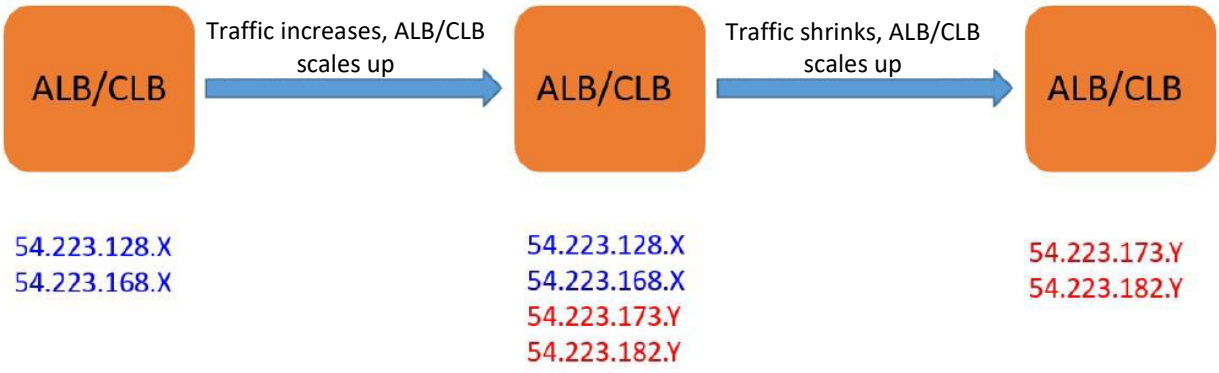
Guide to Use ELB IP Addresses for Amazon Web Services (Beijing) Region and (Ningxia) Region ICP Recordal

When you apply for ICP recordal, please make sure the real IP addresses corresponding to the domain name resolution must be consistent with the addresses used for website record, otherwise it may affect the normal use of your website. Therefore, when submitting your ICP recordal application, it is important to ensure the accuracy of the IP addresses that you provide for ICP recordal. The IP addresses used for ICP recordal must be assigned by Amazon Web Services' Services, otherwise the application will be rejected. In case of IP address change after ICP record is completed, the change process will take about 20 working days. To avoid unnecessary impact on your business, we recommend you using IP addresses with more stability for ICP recordal, such as Elastic IP, static IP addresses of an NLB and ALB/CLB Reserved IP. ELB supports three types of load balancers: Application Load Balancer (ALB), Classic Load Balancer (CLB) and Network Load Balancer (NLB). Please refer to the following steps to apply for ICP recordal according to your ELB type.

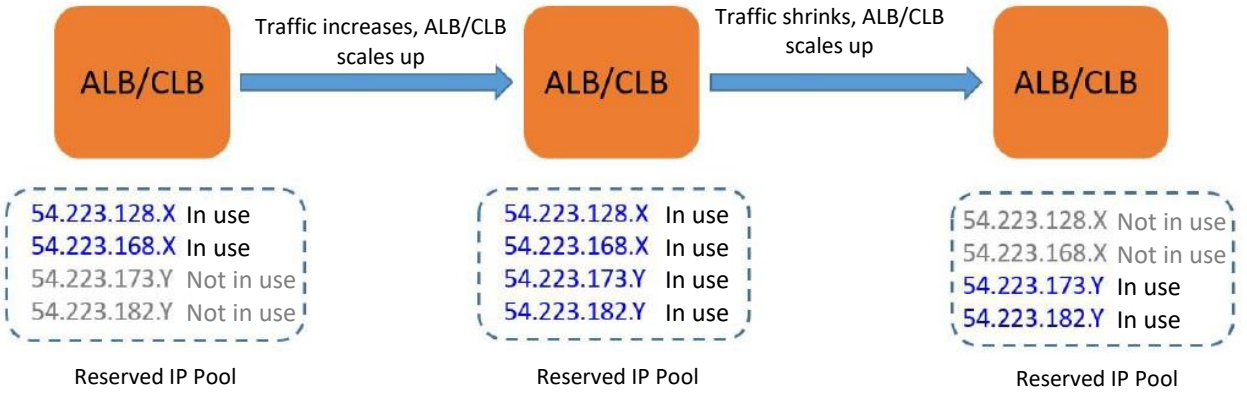
ALB/CLB Reserved IP

You can use ALB/CLB to publish your web services. By default, the IP addresses via which ALB/CLB deliver services may change. For example, when ALB/CLB scales up or down elastically with load variation, the IP addresses will be released back into the address pool, and there is no guarantee that they can be used by you again. To avoid the impact of this scenario on record, Amazon Web Services' Services can reserve a certain number of public IPs for you based on your estimated amount of traffic and bind them to the ALB/CLB. Since ALB/CLB will deliver services via some or all of the reserved IPs depending on the load variation, you need to apply for record with all the reserved IPs. If ICP Recordal is required for the Services delivered with your ALB/CLB, you will first need to request IP address reservation before record with the list of reserved IP addresses provided by the Amazon Web Services' Services.

For example:



ICP record obtained,54.223.128.X, 54.223.168.X not reserved
After ALB/CLB scales up and down, the IP addresses in use change to those not in ICP record



ICP record obtained, 54.223.128.X, 54.223.168.X, 54.223.173.Y, 54.223.182.Y reserved
After ALB/CLB scales up and down, all IP addresses in use are included in ICP record

Selecting the right region

Before you create an ALB/CLB, please confirm the region (Beijing Region/Ningxia Region) in which the ALB/CLB is created.

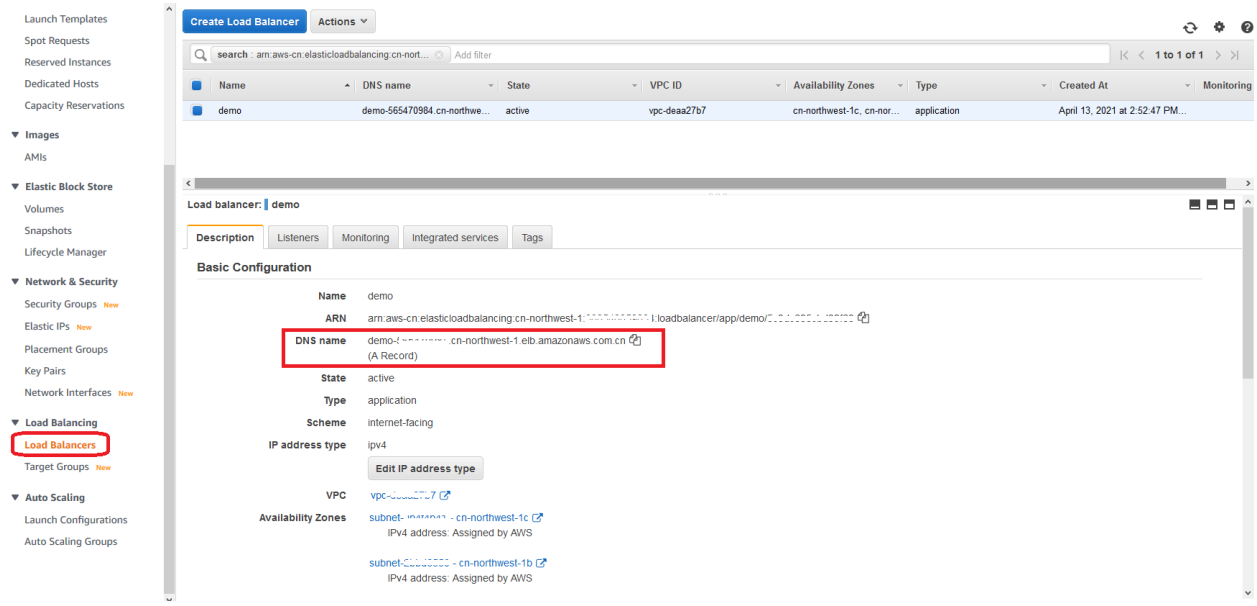
Log in your account, select region by clicking the drop-down list in the upper right corner, and then you can create an ALB/CLB under this region. Note: If a region is selected, you cannot view services you have launched in other regions.

Steps for ALB/CLB IP Address Reservation

1. Create an ALB/CLB and record the DNS name of the ALB/CLB. Please refer to the following document for detailed steps.

ALB: http://docs.amazonaws.cn/elasticloadbalancing/latest/application/application-loadbalancer-getting-started.html

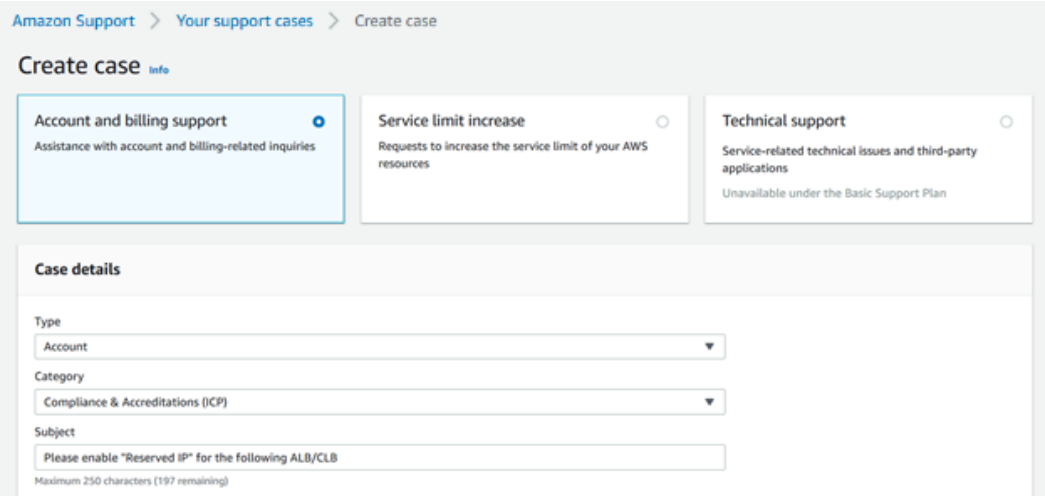
CLB: http://docs.amazonaws.cn/elasticloadbalancing/latest/classic/elb-getting-started.html



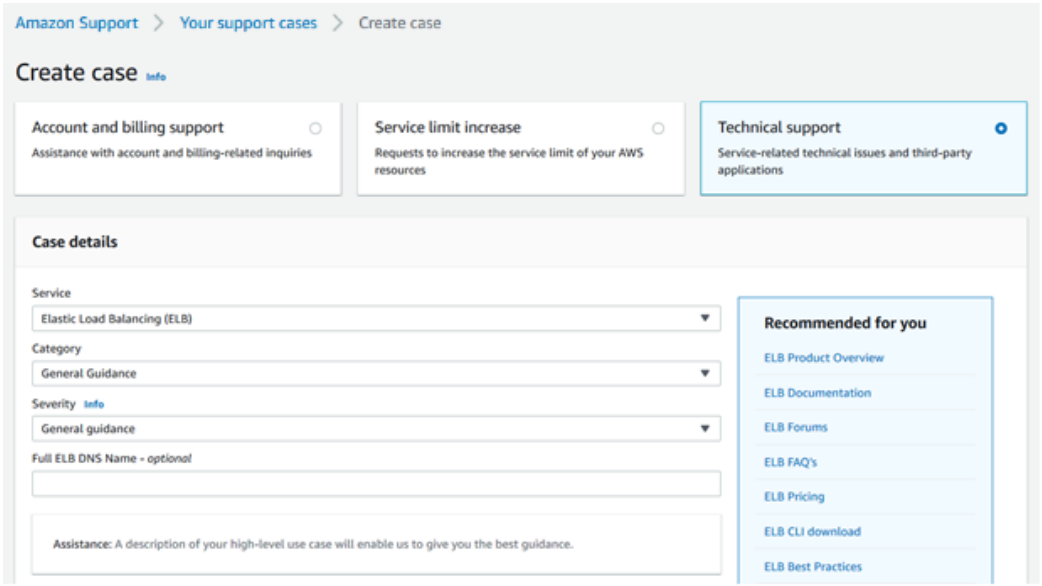
2. Apply for reserved IP Addresses

Create a case: You need to create a support case at Support Center by visiting https://console.amazonaws.cn/support:
Please note that your account will not be charged for reserving IP Addresses. However, you will be charged if you use the ELB service, we recommend that you could learn the pricing about ELB in advance by the following link:
https://www.amazonaws.cn/en/elasticloadbalancing/pricing/

a. For accounts without a technical support subscription, please create an "Account and Billing Support" case. You can select "Account" for the service and "Compliance and Accreditation (ICP)" for the category:

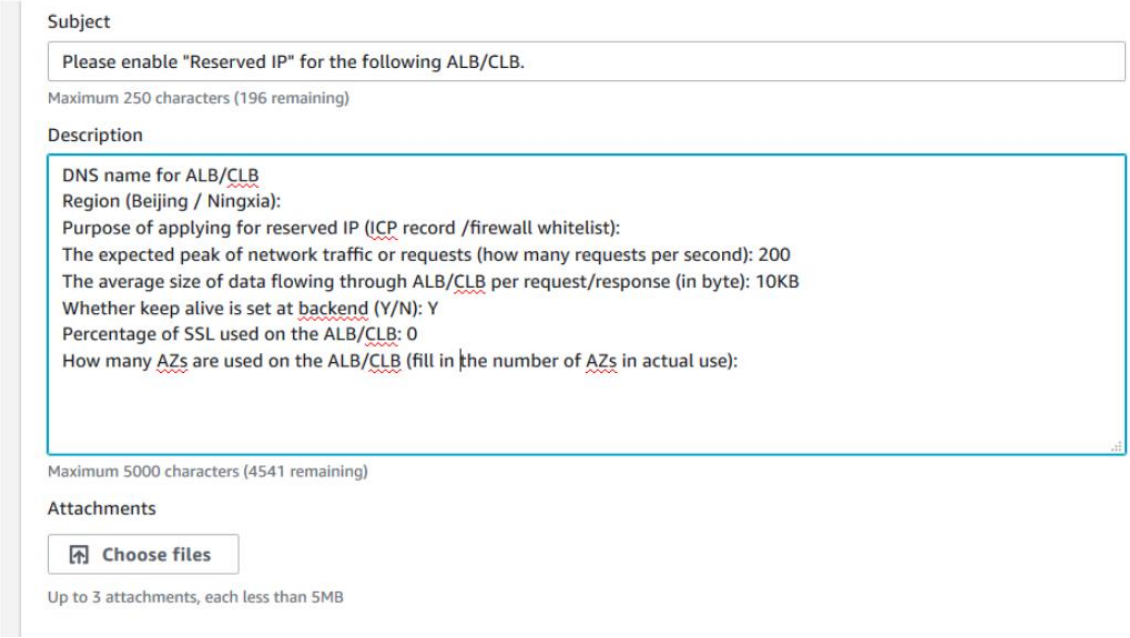


b. For accounts with a technical support subscription of the developer level or above, please create a "Technical Support" case. You can:
Select "(Elastic Load Balancing) ELB" for the service,
Select "General Guidance" for the category,
Fill in the ALB/CLB name that you would like to reserve IP addresses for, and select "General Guidelines" for the severity.



The following steps are for all users:
Fill in the subject: Please enable "Reserved IP" for the following ALB/CLB.
The description as follows.

DNS name for ALB/CLB
Region (Beijing Region/ Ningxia Region):
Purpose of applying for reserved IP (ICP record /firewall whitelist):
The expected peak of network traffic or requests (how many requests per second): 200
The average size of data flowing through ALB/CLB per request/response (in byte): 10KB
Whether keep alive is set at backend (Y/N): Y
Percentage of SSL used on the ALB/CLB: 0
How many AZs are used on the ALB/CLB (fill in the number of AZs in actual use):



Please note that we use the above indicators for ALB/CLB reserved IP record application by default. You can modify the corresponding parameters based on your real needs before submitting the IP reservation application.

3. Notes to IP reservation for ALB/CLB

Amazon Web Services Support team will enable "Reserved IP" for your ALB/CLB upon your application. Once the reserved IPs are enabled, they will send you a list of reserved IP addresses for your ALB/CLB via the support case. You will need to fill in all the reserved IP addresses in the list when conduct the record application,

If an ALB/CLB with reserved IPs is deleted, the reserved IP addresses will be released and there is no guarantee that you can use them again. If you need to delete an ALB/CLB that has been filed or is being filed, we suggest you consider carefully before deleting it.

Obtain an IP address for NLB

Network Load Balancer (NLB) is ideal for load balancing of TCP traffic that requires extremely high performance. If you publish your web services with an NLB, a network interface will be created at the time of creating a NLB in each availability which you have used. Each load balancer node in the availability zone can obtain a static IP address via this network interface. You can also associate an elastic IP address with each subnet. Both elastic IP addresses and static IP addresses of an NLB can be used for ICP record. Therefore a reserved IP address for NLB is not necessary. To obtain an NLB IP address for record, please refer to the following steps:

Selecting the right region

Before you create an NLB, please confirm the region (Beijing Region/Ningxia Region) in which the NLB is created.
Log in your account, select region by clicking the drop-down list in the upper right corner, and then you can create an NLB under this region. Note: If a region is selected, you cannot view services you have launched in other regions.

Steps of obtaining IPs

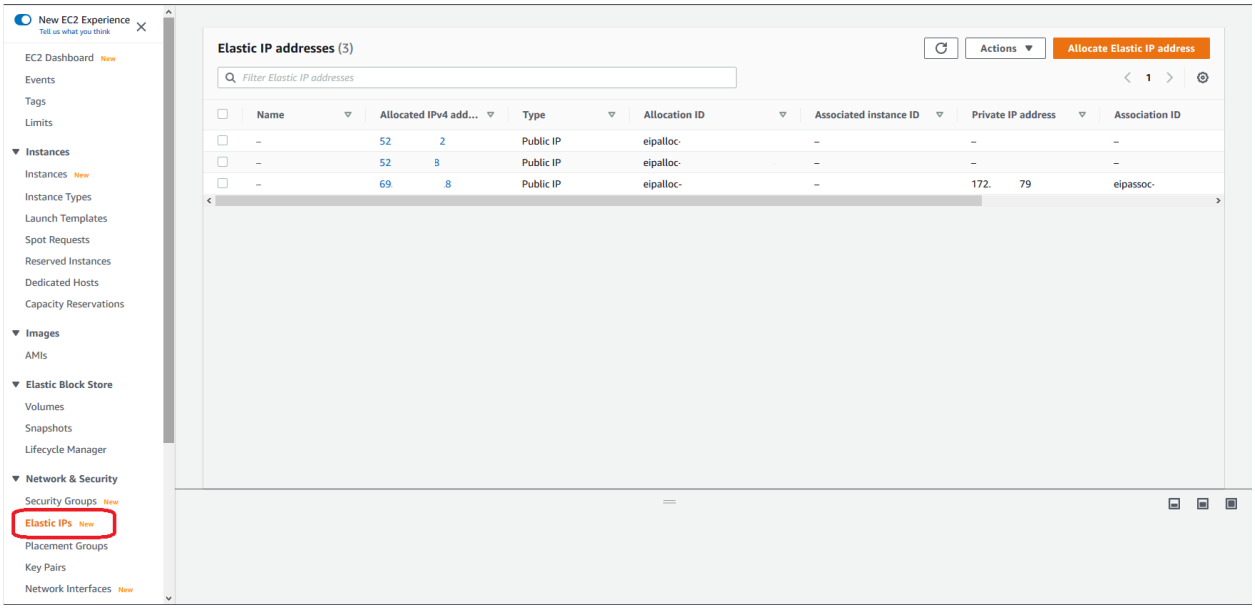
1. Please refer to the following documents for detailed steps of creating an NLB.
http://docs.amazonaws.cn/elasticloadbalancing/latest/network/network-load-balancergetting-started.html

2. Obtain IPs

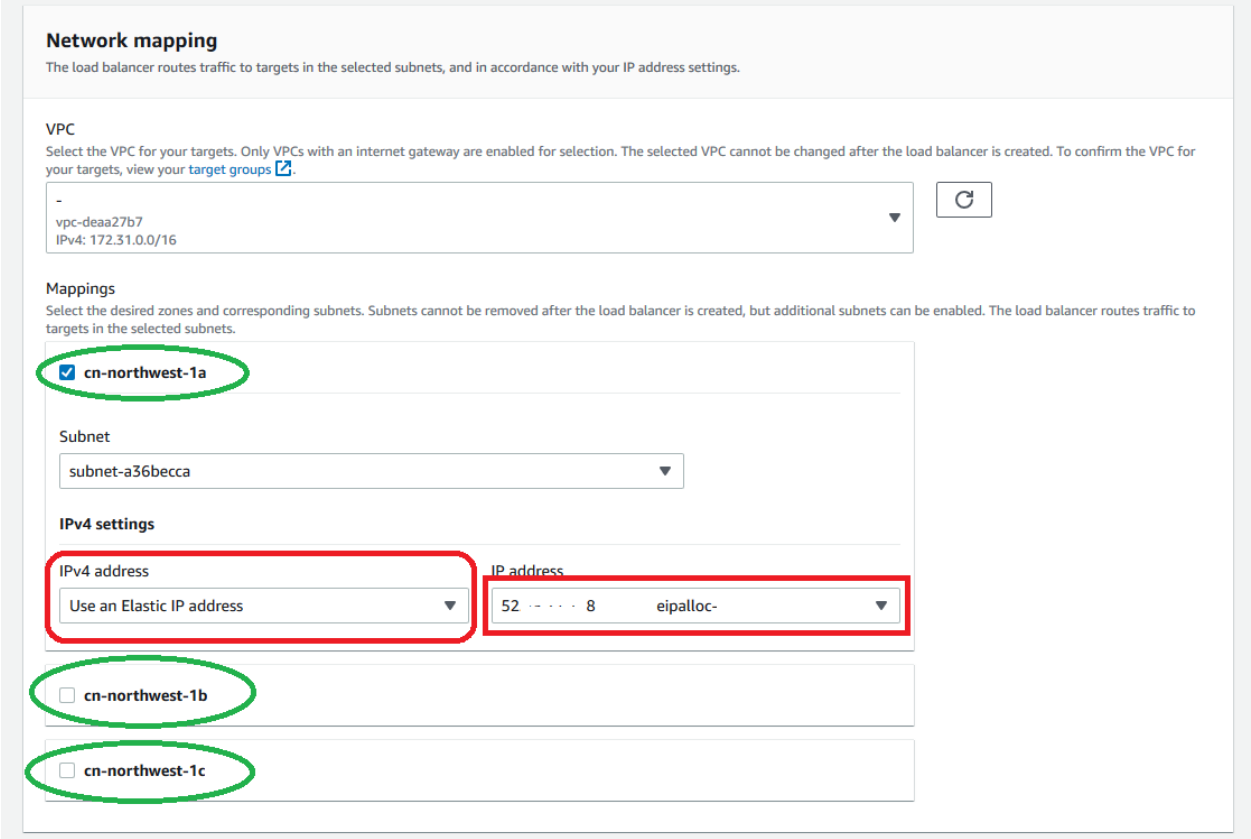
a. Assign elastic IP addresses to each subnet in the availability zones (You need to assign EIPs to the corresponding zone before assigning EIPs to NLB)

Log into the elastic IP address management console to confirm whether there are enough idle EIPs in the account and allocate elastic IP addresses to each available zone for use

https://cn-northwest-1.console.amazonaws.cn/ec2/v2/home?region=cn-northwest-1#Addresses:



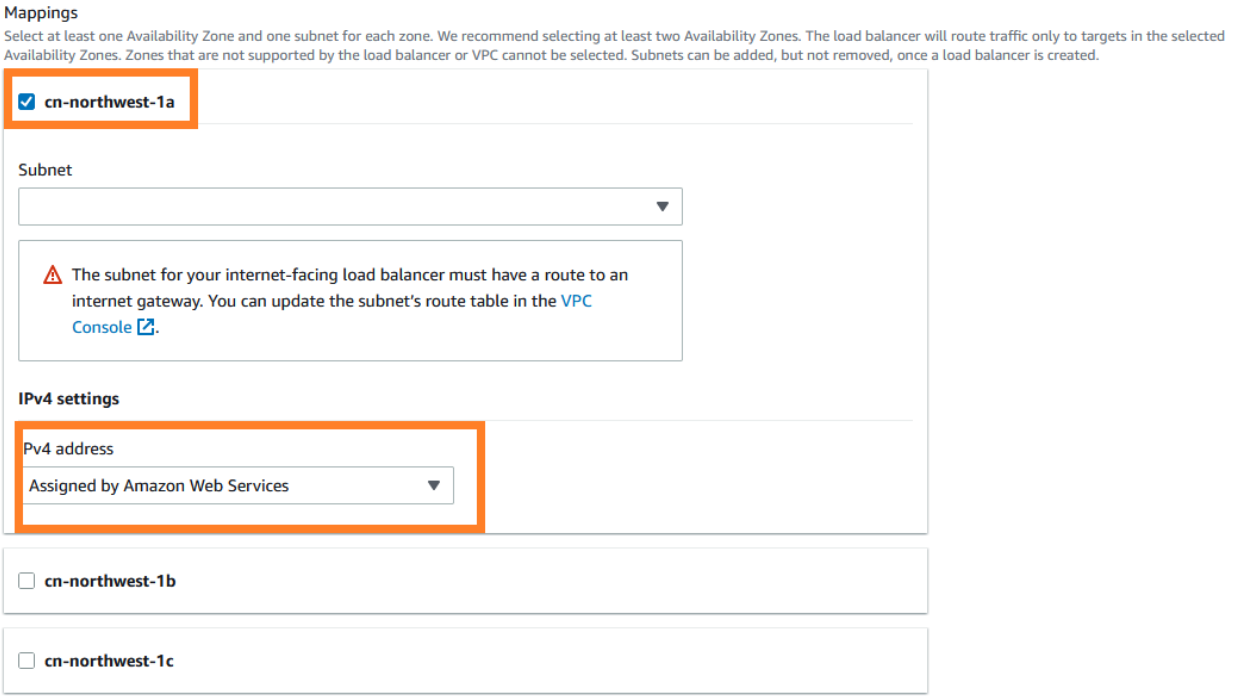
When create an NLB, assign an elastic IP address to each available zone at the “elastic IP address” section.



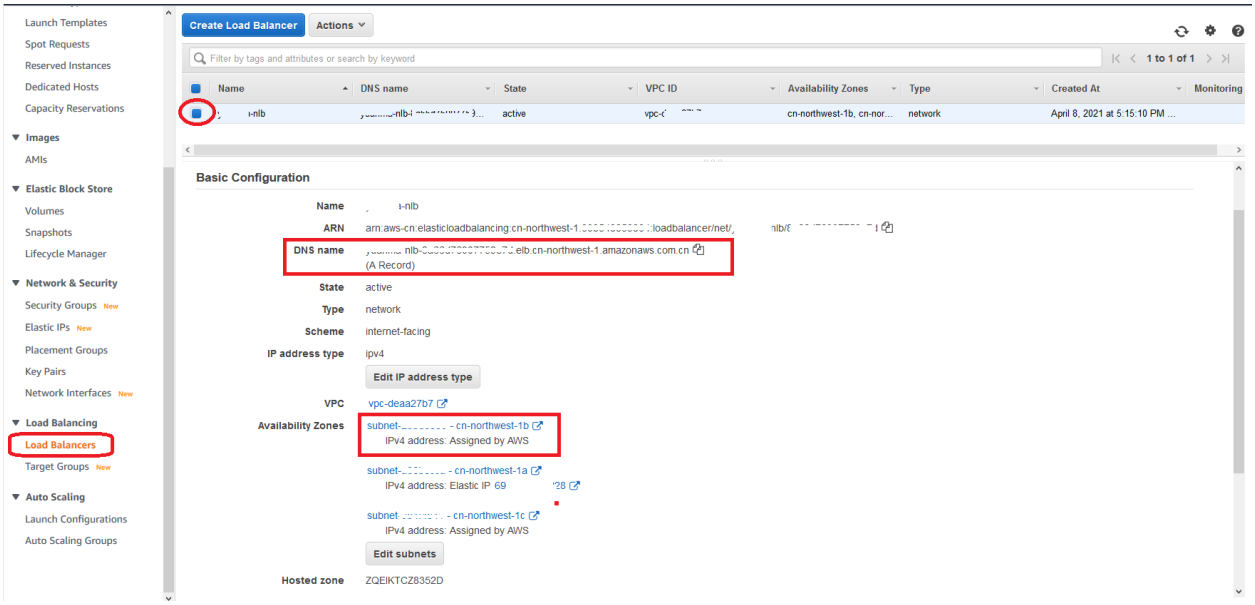
You can check the assigned elastic IP addresses and DNS name in ELB management console after an NLB is created.

b. The system automatically assigns a static IP address in each available zone for to NLB.

When create the NLB, you can go to the next step without assigning an elastic IP address;



You can get the DNS name of the NLB in ELB management console and the static IP addresses allocated by nslookup or dig commands.



3. Notes for the record of NLB IP address

(1) You may be charged if you use NLB. We recommend that you could learn the pricing about NLB addresses in advance by the following link: https://www.amazonaws.cn/en/elasticloadbalancing/pricing/

(2) The elastic IP address bound to the NLB cannot be unbound from this NLB during its lifetime.

(3) If the NLB is deleted, the elastic IP addresses bound to the NLB will be reserved in your account until you release it manually. However, the static IP addresses automatically assigned by NLB will be released and may not be available for your use anymore. Therefore, we suggest you consider carefully before deleting them.