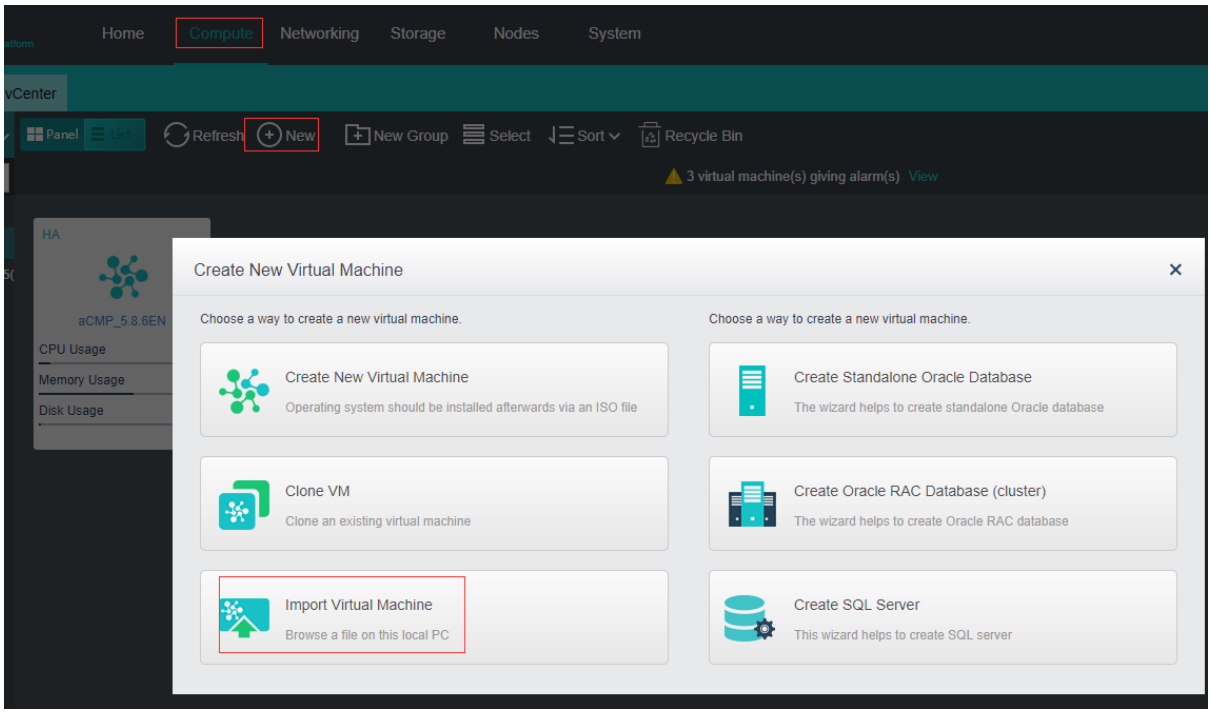
3.1 aCloud5.8.6 import aCMP image

【Steps】

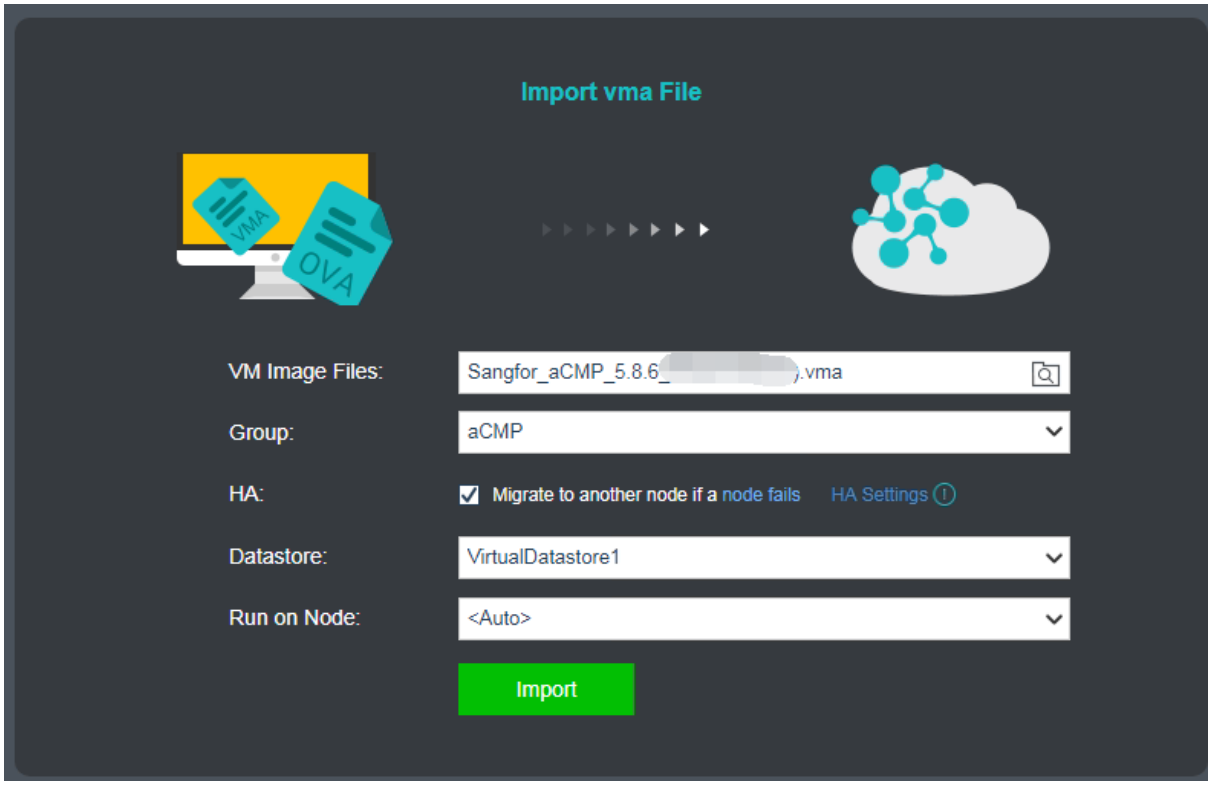
Open aCloud5.8.6 login page:

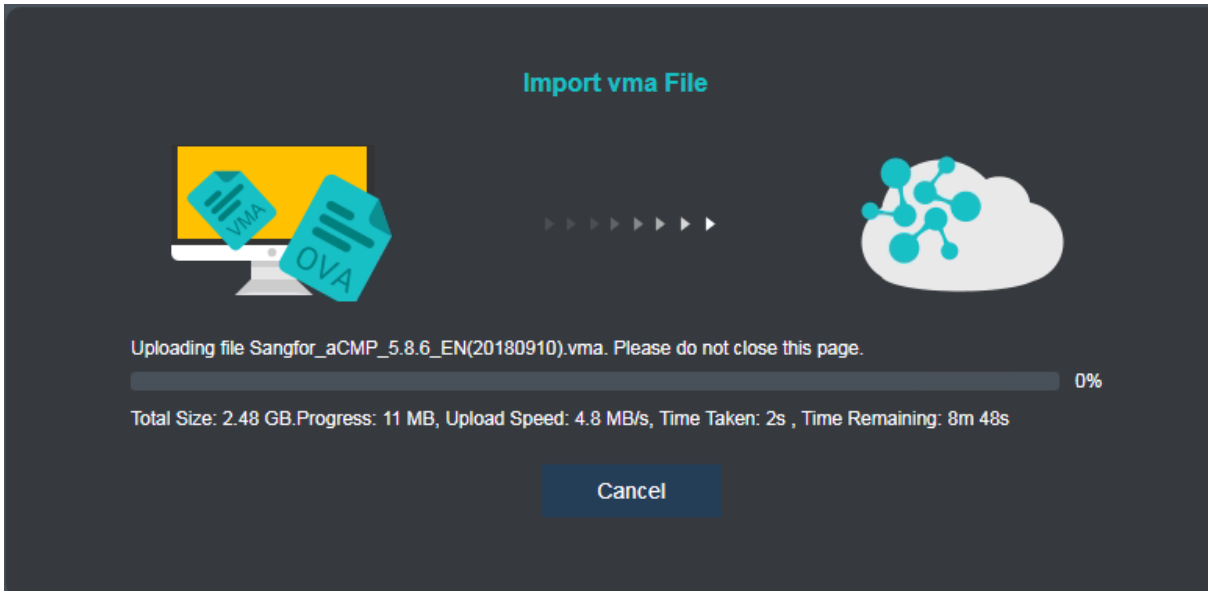


1. Click『Compute』→『New』→『import Virtual Machine』

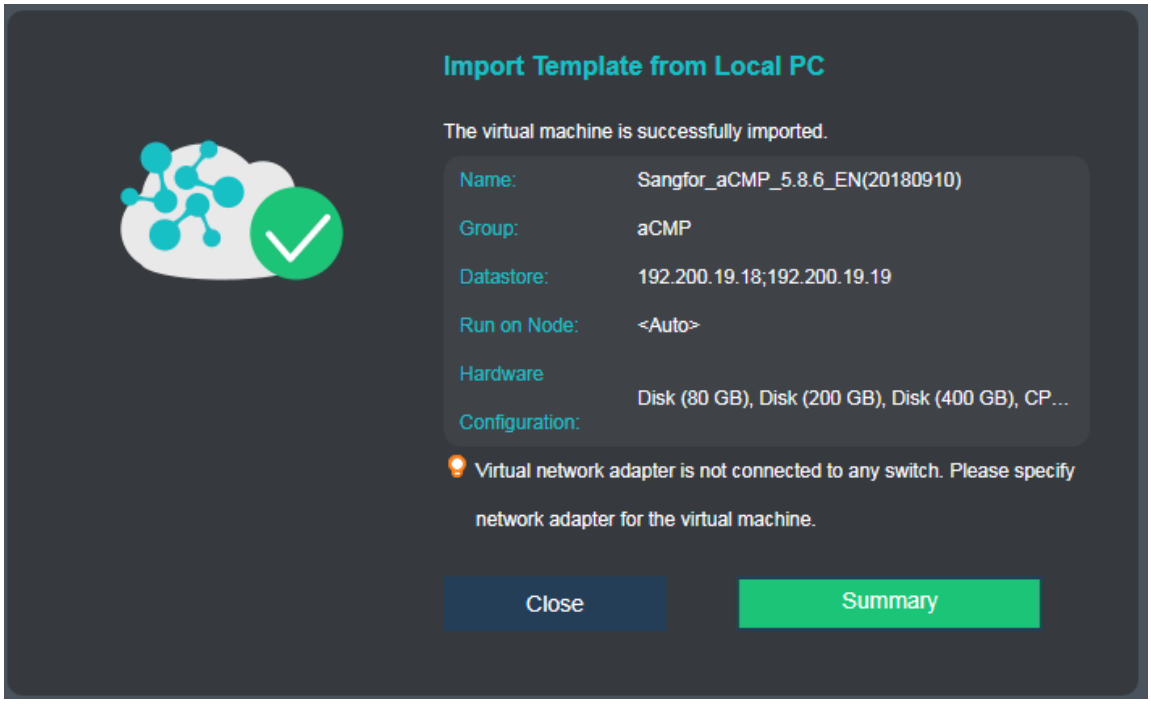


2. Select aCMP virtual machin,select corresponding group, storage location and running location, click Import button， then it will show upload interface;





3. After success upload the image file, require to open the aCMP virtual machine to configure network.

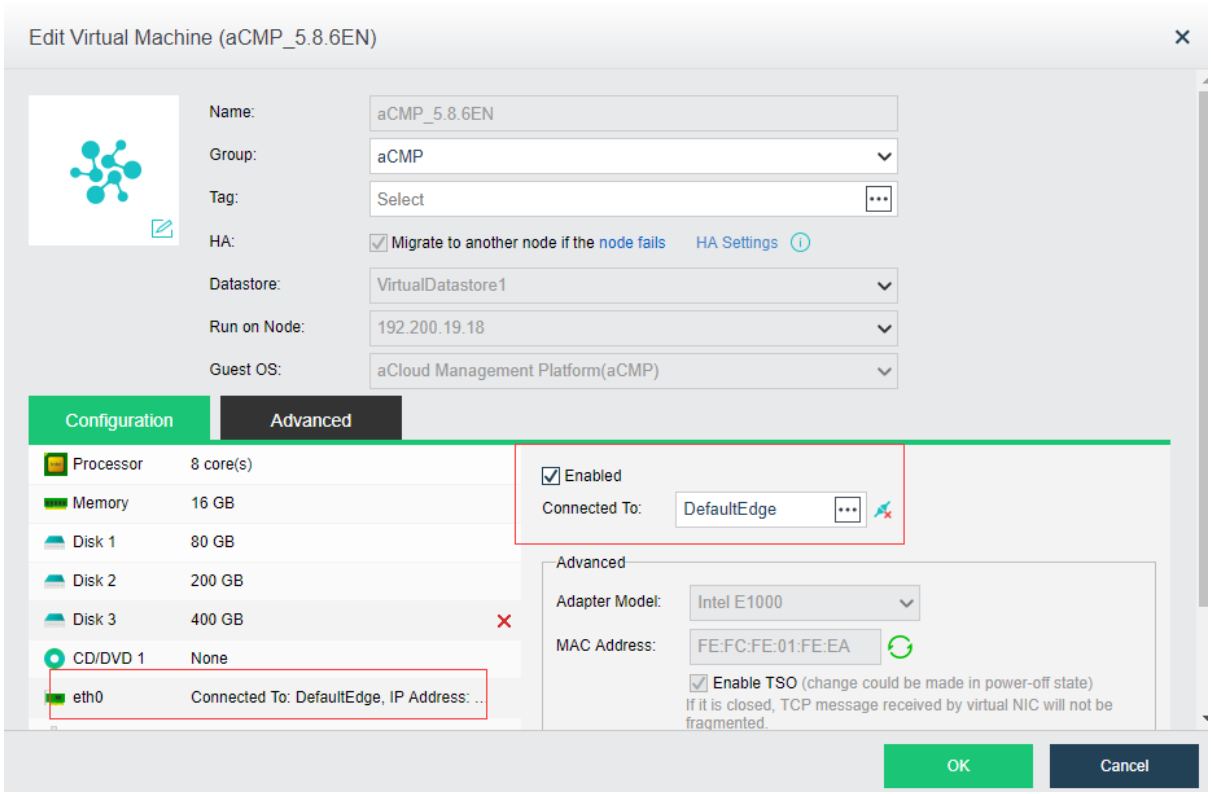


3.2 Congiure aCMP network IP

After success import aCMP into HCI, require to configure network configuration in aCMP cloud management platform. So that aCMP can communicate with aCloud cluster network, then aCMP can manage those reachable cluster in the network.

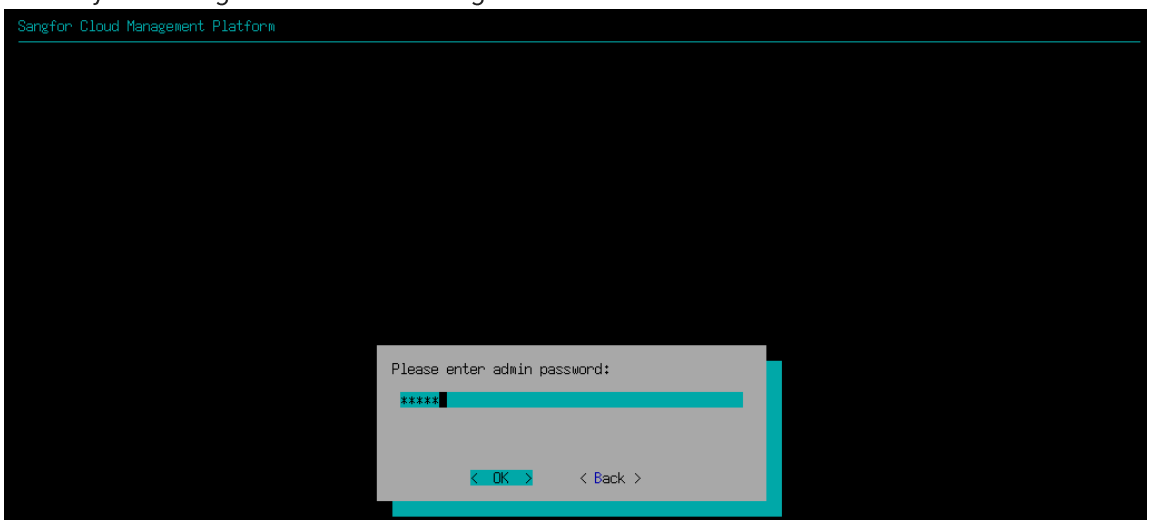
【Steps】

1. Select aCMP virtual machine, click『**more**』→『**setting**』. Configure the network card to make it connect to second/third layer of aCloud. Click OK button;

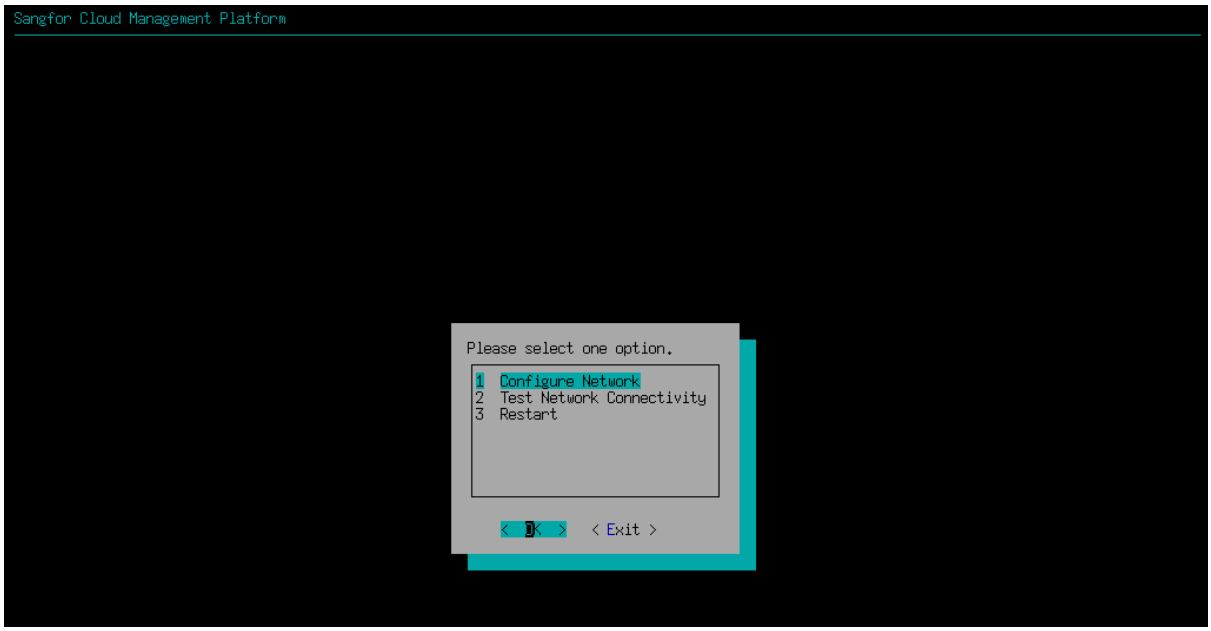


2. Power on the aCMP virtual machine and login to aCMP virtual machine;

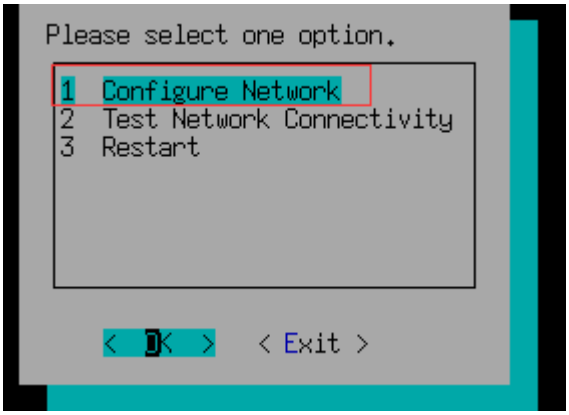
3. Click anywhere on the virtual machine console, type "enter" on the keyboard to enter maintenance mode, then enter the password (the initial password is admin), select the OK option after entering the password. Then type "enter" on the keyboard again to enter configuration interface.

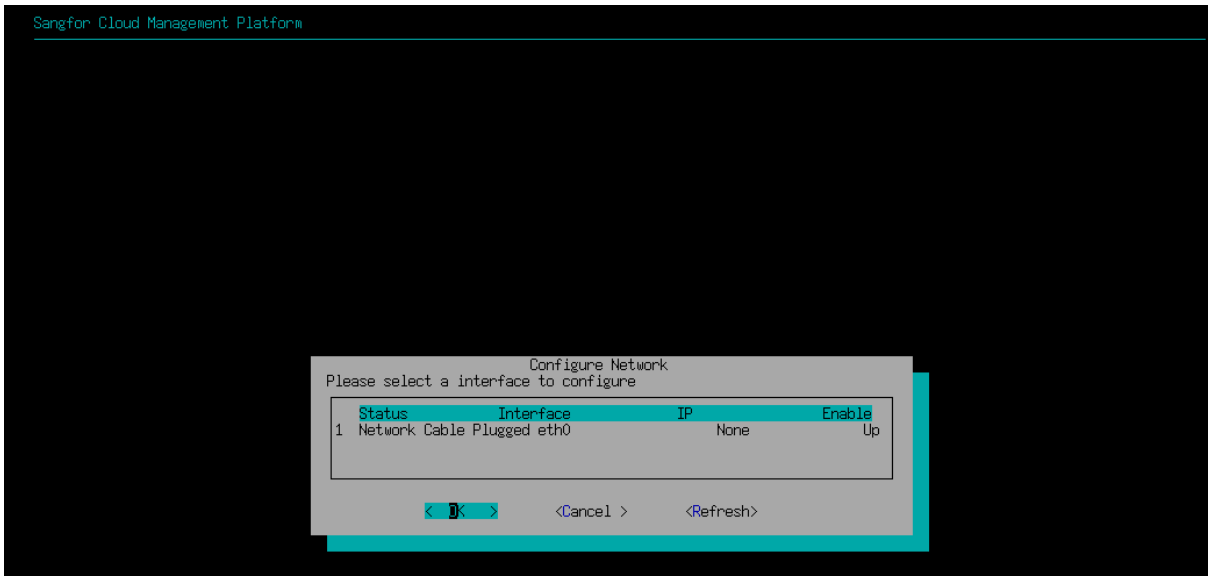


After click OK wil show an interfase as shown below:

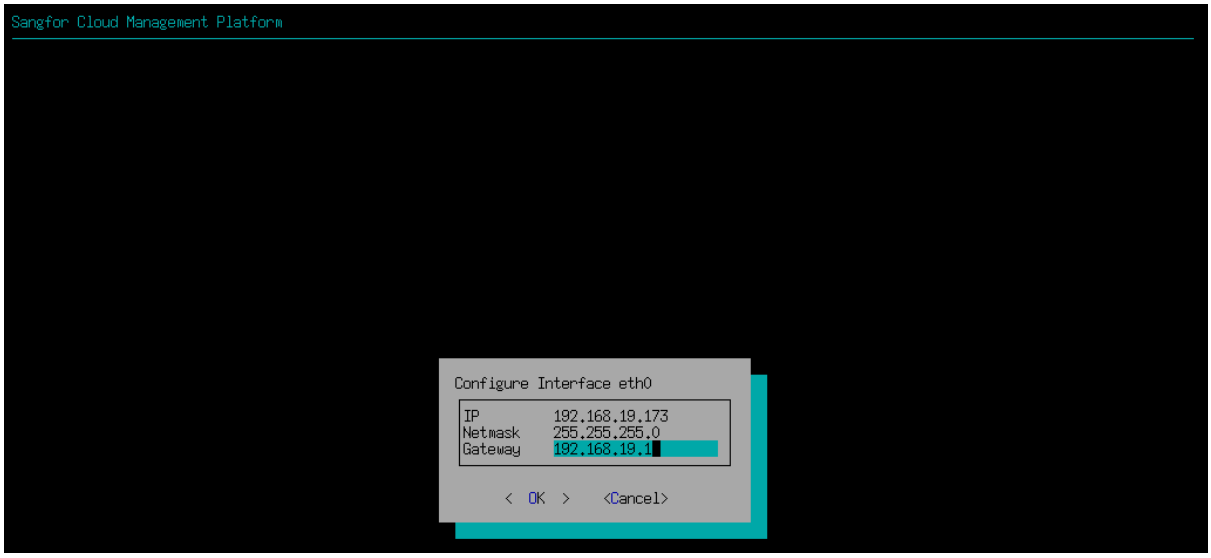


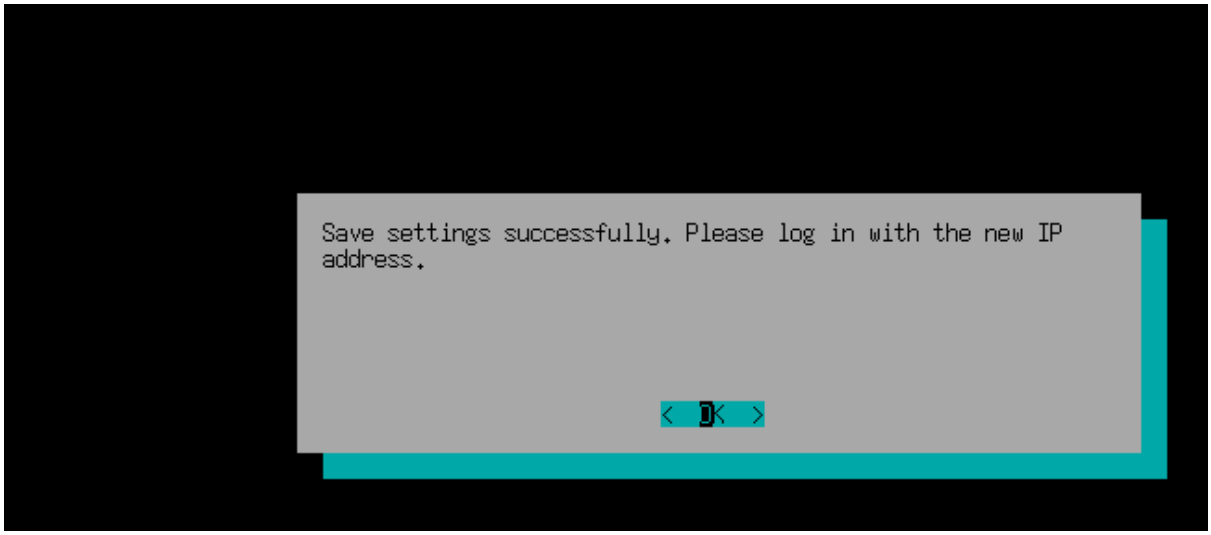
4. Use keyboard"↑↓"key to select『Configure Netwrok』and press enter key on keyboard;



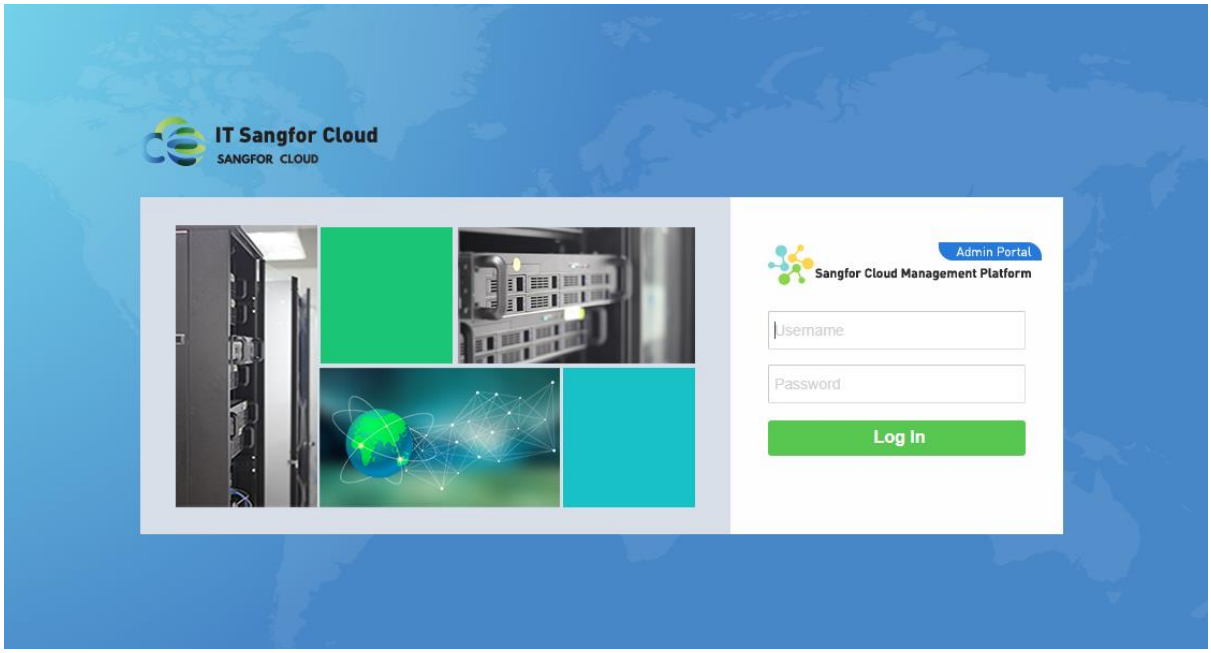


5. Configure IP address, netmask and gatewat and press OK.

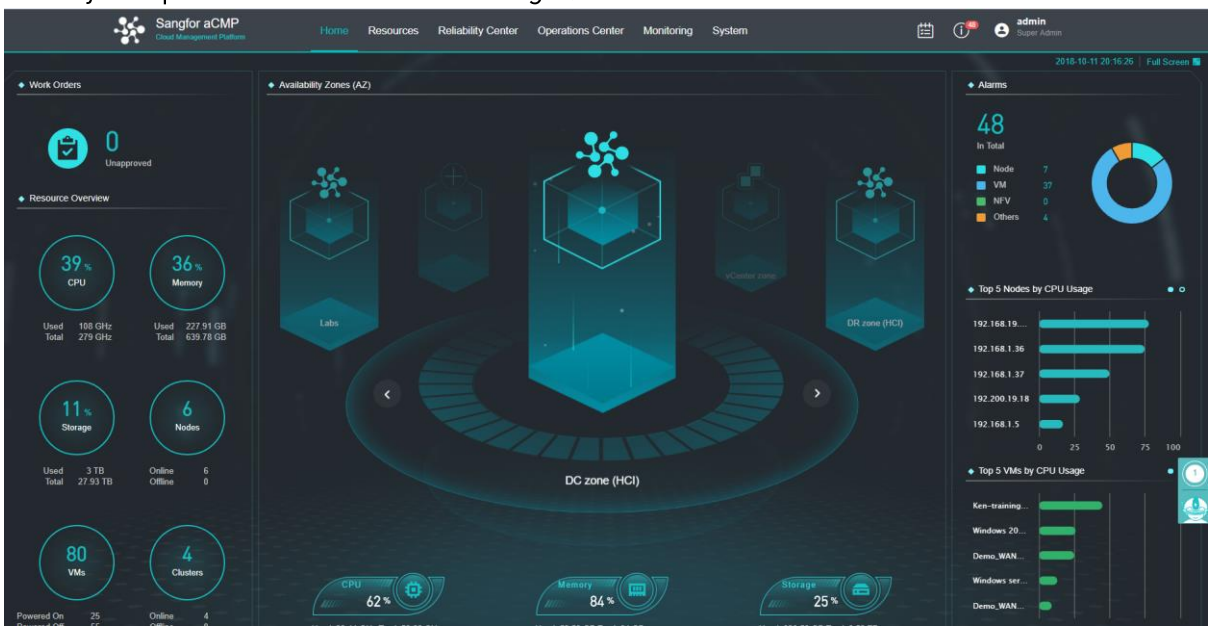




6. Open a browser and type in https://IP:4430



7. Default username and password is admin/admin. (To ensure the security please modify the password once success login)

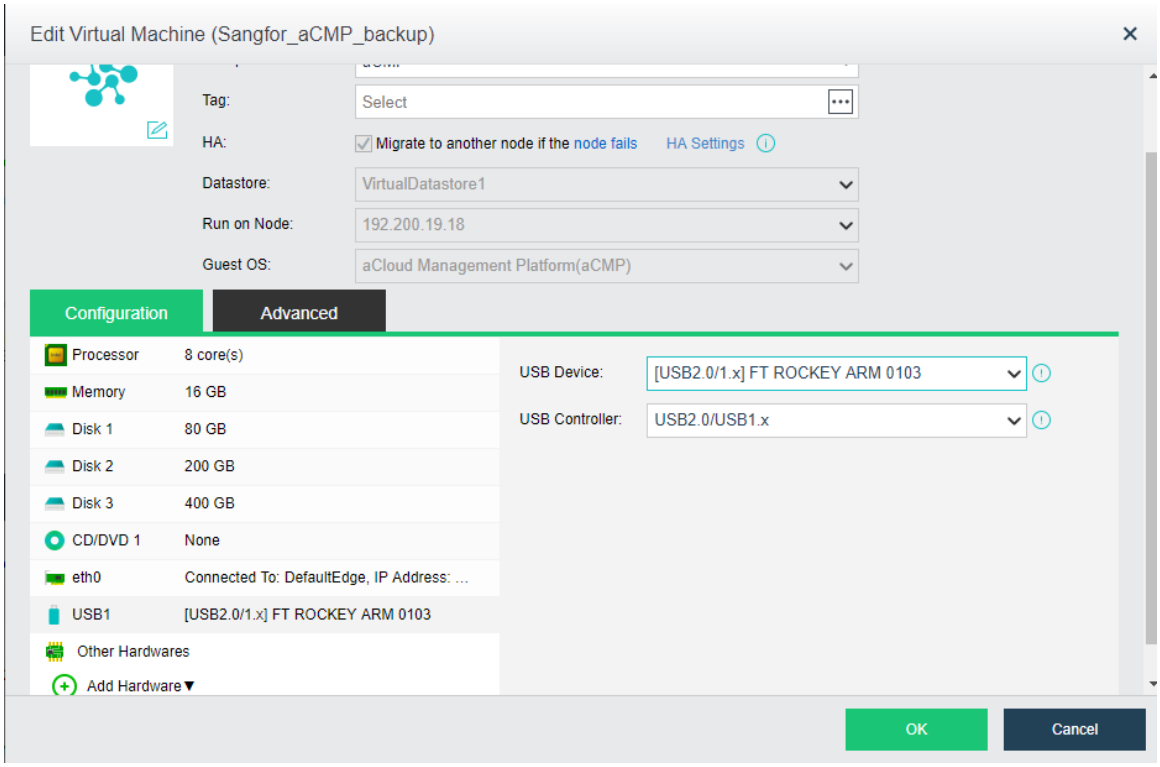


3.3 aCMP Authorization

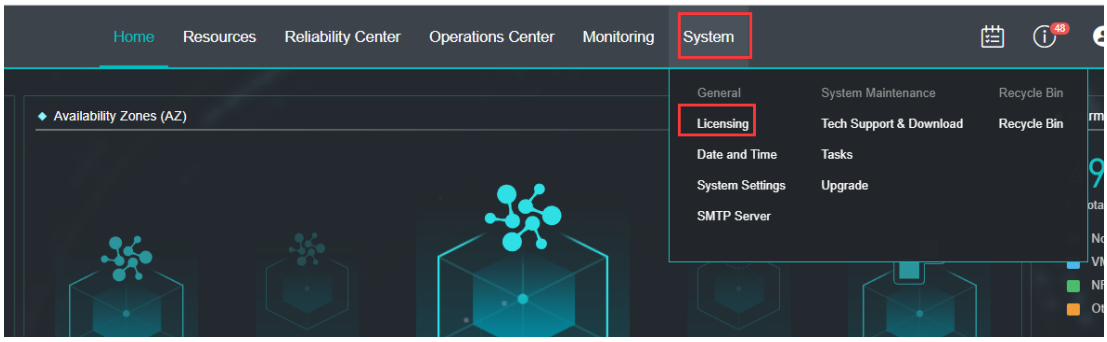
After configuring the network configuration of aCMP, you need to insert the previously prepared USB KEY into the USB interface of the aCloud cluster (any one), and then perform the authorization activation of aCMP as follows:

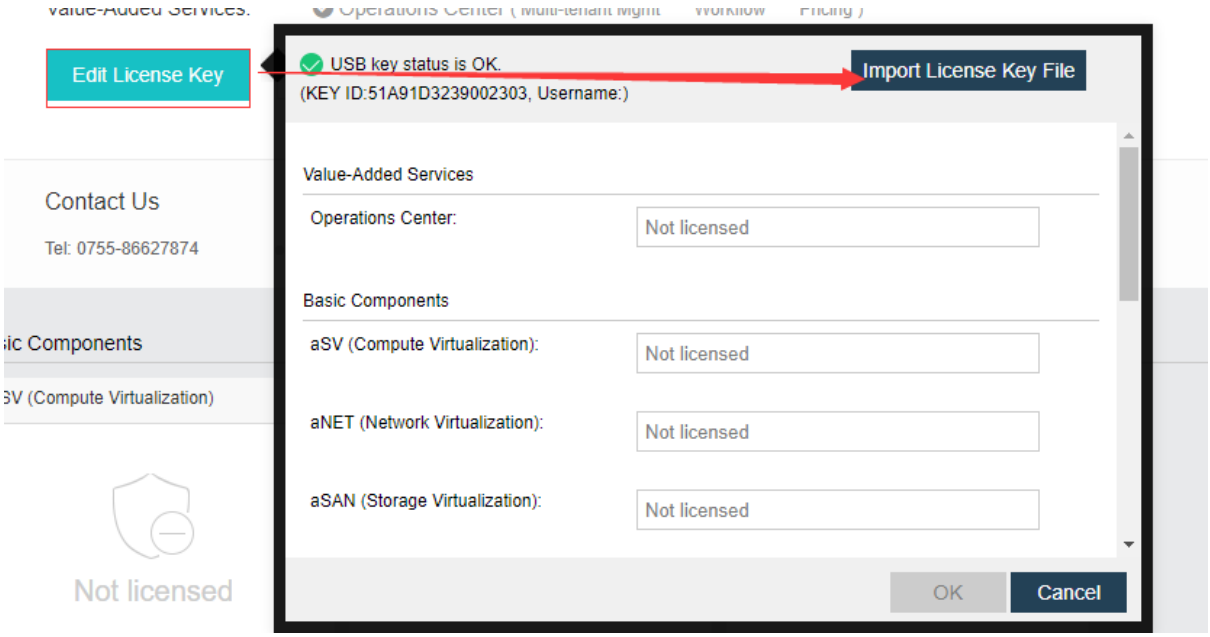
【Steps】

1. Click aCMP virtual machine→『Configuration』→Add USB Hardware→ Map the USB to the virtual machine;

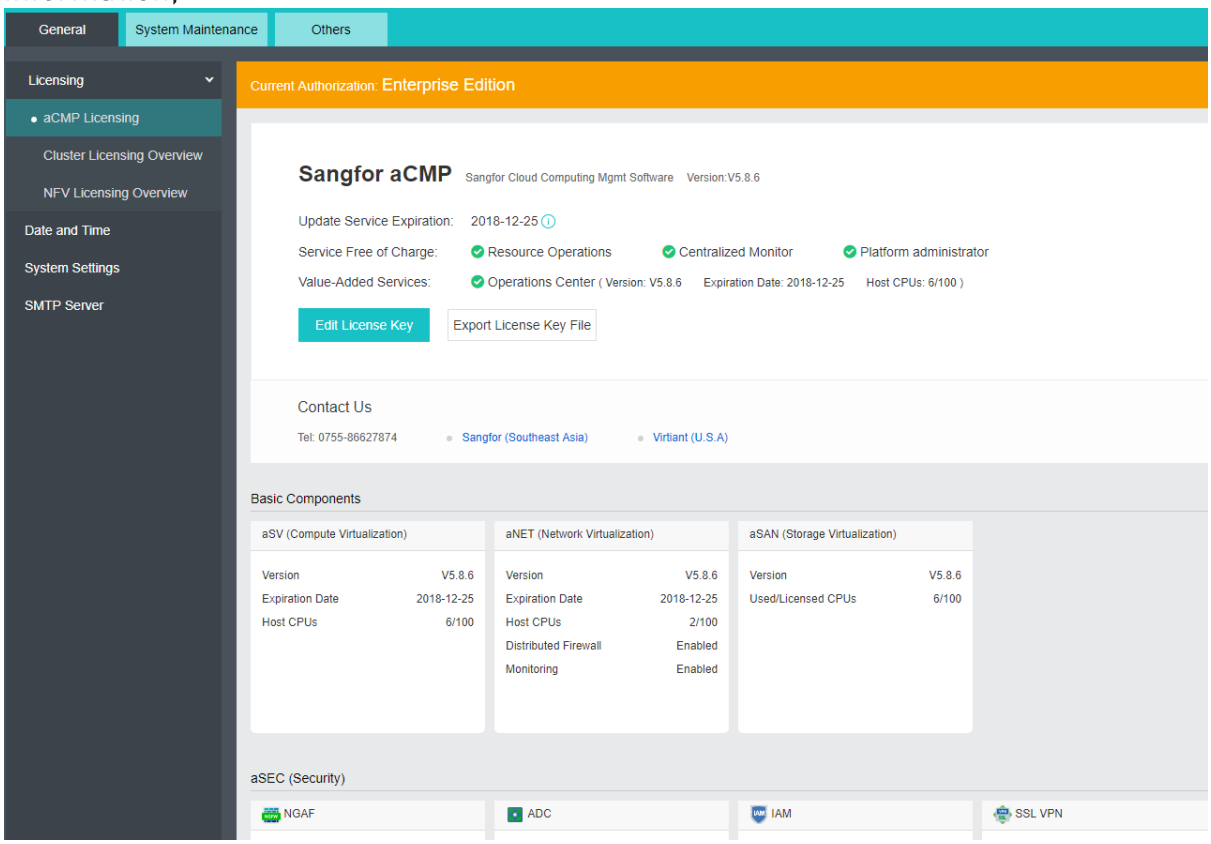


2. Login to aCMP homepage, click『System』→『Licensing』→『General』to enter aCMP authorization page. Then click『Edit License Key』and select the prepared authorzation file with suffix .lic.





After the import is successful, you can view the corresponding serial number information;



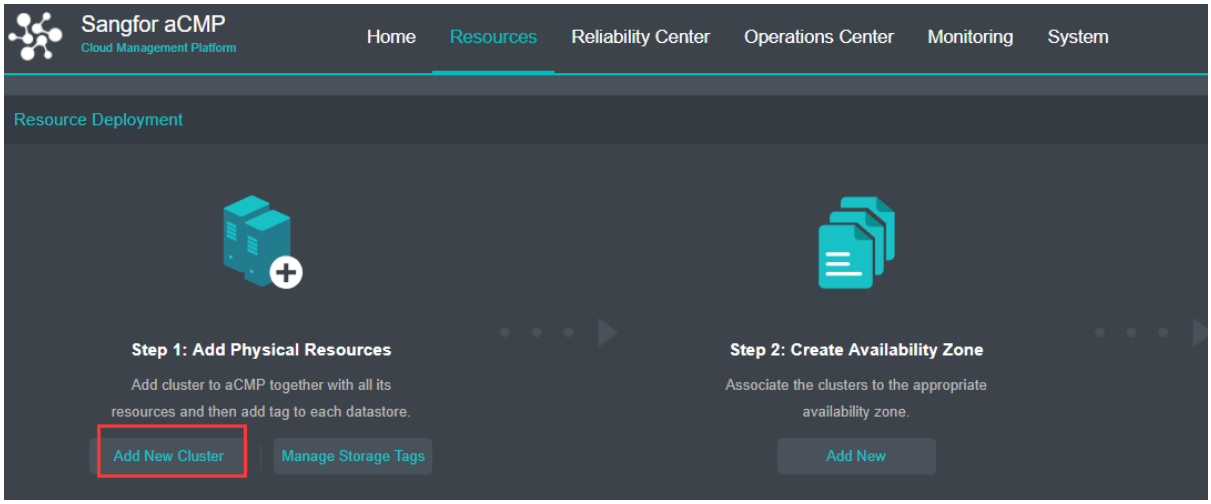
3.4 aCloud cluster joins aCMP centralized management

Version Requirement:

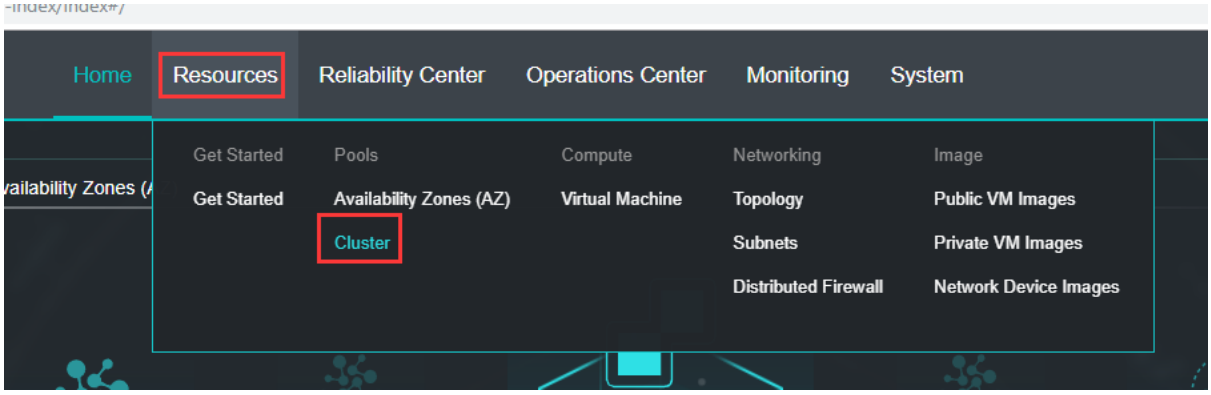
aCMP5.8.6 only support aCloud5.8.6 centralized control, aCloud with version lower than 5.8.6 is not supported to join aCMP5.8.6 centralized control.

【Steps】

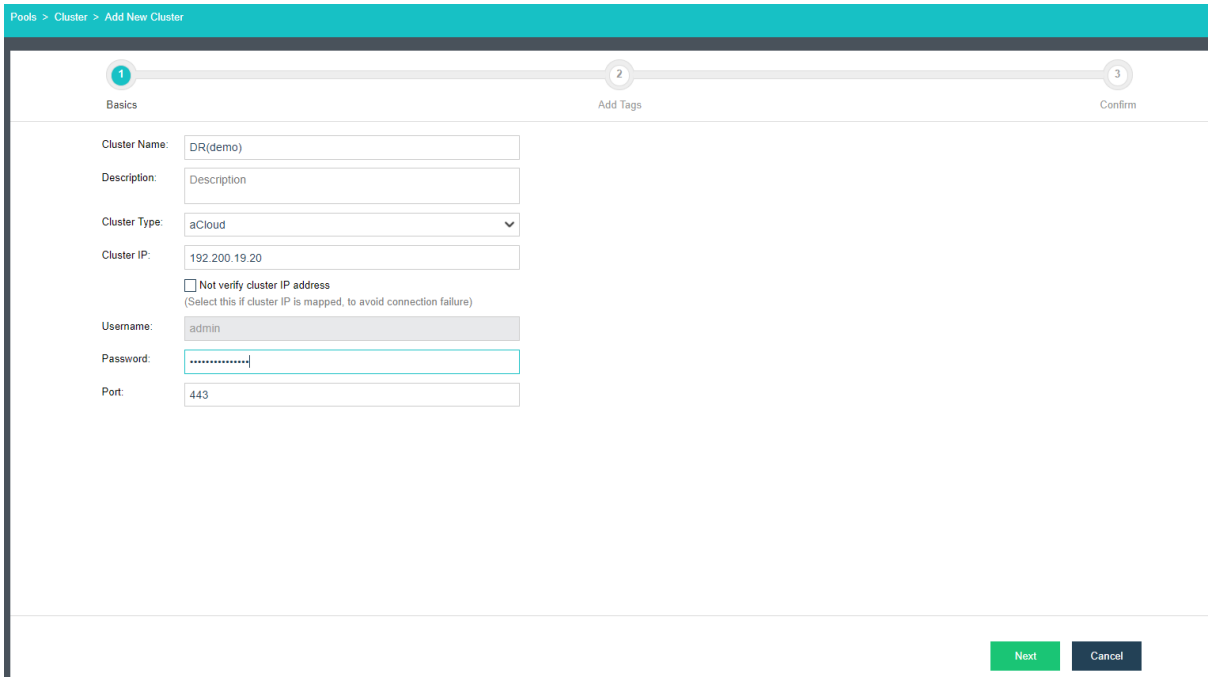
1. Login to aCMP platform homepage, select『Resources』→『Get Started』, then click Add New Cluster button as figure shown below:



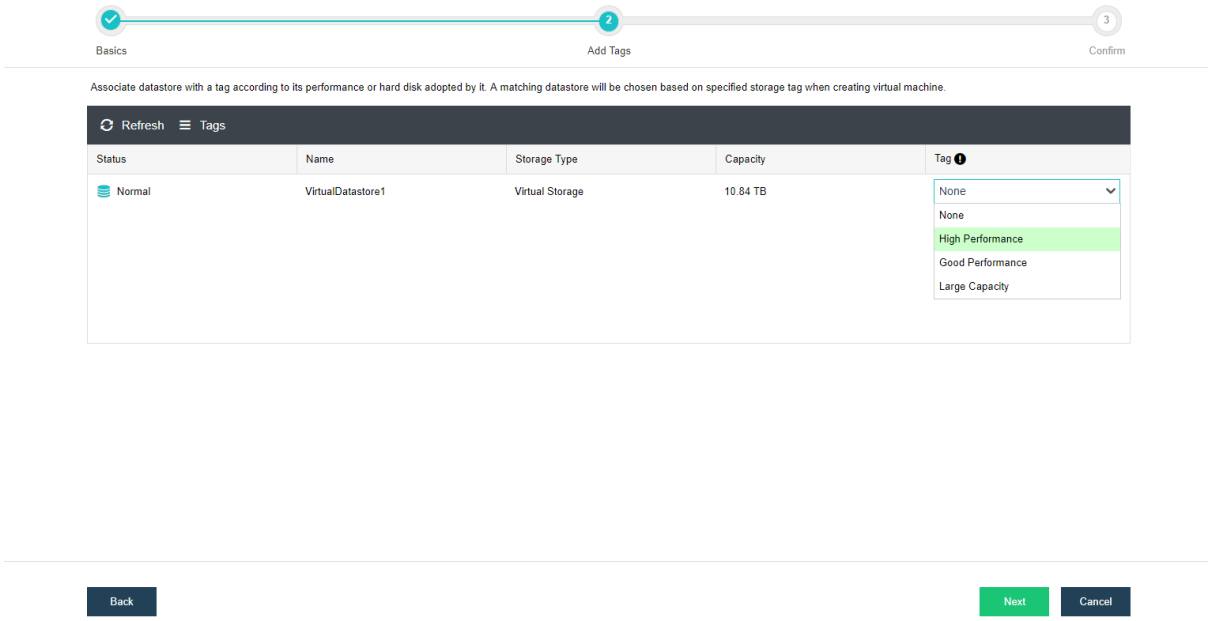
Or select『Resources』→『Clusters』and click New button.

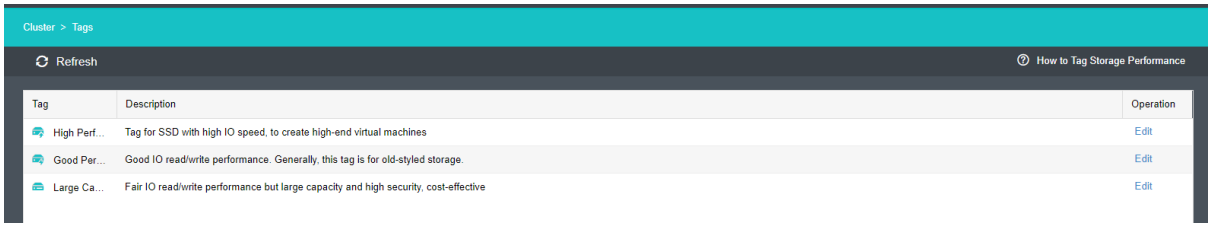


2. Enter cluster IP、username、password、cluster name、description and cluster type accordingly. Then click Next button. (Keep the default port number if there is unchange port number)

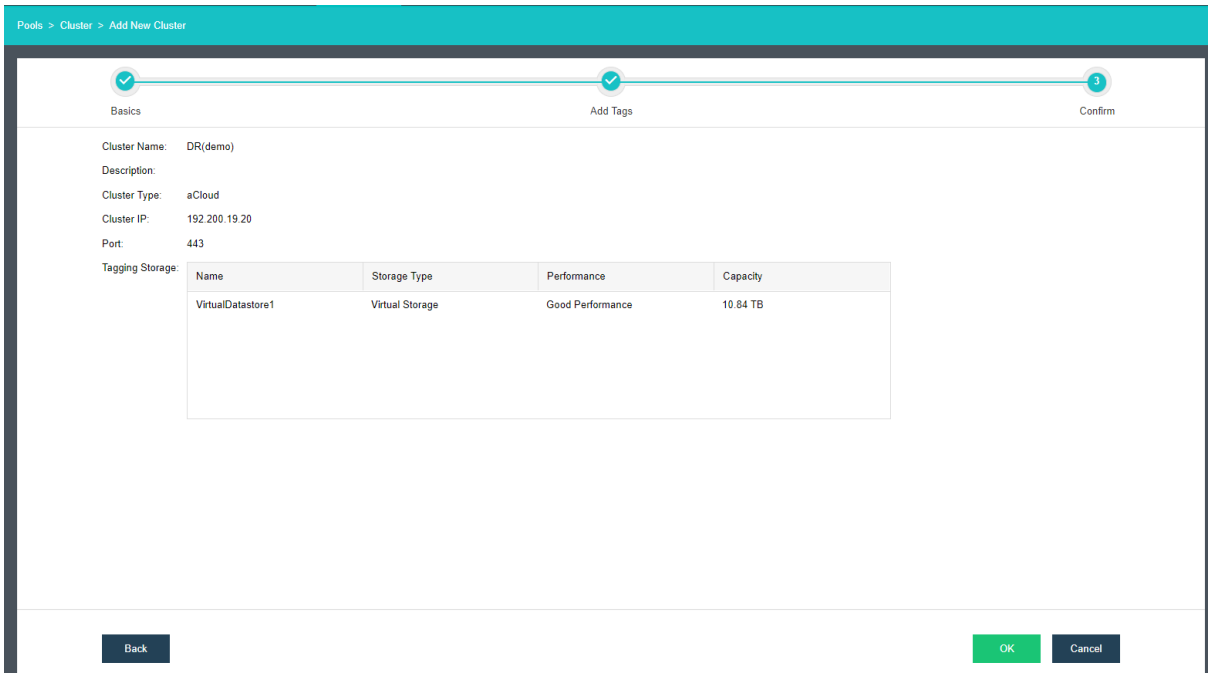


3. According to the actual situation of the cluster, you can set different tags for different storage volumes. By default the tags inlcude “None”, “High Performance”, “Good Performance”, and “Large Capacity”. These tags can be changed according to the acutal situation. The tags can change in [Cluster] → [Mange Storage Tag]. After setting complete click Next button

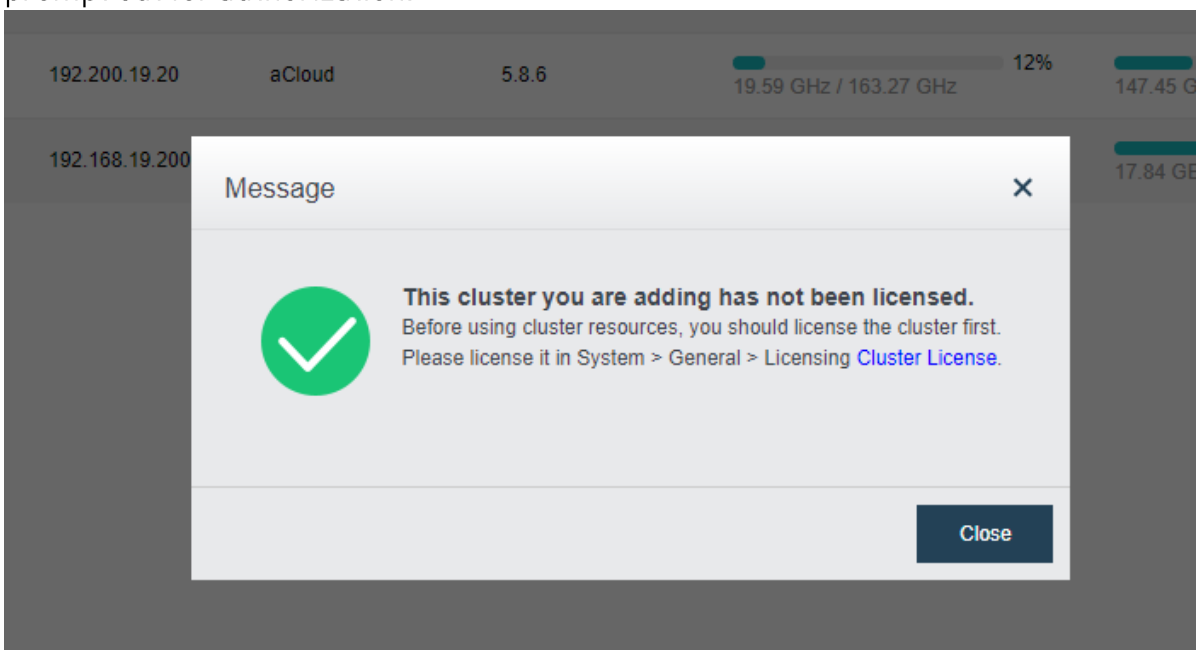




4. After ensure all information enter correctly，click OK button



5. The first time add cluster to the aCMP cloud management platform, aCMP will prompt out for authorization.



3.5 Authorize aCloud clusters through aCMP

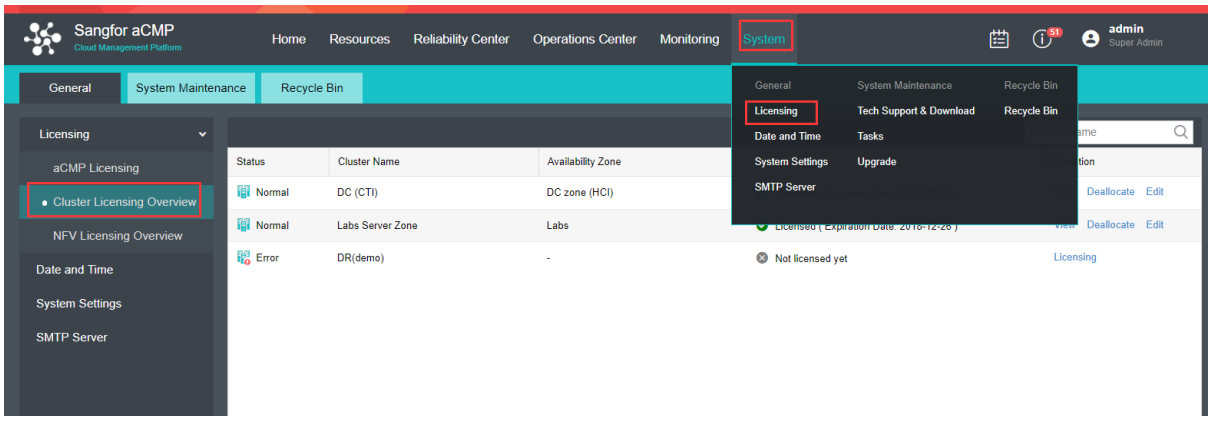
After aCloud cluster success added into aCMP, the aCloud cluster needed to be authorized to ensure the aCloud cluster service is available or perform authorization reclaim, edit and other operations. All the operations are performed in aCMP.

【Pre-requirement】

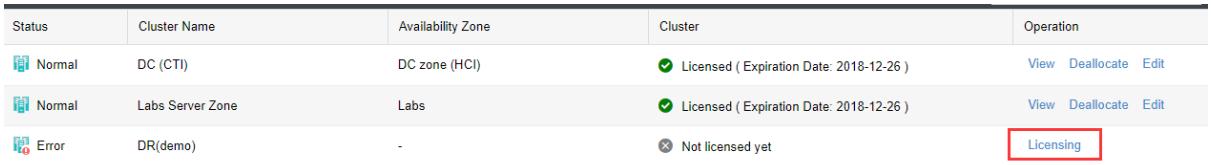
aCMP must be import authorization and authorization number enough to authorize manged aCloud cluster.

【Steps】

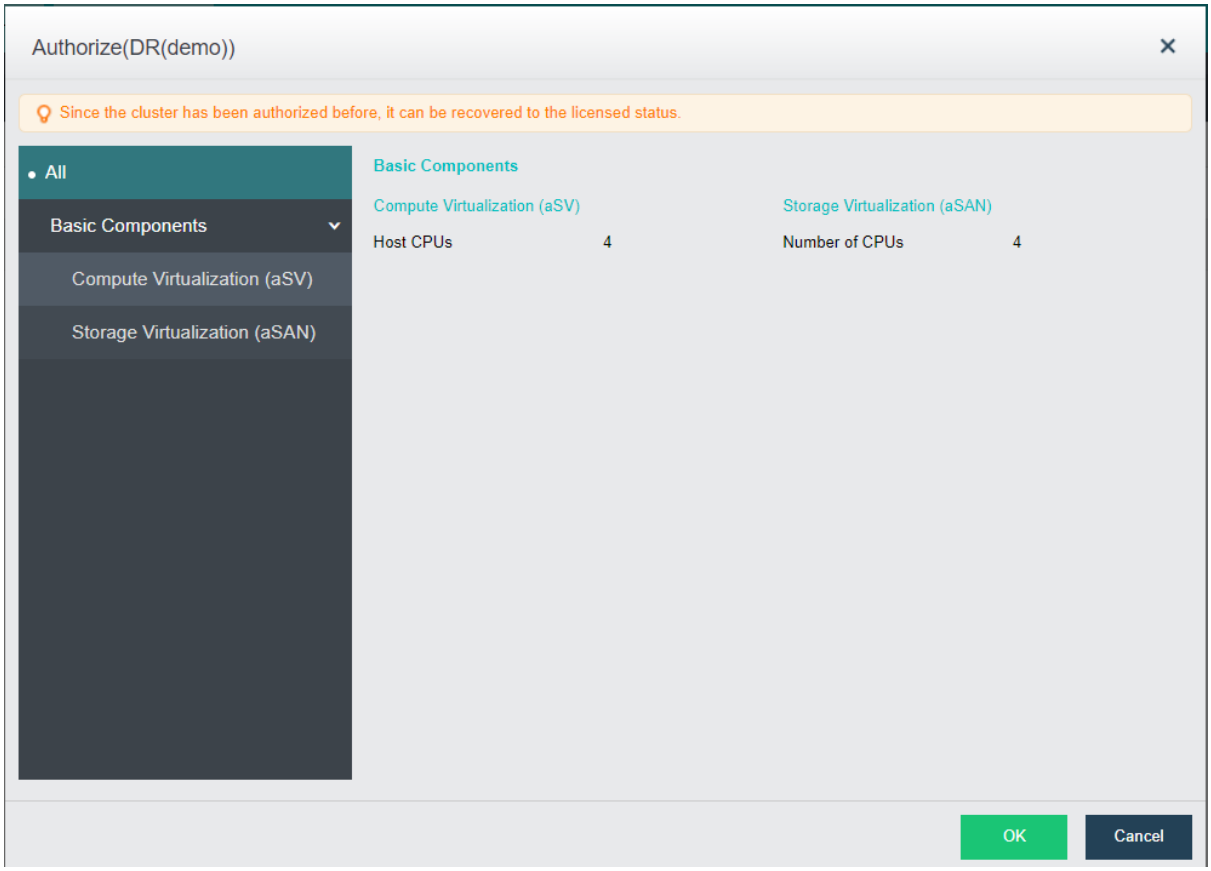
1. Login to aCMP homepage，select 『System』→『Licensing』→『Cluster Licensing Overview』 to check which cluster has not been authorize. Then click Licensing button to authorize the particular cluster.



2. Click on the abnormal cluster [Licensing];



After assigning the authorization, click the OK button to complete the authorization.



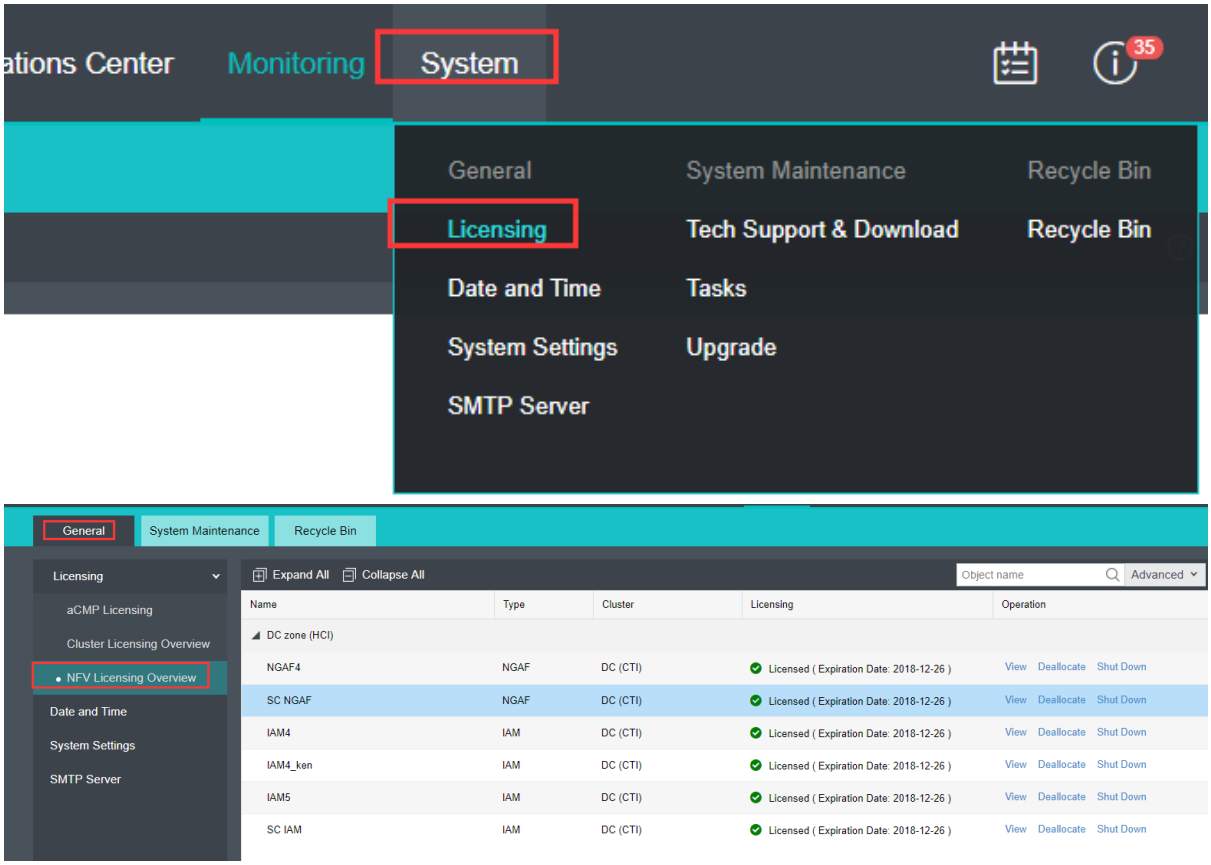
3. The authorized cluster can be view, edit and deallocate.

3.6 NFV Authorization

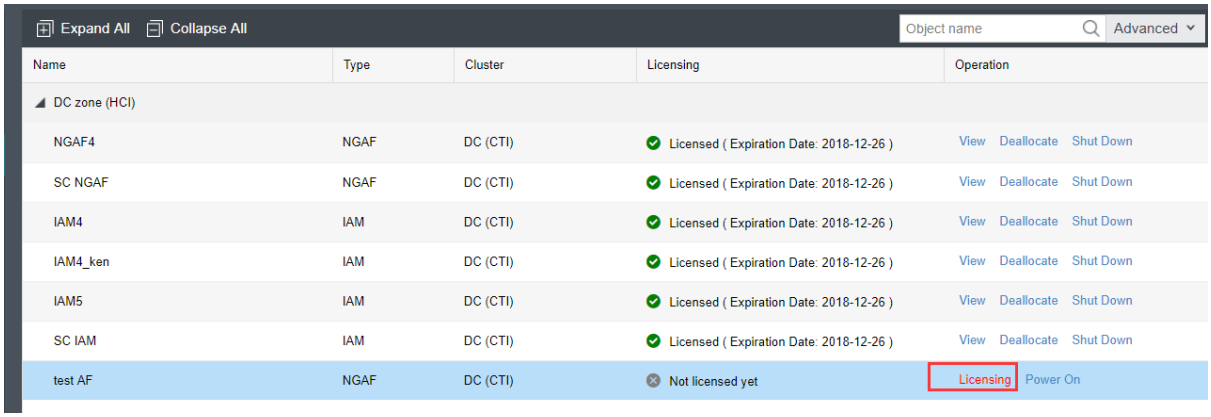
After the aCloud clusteris managed by aCMP, the virutal network device can only be deployed on the aCMP. NFV device require to authorize through aCMP so that the advance funstion in NFV can be used normally.

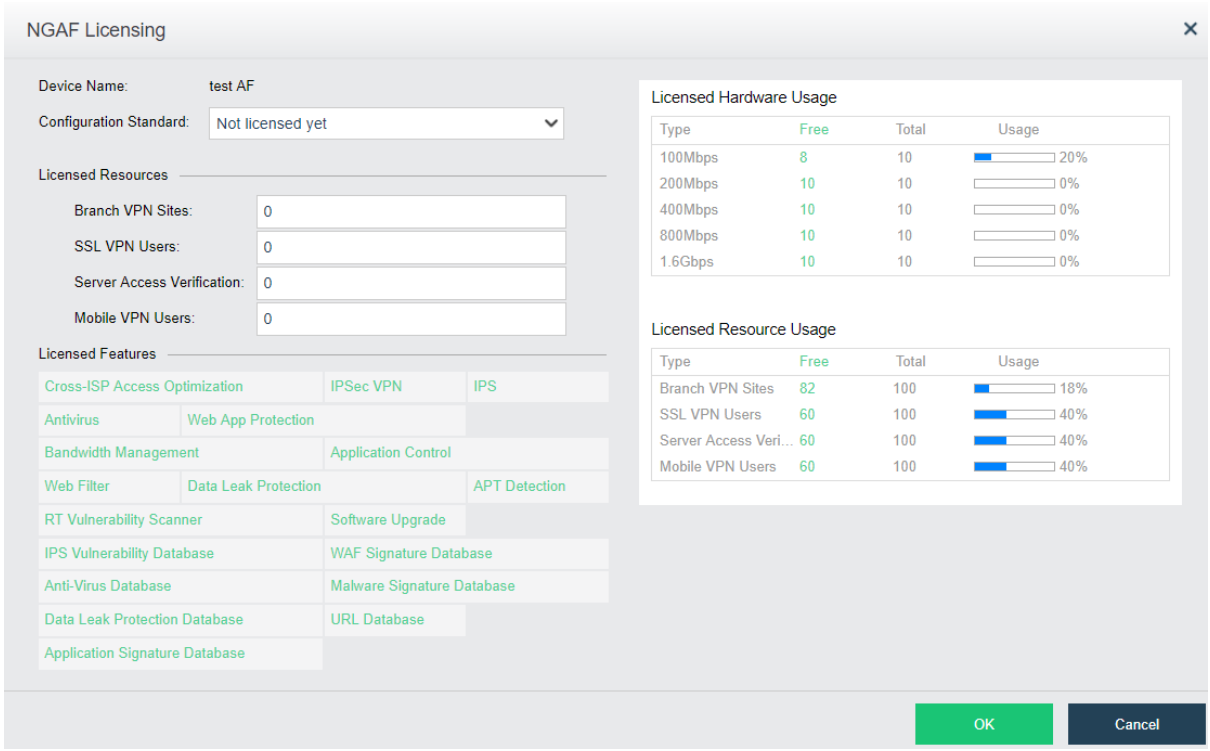
【Steps】

1. Select『System』→『Licensing』→『NFVLicensing Overview』 to check which device is not authorize. Then select unauthorized device and click Licensing button.

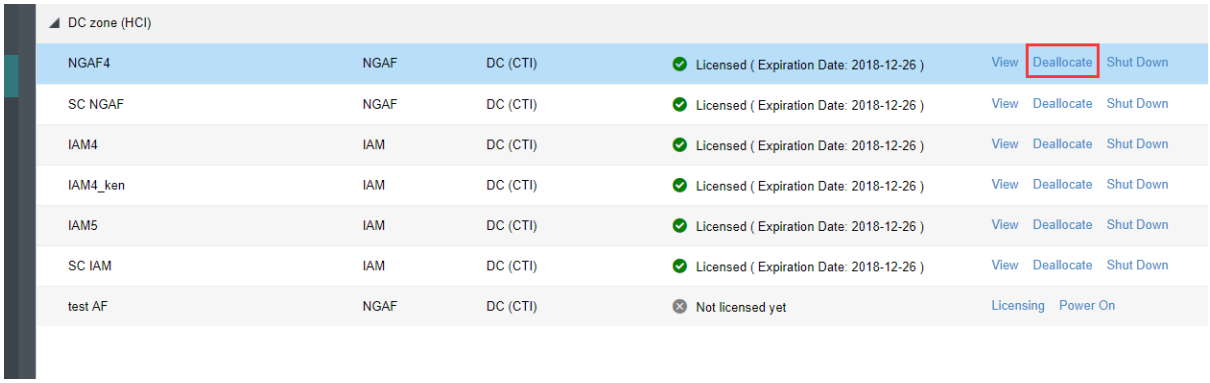


2. Select unauthorize NFV device and click licensing which locate on the right side. After assigning corresponding authorization, click OK button.





4. The authorized NFV can be view, edit and deallocate.

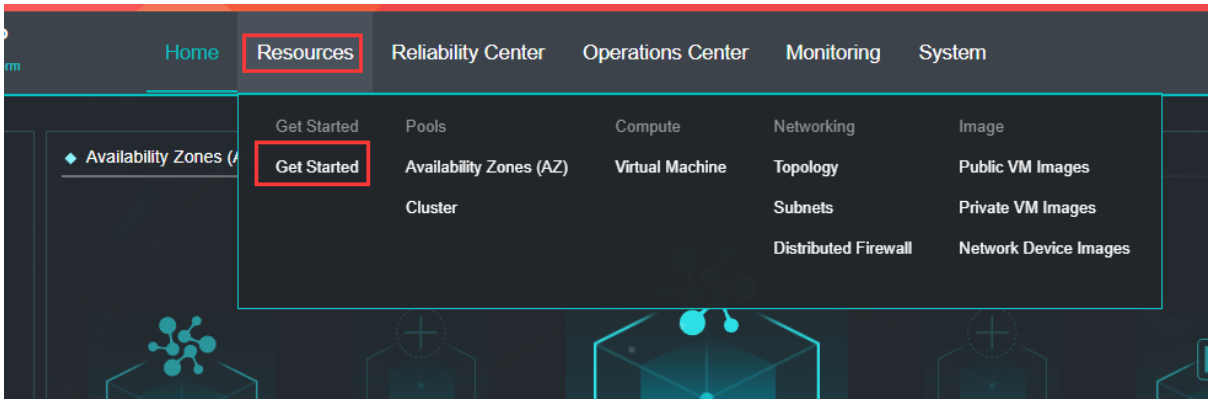


3.7 Availbility Zone

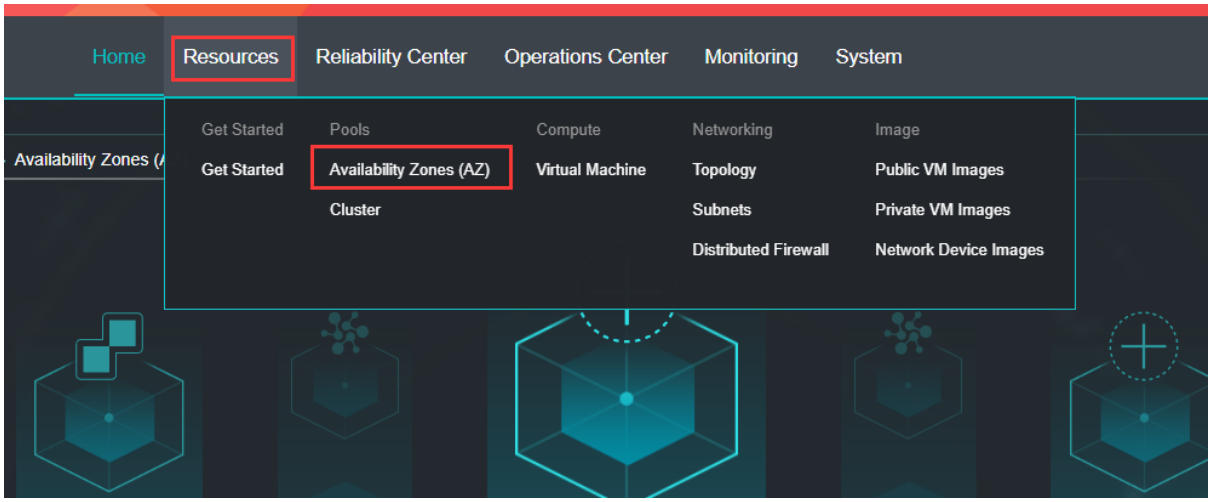
After the cluster is managed, it is necessary to divide the existing different clusters into different Availability Zones. The so-called availability zone concept is targeted at the data center. Generally, the Availability Zone can contain multiple clusters. By dividing the logical concept of the Availability Zone can effectively help the administrator to manage the platform.

【Steps】

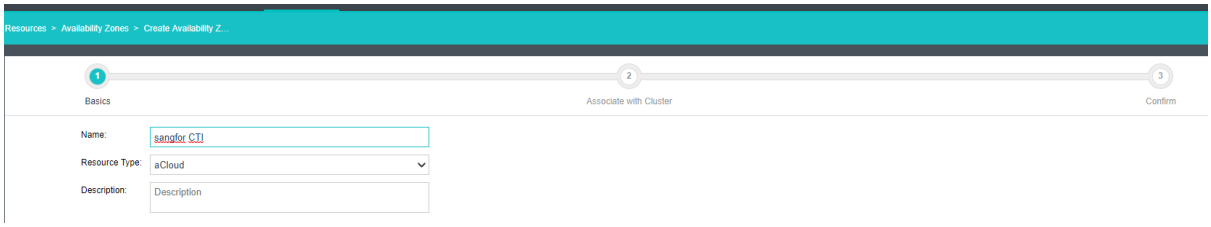
1. Click『Resources』→『Get Started』 as shown below:



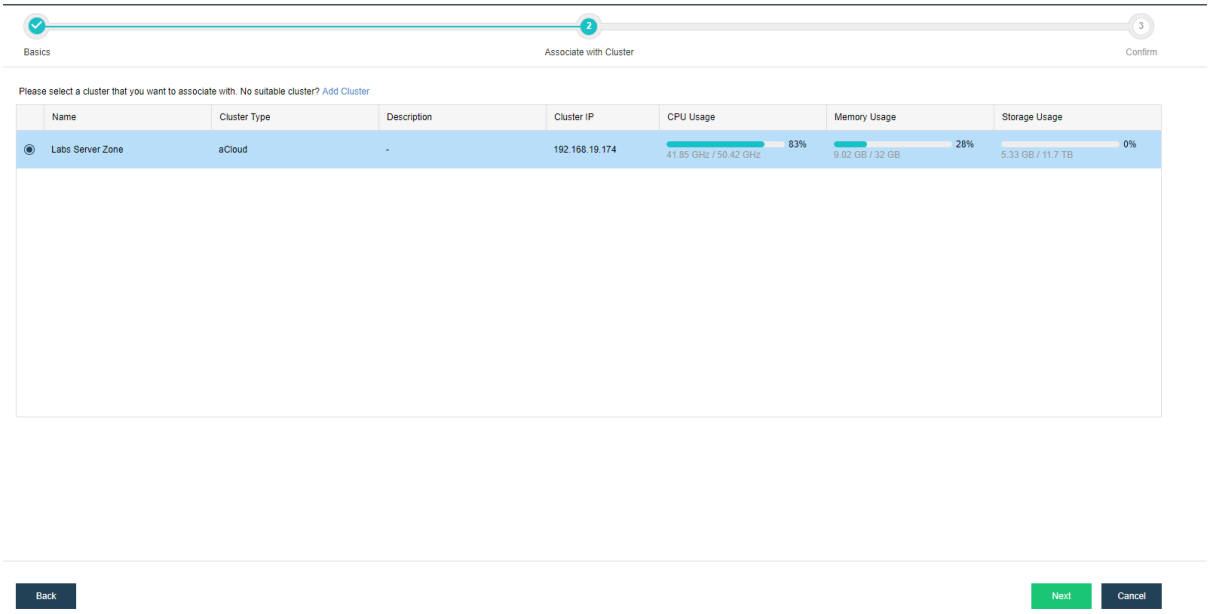
Or click 『Resources』→『Availability Zone』will prompt out a page and click New button to build new zone：



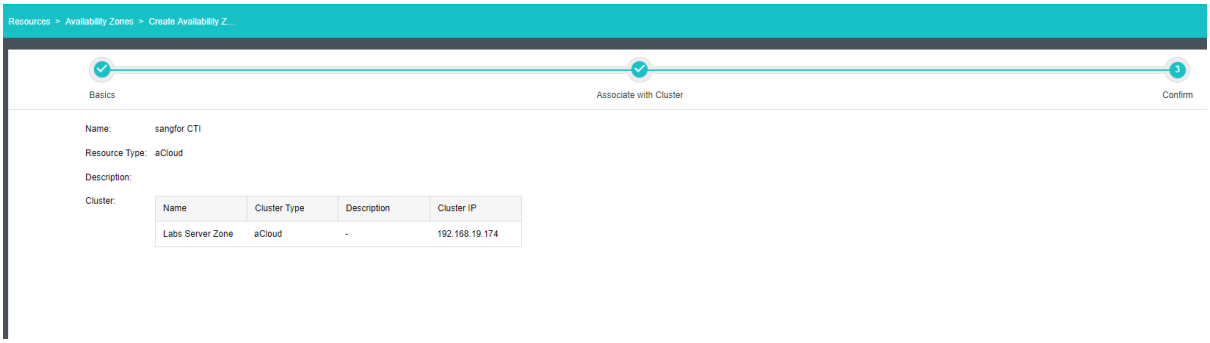
2. Fill in corresponding information and click Next button to proceed.



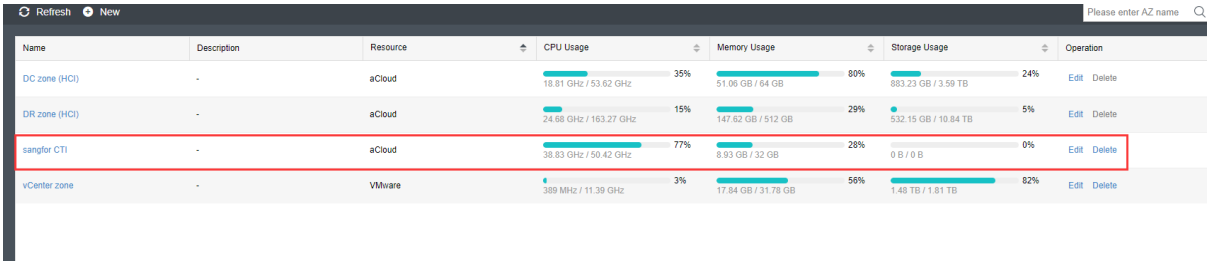
3. Select targeted cluster that needed to add in to the Availability Zone. (If the target cluster is not found, can add the cluster manualy. For the detail please refer to Section 3.4) Click Ok to proceed to next step.



4. Ensure all the information is correct and click OK button.



5. The added Availability Zone can be edit and delete.

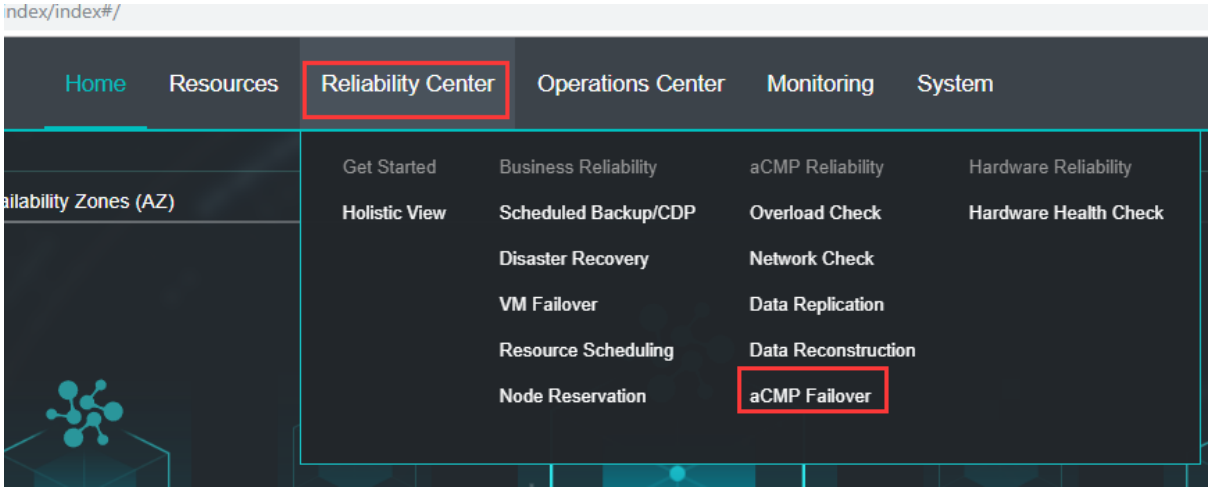


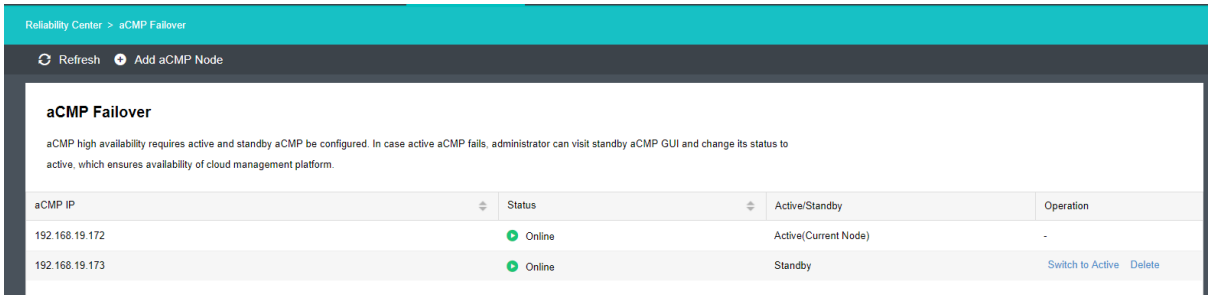
Chapter 4 aCMP Active and Standby Deployment

Application scenario：Active aCMP has been deployed and require to build another aCMP as buckup in another data center.

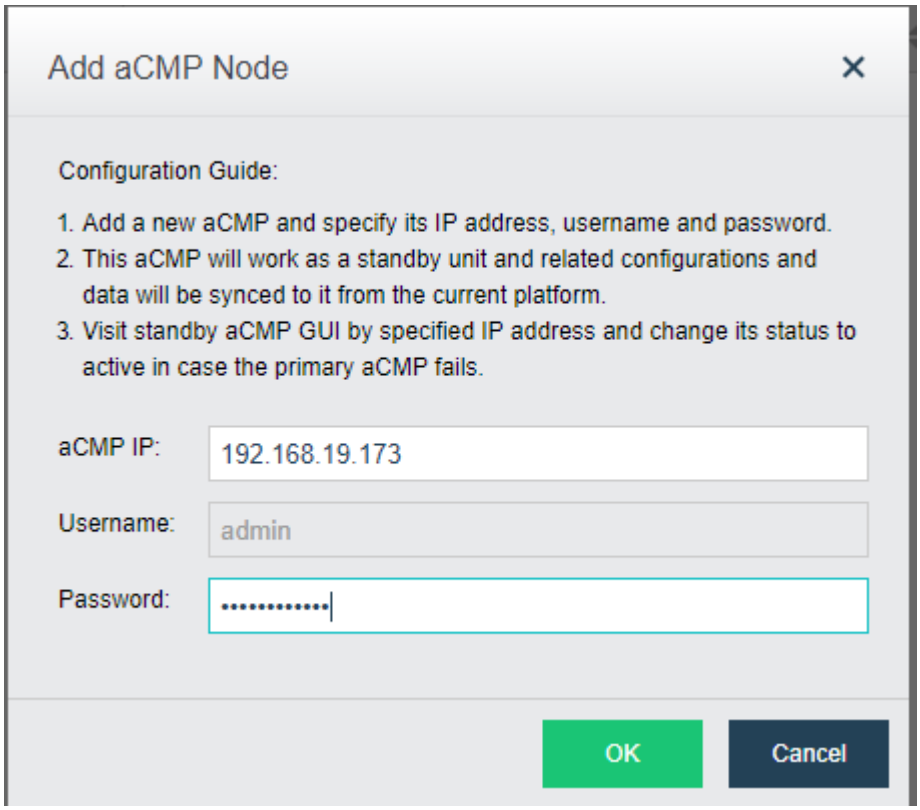
Configuration steps：

1) Deploy aCMP IP in a remote data center according section 3.1, 3.2and 3.3 and the IP address is different from the active aCMP.
2) Click 『Reliability Center』→『aCMP Failover』

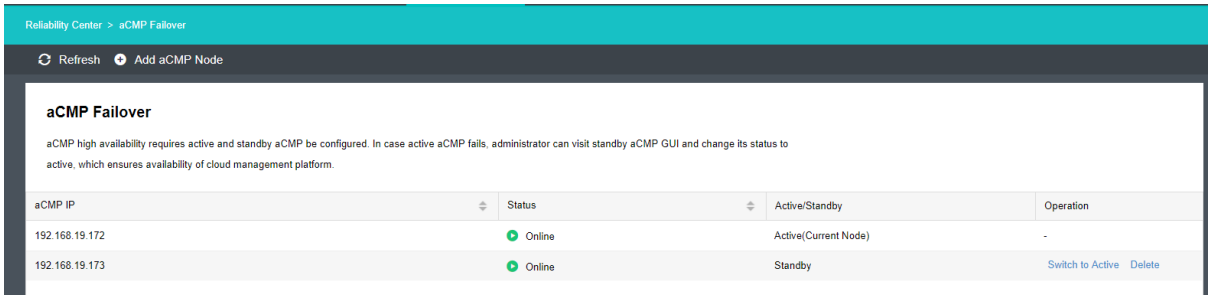




3) Click Add aCMP Node button， type in the backup aCMP's IP address and password, then click OK button.



After success added standy aCMP, it is shown in the aCMP Failover page as shown below:



Follow the steps above to complete the deployment of the aCMP standby machine.

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