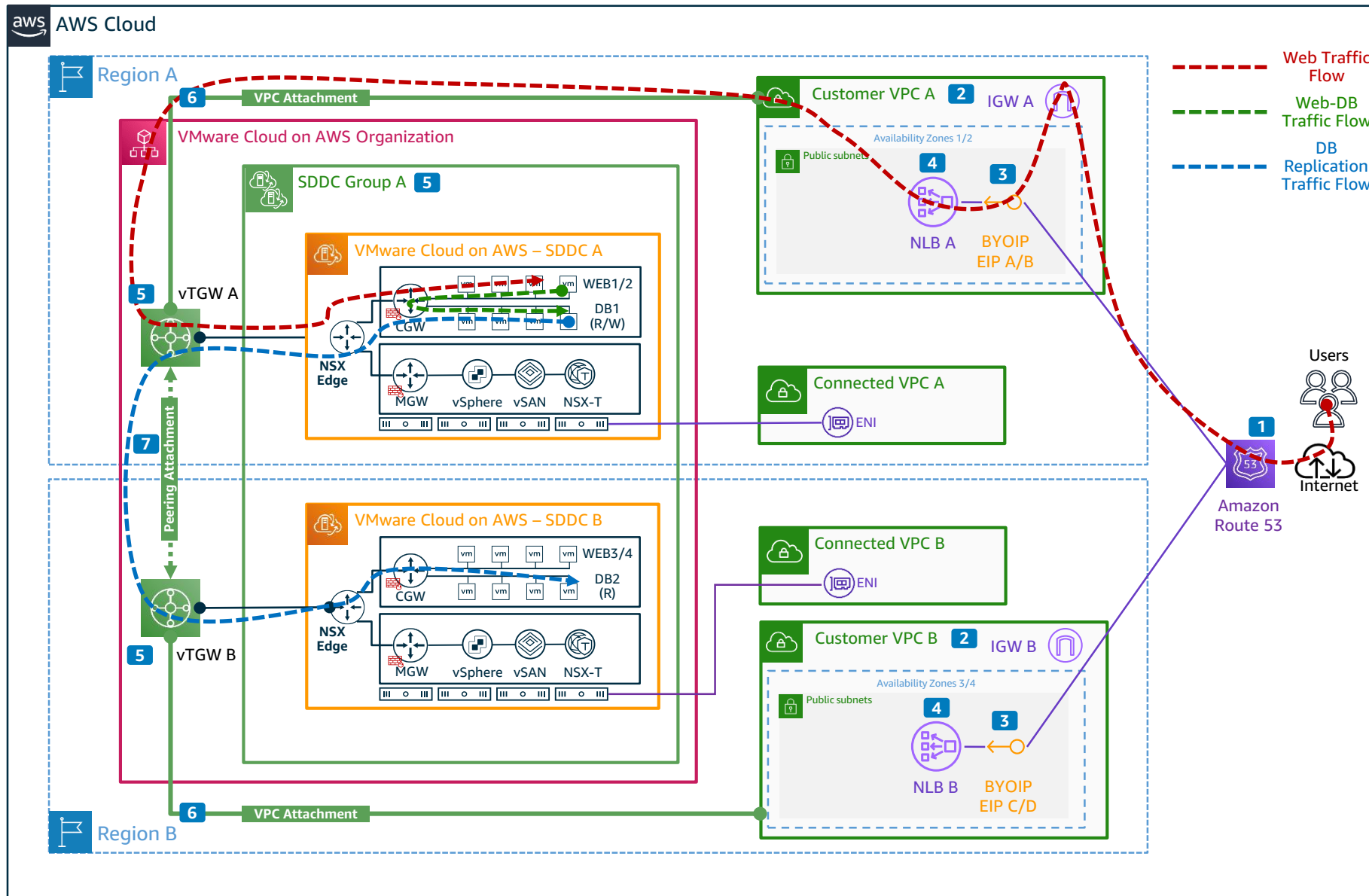


# VMware Cloud on AWS – BYOIP Reference Architecture 1

Bring Your Own Public IP Address (BYOIP) to VMware Cloud on AWS with AWS Cloud (Multi-Region).

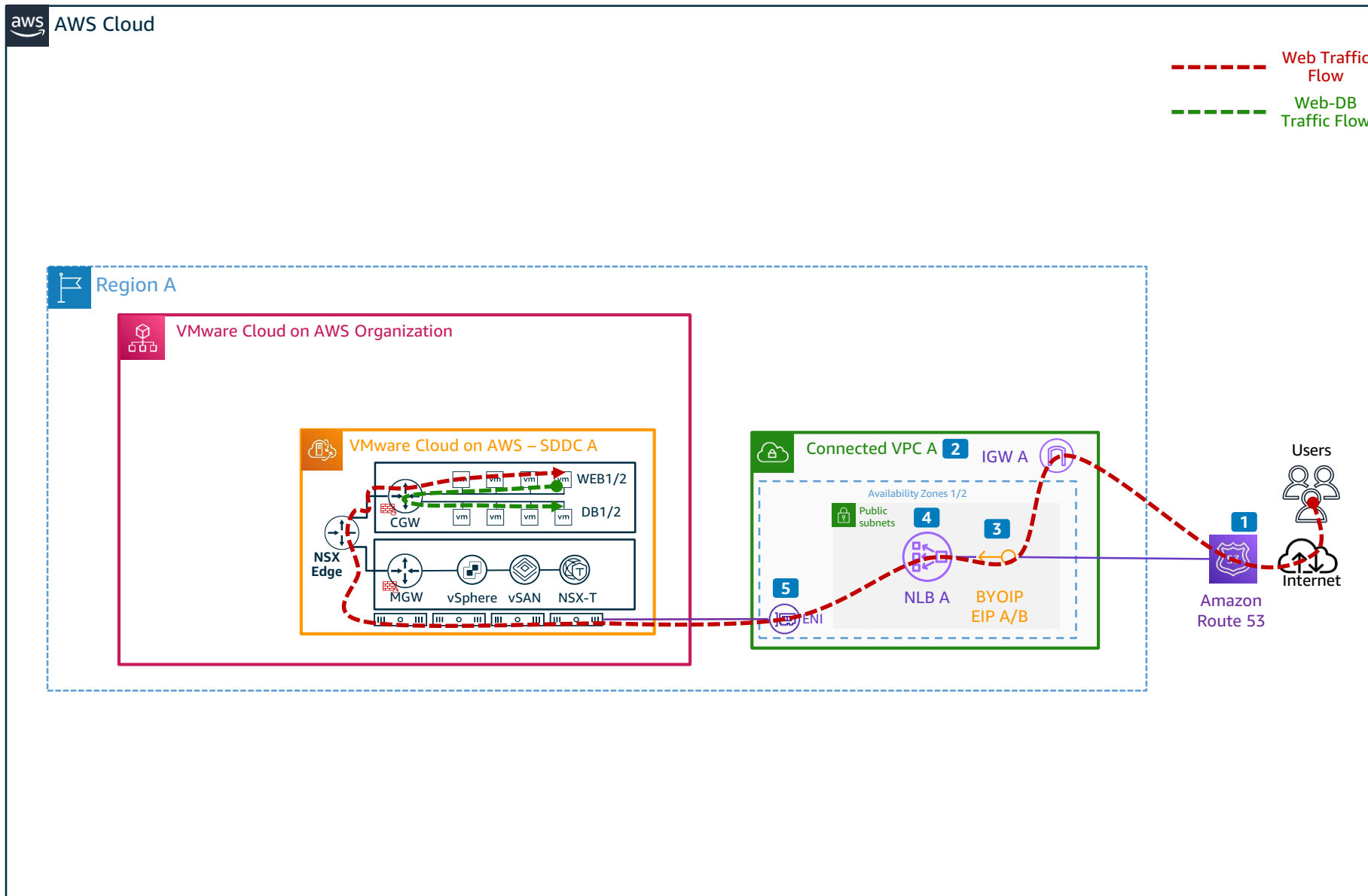


- 1 **Amazon Route 53** provides DNS resolution and multi-region traffic control with a latency or geoproximity Traffic Policy.
- 2 Customer ARIN/RIPE/APNIC Route Origin Authorizations (ROAs) are used to allow AWS to advertise the Customer Bring Your Own Public IP Address (BYOIP) networks from the AWS BGP ASNs 16509 & 14618.
- 3 Customer BYOIP networks become available in the Customer AWS Account as “BYOIP” Public IPv4 Address Pools for Elastic IP Address assignment.
- 4 The Elastic IP Addresses from the “BYOIP” Public IPv4 Address Pools are assigned to Network Load Balancer Availability Zones, including Target Groups with the IP addresses of the Web Server VMs running in **VMware Cloud on AWS**.
- 5 The SDDC Group uses a VMware Transit Connect (vTGW) to provide high-bandwidth, low-latency connectivity between:
  - SDDCs in an SDDC Group
  - SDDCs and one or more VPCs
  - SDDCs and one native TGW (inter-region)
  - SDDCs and on-premises via DXGW
  - SDDCs in other Regions (inter-region)
- 6 **Amazon Virtual Private Cloud (Amazon VPC)** uses VPC Attachments to connect to the vTGW to establish communication with networks connected to the vTGW.
- 7 The vTGW Peering Attachment enables cross-region communication between SDDC compute and management networks connected to vTGW A and vTGW B.



# VMware Cloud on AWS – BYOIP Reference Architecture 2

Bring Your Own Public IP Address (BYOIP) to VMware Cloud on AWS with AWS Cloud (Single SDDC).



- 1 Amazon Route 53 provides DNS resolution.
- 2 Customer ARIN/RIPE/APNIC Route Origin Authorization (ROA) is used to allow AWS to advertise the Customer BYOIP networks from the AWS BGP ASNs 16509 & 14618.
- 3 The Customer BYOIP networks become available in the Customer AWS Account as "BYOIP" Public IPv4 Address Pools for Elastic IP Address assignment.
- 4 The Elastic IP Addresses from the "BYOIP" Public IPv4 Address Pools are assigned to Network Load Balancer Availability Zones, including Target Groups with the IP addresses of the Web Server VMs running in **VMware Cloud on AWS**.
- 5 The Network Load Balancer connects from the Connected VPC to the **VMware Cloud on AWS SDDC** via the Elastic Network Interface.



Reviewed for technical accuracy November 30, 2021

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AWS Reference Architecture