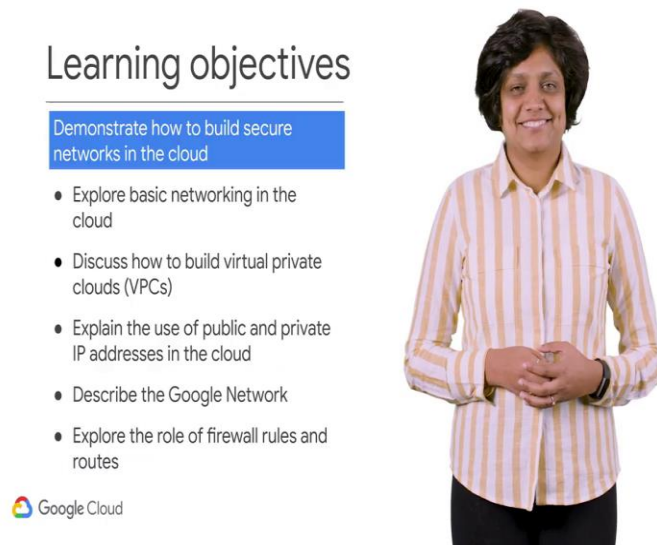**Google Cloud Computing Foundation Course**
Priyanka Vergardia
Google Cloud

Lecture-51
Module introduction

Hi I am Priyanka and welcome to the module it helps to network. In this module you will be learning about networking in the Google cloud platform. So, far in this course you have learned for TCP is how GCP supports the building of apps different storage options the use of API's and cloud security. In this module of the Google cloud computing foundations course you find out how networking in GCP works and what you need to consider before setting up those networks.

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The main objective of this module is to be able to demonstrate how to build secure networks in the cloud. To achieve this goal you will need to meet the following learning objectives provide an overview of networking in the cloud, discuss how to build virtual private clouds, explain the use of public and private IP addresses, describe the Google Network including regions zones cache nodes point of presence and fibre architecture and explore the role of firewall rules and routes.

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You will also explore various hybrid cloud networking options and differentiate between load balancing options.

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These are the topics that make up the module. First you will be introduced to networking in the cloud, then you will learn what a virtual cloud is followed by an introduction to public and private IP addresses. And a review of Google's network architecture, you will then learn about routes and firewall rules in the cloud before completing a hands-on lab to discover the fundamentals of VPC networking.

The next topic will explore how multiple VPC networks can be used which is supported by two labs. In the first you will create VPC networks and VM instances and in the other you will create a web server and explore Identity and Access Management roles and service accounts. You will then learn how to build hybrid clouds using VPNs interconnecting and direct peering. Next you think about the different options for load balancing followed by another two labs.

The first lab you will configure the HTTP load balancer and perform a stress test using cloud armor. In the second lab you will configure and test an internal load balancer. The module will end with a short quiz to help you check your understanding followed by a recap of the key learning points covered in the module.