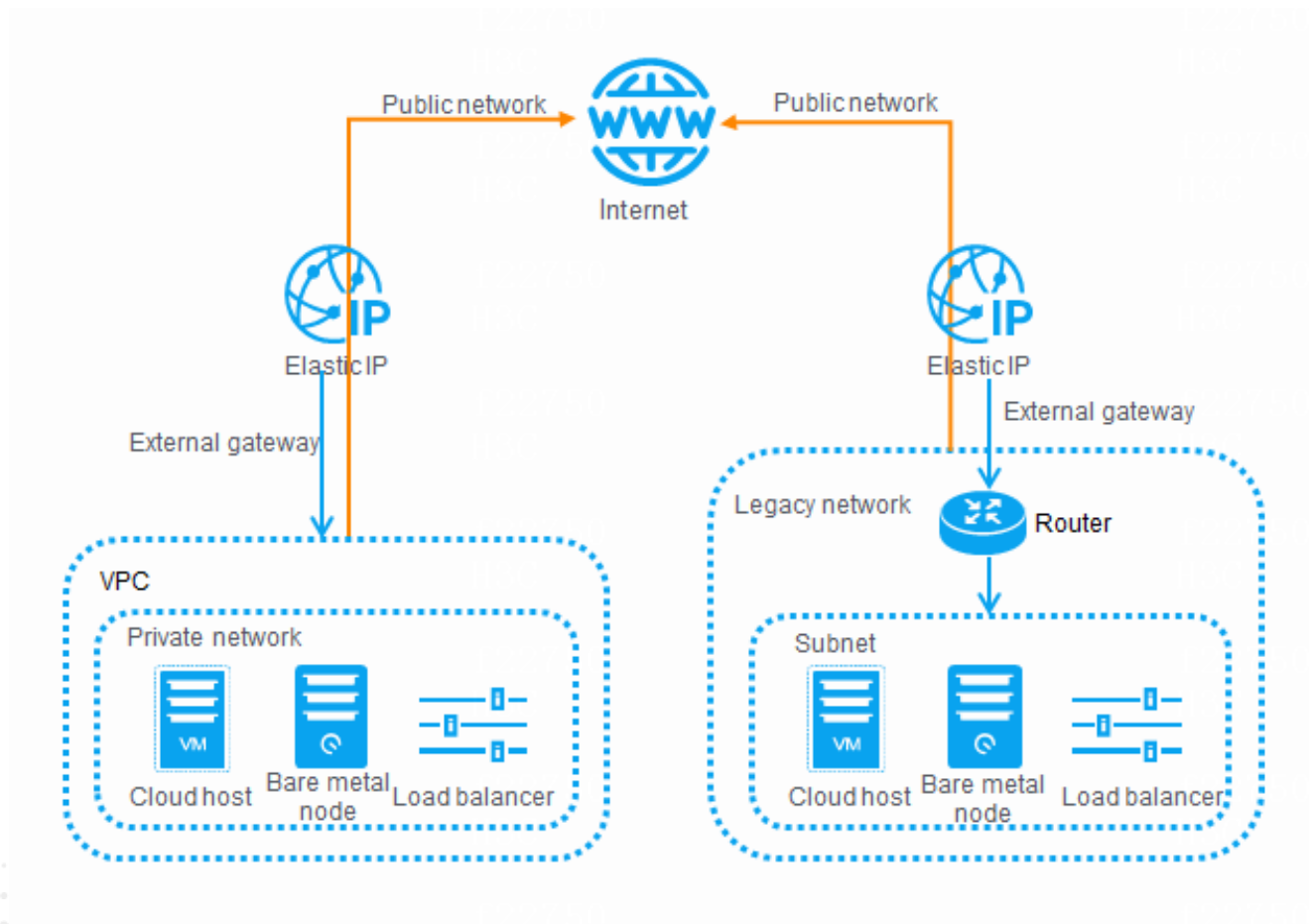


Public IP Vs Static IP Vs Elastic IP



Public IP Addresses

- A Public IP address is how the internet identifies you. A public IP address is the IP address that communicates your internet connected device to the public internet.
- An Elastic IP has the public IP address component, as you need to advertise your AWS instances to the public internet. As the AWS Elastic IP will advertise a public, static IP address that can compensate for fluctuations in your AWS infrastructure, they are necessary in dynamic cloud computing.

What is a Static IP?

- This is an IP address that never changes. If you are running a dynamic cloud environment, this would be necessary for advertising your content to the public internet. This is a primary function of AWS Elastic IPs, which contain the static IP address component.
- A static IP is useful for various reasons. In cloud computing, a static IP address is advantageous for DNS queries. If IPs are changing, this can affect the content loading process.

- Static IP addresses are IPs which do not change. They are common for business and cloud computing, which is why AWS includes this within the Elastic IP framework.



What is an Elastic IP?

- Elastic IP addresses are used by AWS to manage its dynamic cloud computing services.
- Within the AWS infrastructure, customers have virtual private clouds (VPCs). Within the VPCs, users have instances. The Elastic IP address is what is used to advertise the data within the instance to the public internet.
- If an instance goes down within AWS, you want to maintain your IP address, as well as maintain communication with your AWS account.

The Public, Static, and Elastic IP Debate

- The debate between what IP address is right for your business comes down to necessity.
- What are you trying to accomplish?
- We have said this in a few other networking posts, and the common thought for network design is: **"it depends"**.
- Having an understanding of the different IP address structures available to you can help you make better decisions.
- With your AWS Elastic IP address, you have all the requirements for dynamic cloud computing.