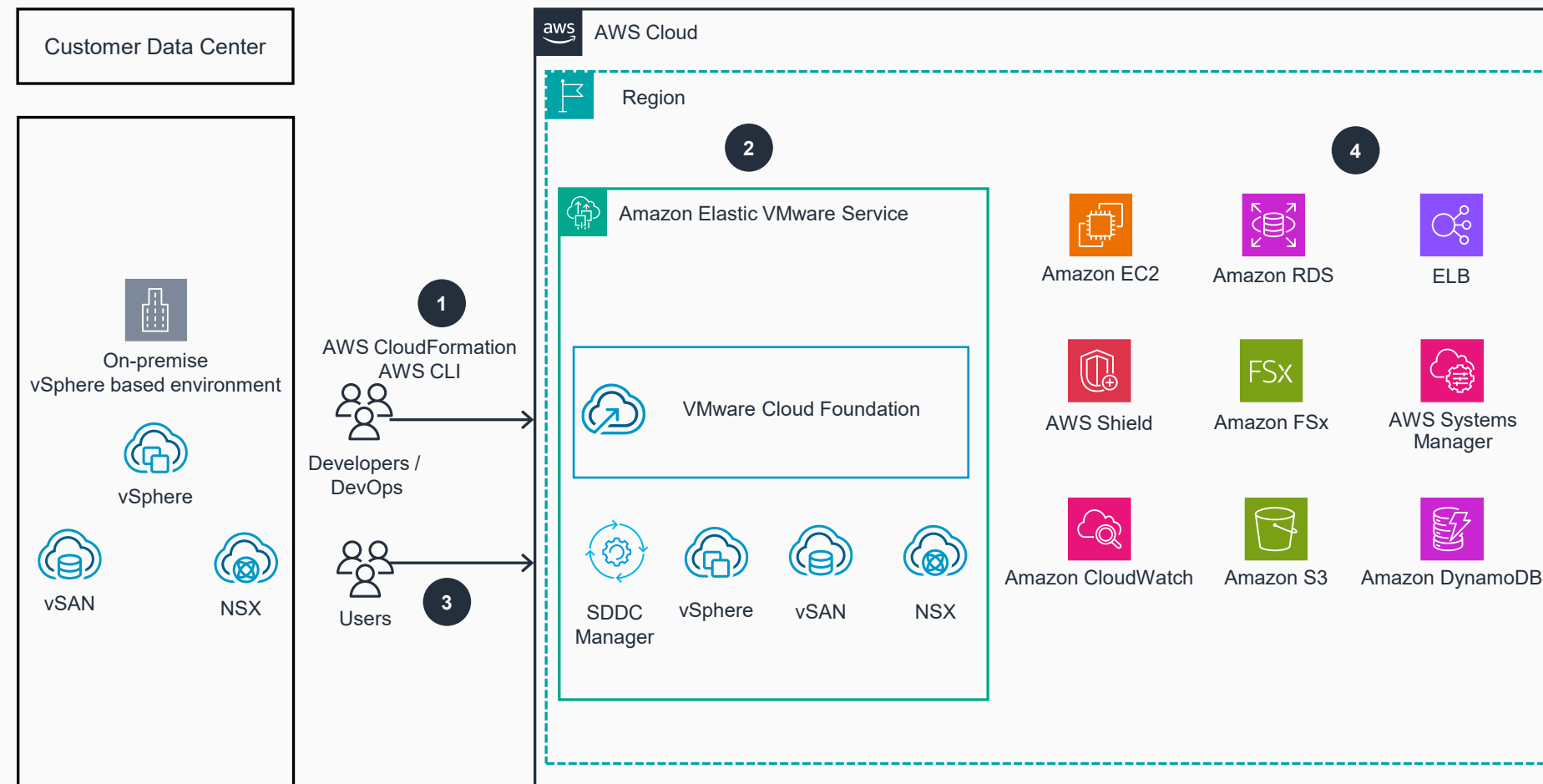


Guidance for Automated Setup for Elastic VMware Service

This reference architecture shows the mapping of on-premise VMware components to Amazon Elastic VMware Service core components and deployment of Amazon EVS with dependencies using AWS CloudFormation.

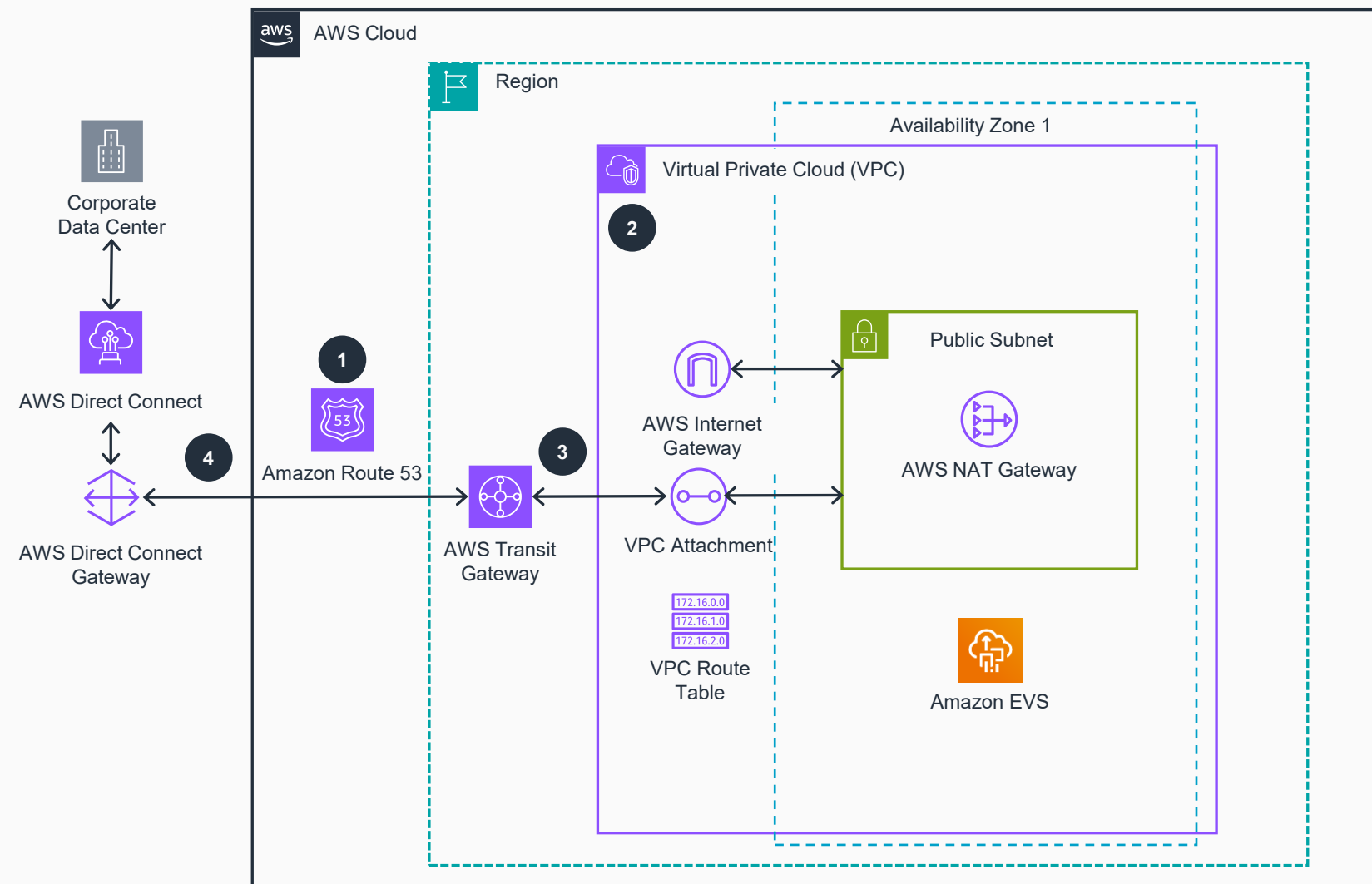


- 1 Developer/DevOps users use the AWS SDK, AWS CLI, and **AWS CloudFormation** for Infrastructure as Code (IaC) deployment of solution. These automation tools enable programmatic provisioning of **Amazon Elastic VMware Service (Amazon EVS)** through standardized AWS API and declarative CloudFormation template.
- 2 CloudFormation provisions **Amazon EVS** as the primary service, integrated with essential AWS infrastructure services including **Amazon Virtual Private Cloud (Amazon VPC)** for network isolation, **Amazon VPC Route Server**, **Amazon Route 53** for DNS resolution, and others.
- 3 Using **Amazon EVS**, users can interact with familiar VMware tools and services: SDDC Manager for infrastructure management, vSphere for virtualization, vSAN for storage, NSX for networking, along with other AWS managed and core services that can integrate with the **Amazon EVS** environment.
- 4 Multiple AWS services can be integrated with Amazon EVS such as: Amazon EC2, Amazon Elastic Load Balancing (ELB), Amazon FSx for storage, AWS System Manager, Amazon Simple Storage Service (S3), Amazon DynamoDB, Amazon Cloud Watch and others.



Guidance for Automated Setup for Elastic VMware Service

This reference architecture shows setting up network access to Amazon EVS via AWS Direct Connect and AWS Transit Gateway services.

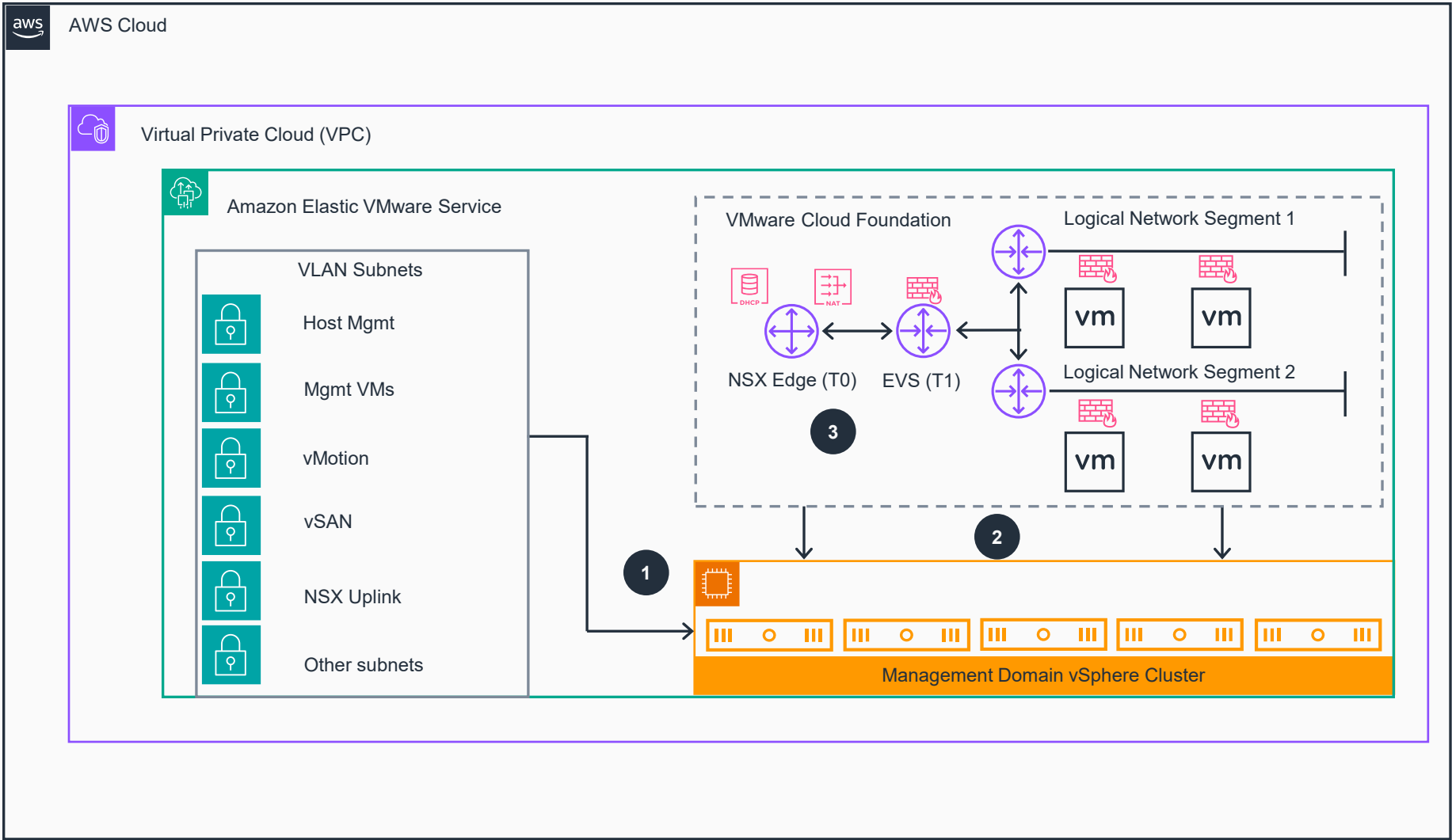


- 1 Create **Amazon Route 53** forward and reverse hosted zones in the target AWS Region. Set up **Amazon Route 53** inbound resolver endpoints so the **Amazon Elastic VMware (Amazon EVS)** management components and ESXi hosts can resolve DNS names properly (implemented by CloudFormation template, see Slide 1).
- 2 **Amazon Virtual Private Cloud (Amazon VPC)** is built with service access and public subnets in a single Availability Zone. Amazon Internet Gateway and NAT Gateway provide outbound internet access for private subnets. A custom DHCP Option Set is created to use the inbound resolvers from step 1 for DNS resolution and applied to the VPC. Deploy **Amazon VPC** Route Server with two endpoints in the service access subnet to handle BGP route exchange between **Amazon EVS** overlay networks and AWS underlay infrastructure.
- 3 Provision **AWS Transit Gateway** with **Amazon VPC** attachment and connect to the service access subnet.
- 4 For external connectivity, users may set up **AWS Direct Connect Gateway** to connect their corporate data center to the AWS Region and configure BGP routing to advertise routes between the on-premises network and **AWS Transit Gateway** for **Amazon EVS** workload migration.



Guidance for Automated Setup for Elastic VMware Service

This reference architecture shows internal connectivity and network topology of Amazon Elastic VMware Service components.



- 1 **Amazon Elastic VMware Service (Amazon EVS)** will provision **Amazon EC2** i4i.metal type instances for ESXi hosts using user provided Broadcom keys and credentials. **Amazon EVS** will configure the initial VLAN subnets for host management, vMotion, vSAN, and NSX overlay networks.
- 2 The **Amazon EVS** deployment process includes initializing vSphere cluster and deploying the VMware Cloud Foundation software including the vCenter Server, SDDC Manager, and Cloud Builder appliances in the VM Management VLAN network segments.
- 3 The **Amazon EVS** deployment process will also deploy a three-node NSX Manager Cluster and a two-node NSX Edge Cluster.