1. Describe how to link numerous sites to a VPC?

Ans

VPC with public and private subnets and AWS Site-to-Site VPN access

The configuration for this scenario includes a virtual private cloud (VPC) with a public subnet and a private subnet, and a virtual private gateway to enable communication with your own network over an IPsec VPN tunnel. We recommend this scenario if you want to extend your network into the cloud and also directly access the internet from your VPC. This scenario enables you to run a multi-tiered application with a scalable web front end in a public subnet, and to house your data in a private subnet that is connected to your network by an IPsec AWS Site-to-Site VPN connection.

This scenario can also be optionally configured for IPv6. Instances launched into the subnets can receive IPv6 addresses. We do not support IPv6 communication over a Site-to-Site VPN connection on a virtual private gateway; however, instances in the VPC can communicate with each other via IPv6, and instances in the public subnet can communicate over the internet via IPv6. For more information about IPv4 and IPv6 addressing, see [IP addressing](https://docs.aws.amazon.com/vpc/latest/userguide/how-it-works.html#vpc-ip-addressing).

1. What is the difference between EBS and Instance Store, and how do you explain it?

Ans

The instance store is ideal for temporary storage, because the data stored in instance store volumes is not persistent through instance stops, terminations, or hardware failures.

For data you want to retain longer, or if you want to encrypt the data, use [Amazon Elastic Block Store (Amazon EBS) volumes](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AmazonEBS.html) instead. EBS volumes preserve their data through instance stops and terminations, can be easily backed up with EBS snapshots, can be removed from one instance and reattached to another, and support full-volume encryption.

1. What are the different types of load balancers available in AWS?

Ans

Elastic Load Balancing supports the following types of load balancers: Application Load Balancers, Network Load Balancers, and Classic Load Balancers. Amazon ECS services can use these types of load balancer. Application Load Balancers are used to route HTTP/HTTPS (or Layer 7) traffic. Network Load Balancers and Classic Load Balancers are used to route TCP (or Layer 4) traffic.

An Application Load Balancer makes routing decisions at the application layer (HTTP/HTTPS), supports path-based routing, and can route requests to one or more ports on each container instance in your cluster. Application Load Balancers support dynamic host port mapping.

1. How does AWS IAM make a profit?

Ans

AWS Identity and Access Management (IAM) provides fine-grained access control across all of AWS. With IAM, you can specify who can access which services and resources, and under which conditions. With IAM policies, you manage permissions to your workforce and systems to ensure least-privilege permissions.

IAM is an AWS service that is offered at no additional charge. To get started using IAM or if you have already registered with AWS, go to the [IAM console](https://console.aws.amazon.com/iam/home).

With IAM, you can manage AWS permissions for workforce users and workloads. For workforce users, we recommend that you use [AWS Single Sign-On](https://aws.amazon.com/single-sign-on/) (AWS SSO) to manage access to AWS accounts and permissions within those accounts. AWS SSO makes it easier to provision and manage IAM roles and policies across your AWS organization. For workload permissions, use IAM roles and policies, and grant only the required access for your workloads.

1. Demonstrate the DynamoDB support mechanism.

Ans

We’ve developed a free, six-course curriculum to help developers and architects gain a deeper understanding of Amazon DynamoDB.

These new, intermediate-level courses simulate a real application development project. They include scenario-based animations, reading modules, demonstrations, quizzes, and optional self-paced labs (paid) to help you accelerate your application-development skills with DynamoDB.