!. Describe VPC Peering and establish VPC Peering between two different VPC and regions.

VPC Peering is the concept of connecting two different VPC using tunnels or VPNs so that internal communication between two different VPC can achieve. A VPC peering connection helps us to facilitate the transfer of data. For example, if we have more than one GCP account, we can peer the VPCs across those accounts to create a file sharing network. we can also use a VPC peering connection to allow other VPCs to access resources you have in one of your VPCs.


            A VPC peering connection
        

Let’s establish the VPC peering between two different VPC from different regions. Lets first verify can we ping the machine that belongs to other VPC if not create VPC peering between two VPCs and cross check the connection between machines from different VPCs.

In below we have 3 VPCs namely private-net, management, mynetwork.Graphical user interface, text, application, email

Description automatically generated Let’s run machines from management and private-net VPCs and check connections between them: Graphical user interface, application

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To estblish communication between these two mechines from different VPC we need to create VPC Peering. Note to estblish VPC peeing between two VPC we need to create two-way connection one from “management->private-net” and one from “private-net->management”

* Navigate to Menu->VPC Network->VPC Network Peering and go to CREATE A PEERING CONNECTION.
* Read the instructions and click Continue.
* Add the meeningful name for my case I use “name=management-2-private-net”, chhose VPC network in my case “VPC Network=management” and then choose the destination VPC is belongs to same project or different project in my case same Project, then choose destination VPC network from drop down in mycase it will be private-net.
* Leave all options as default.
* CREATE.

Repete same steps avobe just change the configuration like name source VPC and Destination VPC vice versa as mentioned above. Once we created both side VPC peering network then we will able to communicate between two different VPC mechines using internal or private IP address. Note: untill and unless we are not created both side VPC Peering network it will not work and the previously created VPC peering Network shown as INACTIVE.once both VPC peering network created it will automatically shows as active. Graphical user interface, text, application, email

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Now check the connection between the same mechines: Text

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So what we have learned today:

* What is VPC peering.
* Why do we need VPC peering.
* How to create VPC peering.
* How to estblish 2-way connection between two different VPCs. Etc

PTO