

Project 1 - GCP Project	Project 2 - Consider this as On Prem Setup
Rename the project as EdurekaCloud	Rename the project as EdurekaOnPremise
Create a custom VPC <ul style="list-style-type: none"> Name - cloud-vpc Add 2 subnets <ul style="list-style-type: none"> Subnet#1: <ul style="list-style-type: none"> Name - cloud-vpc-subnet1 Range - 10.1.1.0/24 Region - us-central1 Subnet#2: <ul style="list-style-type: none"> Name - cloud-vpc-subnet2 Range - 10.2.1.0/24 Region - us-east1 Default 4 FW rules in place 	Create a custom VPC <ul style="list-style-type: none"> Name - onprem-vpc Add 1 subnet <ul style="list-style-type: none"> Subnet#1: <ul style="list-style-type: none"> Name - onprem-vpc-subnet1 Range - 192.168.1.0/24 Region - us-central1 Default 4 FW rules in place
Create a VM in <ul style="list-style-type: none"> Name - cloud-vpc-instance1 Region- us-central1 Zone - us-central1-b Network - cloud-vpc Subnet - cloud-vpc-subnet1 No HTTP, HTTPS No external IP 	Create a VM in <ul style="list-style-type: none"> Name - onprem-vpc-instance1 Region- us-central1 Zone - us-central1-a Network - onprem-vpc Subnet - onprem-vpc-subnet1 No HTTP, HTTPS No external IP
SSH into cloud instance and Ping private IP on onprem instance - It should not work	SSH into onprem instance and Ping private IP on cloud instance - It should not work
Create HA VPN Gateway for Cloud project <ul style="list-style-type: none"> Name: cloud-vpc-vpn-gw1 Network - cloud-vpc Region: us-central1 Ipv4 	Create HA VPN Gateway for Onprem project <ul style="list-style-type: none"> Name: onprem-vpc-vpn-gw1 Network - onprem-vpc Region: us-central1 Ipv4
<ul style="list-style-type: none"> Peer VPN Gateway - Google Cloud Select Project and VPN Gateway Create pair of VPN tunnels 	<ul style="list-style-type: none"> Peer VPN Gateway - Google Cloud Select Project and VPN Gateway Create pair of VPN tunnels

<p>Create Tunnel#1</p> <ul style="list-style-type: none"> • Name: cloud-vpc-tunnel0 • Keep IKEv2 • Pre-shared key: 1234 - it is like you pair 2 devices via bluetooth 	<p>Create Tunnel#1</p> <ul style="list-style-type: none"> • Name: onprem-vpc-tunnel0 • Keep IKEv2 • Pre-shared key: same key shared from Cloud side
<p>Create Tunnel#2</p> <ul style="list-style-type: none"> • Name: cloud-vpc-tunnel1 • Keep IKEv2 • Pre-shared key: 1234 - it is like you pair 2 devices via bluetooth 	<p>Create Tunnel#2</p> <ul style="list-style-type: none"> • Name: onprem-vpc-tunnel1 • Keep IKEv2 • Pre-shared key: same key shared from Cloud side
<p>Create Router</p> <ul style="list-style-type: none"> • Name: cloud-vpc-router1 • Google ASN: 65001 • BGP peer interval: 20 	<p>Create Router</p> <ul style="list-style-type: none"> • Name: onprem-vpc-router1 • Google ASN: 65002 • BGP peer interval: 20
<p>Create BGP Session#1</p> <ul style="list-style-type: none"> • Name: bgp-to-onprem-tunnel0 • Peer ASN: 65002 (onprem ASN) • Allocate BGP IP - Select Manual • Router BGP IP: 169.254.0.1 • Peer BGP IP: 169.254.0.2 	<p>Create BGP Session#1</p> <ul style="list-style-type: none"> • Name: bgp-to-cloud-tunnel0 • Peer ASN: 65001 (cloud ASN) • Allocate BGP IP - Select Manual • Router BGP IP: 169.254.0.2 • Peer BGP IP: 169.254.0.1
<p>Create BGP Session#2</p> <p>Name: bgp-to-onprem-tunnel1</p> <p>Peer ASN: 65002</p> <p>Allocate BGP IP - Select Manual</p> <p>Router BGP IP: 169.254.1.1</p> <p>Peer BGP IP: 169.254.1.2</p>	<p>Create BGP Session#2</p> <ul style="list-style-type: none"> • Name: bgp-to-cloud-tunnel1 • Peer ASN: 65001 (cloud ASN) • Allocate BGP IP - Select Manual • Router BGP IP: 169.254.1.2 • Peer BGP IP: 169.254.1.1
<p>Click Create at the END</p>	<p>Click Create at the END</p>
<p>SSH into cloud instance and Ping private IP on onprem instance - It should work</p>	<p>SSH into onprem instance and Ping private IP on cloud instance - It should work</p>