



PICT, PUNE

## Assignment 4-6

33271

Batch : N-10

Title: Work on AWS VPC or AWS Elastic Beanstalk for deployment

Problem statement: Deploy / Host your web application on AWS VPC or AWS Elastic Beanstalk

Objective: Understand the working of AWS VPC or AWS Elastic Beanstalk

Theory:

What is Amazon VPC?

Amazon Virtual Private Cloud enables you to launch AWS resources into a virtual network that you've defined.

• Virtual private clouds [VPC]

A VPC is a virtual network that closely resembles a traditional network that you'd operate in your own data centre.

### Subnets

A subnet is a range of IP addresses.  
A subnet must reside in a single Availability Zone.

### IP addresses

You can assign IPv4 addresses, and IPv6 addresses to your EC2 instances.

You can ~~also~~ also bring your own IPv4 or IPv6 addresses to AWS and allocate them to resources in your VPC.

### Routing

Use route tables to determine where network traffic from your subnet or gateway is directed.

### Gateways and endpoints

A gateway connects your VPC to another network. For example, use an internet gateway to connect your VPC to the Internet.

### Peering connections

Use a VPC peering connection to route traffic between the resources in two VPCs.

### Traffic Mirroring:

Copy network traffic from network interfaces and send it to security and monitoring appliances for deep packet inspection.

### Transit gateways:

Use a transit gateway, which acts as a central hub, to route traffic between your VPCs, VPN connection, and AWS Direct Connect Connections.

### VPC Flow logs:

A flow log captures information about the IP traffic going to and from network interfaces in your VPC.

### VPC Connections:

Connect your VPCs to your on-premises networks using AWS Virtual Private Network [AWS VPN]

### Conclusion:

Thus, we studied how to deploy/host web application on AWS VPC or AWS Elastic Beanstalk.