

# Google Cloud Virtual Private Network

Google Cloud VPN securely connects your on-premises network to your Google Cloud Platform (GCP) Virtual Private Cloud (VPC) network through an IPsec VPN connection.

## Features

- 99.9% availability.
- Site-to-site VPN (star topology).
- Routing via static or dynamic routes using Cloud Router.
- Supports IKE pre-shared keys.
- Uses Encapsulated Security Payload (ESP) in tunnel mode with authentication.

**Note:** ESP Authentication Headers (AH) or ESP in Transport mode are not supported.

## Performance

- Each VPN has a maximum throughput of 3Gbps.
- Use Equal-Cost Multipath (ECMP) routing over multiple VPNs to achieve greater overall throughput.

## When to Use

- When you have a dedicated client side VPN gateway.
- Point-to-site VPN is not supported.
- When you want to connect two different VPC networks.