Google Cloud Networking Spotlight | Watch this on-demand event with Snap,
Twitter, and MongoDB on the latest networking technology. Watch now

(https://cloudonair.withgoogle.com/events/networking-spotlight).

JUMP TO (#)

# **Virtual Private Cloud (VPC)**

Global virtual network that spans all regions. Single VPC for an entire organization, isolated within projects. Increase IP space with no downtime.

New customers get \$300 in free credits to spend on VPC.

Try VPC free (https://console.cloud.google.com/freetrial)

Contact sales (https://cloud.google.com/contact)

- Start using VPC networks with these <u>how-to-guides</u> (https://cloud.google.com/vpc/docs/how-to)
- ✓ <u>Network</u> (https://cloud.google.com/about/locations) of 34 regions, 103 zones in 200+ countries and territories with uptime of 99.99%
- Use a single VPC to span multiple regions without communicating across the public internet
- Learn more about what <u>customers</u> (https://cloud.google.com/vpc#section-2) are saying about Google VPCs

# Virtual Private Cloud

VIDEO

## **VPC** in a minute

02:12

(https://www.youtube.com/watch?v=hS\_uvz4ohbo)

**KEY FEATURES** 

# **Key features**

#### **VPC** network

VPC can automatically set up your virtual topology, configuring prefix ranges for your subnets and network policies, or you can configure your own. You can also expand CIDR ranges without downtime.

## **VPC flow logs**

Flow logs capture information about the IP traffic going to and from network interfaces on Compute Engine. VPC flow logs help with network monitoring, forensics, real-time security analysis, and expense optimization. Google Cloud flow logs are updated every five seconds, providing immediate visibility.

## **VPC Peering**

<u>Configure private communication</u> (https://cloud.google.com/vpc/docs/vpc-peering) across the same or different organizations without bandwidth bottlenecks or single points of failure.

#### **Shared VPC**

<u>Configure a VPC network to be shared</u> (https://cloud.google.com/vpc/docs/shared-vpc) across several projects in your organization. Connectivity routes and firewalls associated are managed centrally. Your developers have their own projects with separate billing and quotas, while they simply connect to a shared private network where they can communicate.

## Bring your own IPs

<u>Bring your own IP addresses</u> (https://www.youtube.com/watch?v=u1nCeD3r0IE) to Google's network across all regions to minimize downtime during migration and reduce your networking infrastructure cost. After you bring your own IPs, Google Cloud will advertise them globally to all peers. Your prefixes can be broken into blocks as small as 16 addresses (/28), creating more flexibility with your resources.

## iew all features (#)



Looking for other networking products, including Cloud CDN, Private Service Connect. or Cloud DNS?

**Browse all products** 

(https://cloud.google.com/products/networking)

**CUSTOMERS** 

Learn from customers using Virtual Private Cloud



**BLOG POST** 

The secret to Bitly's shortened cloud migration.

5-min read



ee all customers (https://cloud.google.com/customers)

WHAT'S NEW

## What's new

<u>Sign up</u> (https://cloud.google.com/newsletter) for Google Cloud newsletters to receive product updates, event information, special offers, and more.

**BLOG POST** 

Manage data exfiltration risks in Cloud Run with VPC Service Controls

Read the blog

\_(https://cloud.google.com/blog/products/serverles
s/cloud-run-gets-enterprise-grade-network-security
with-vpc-sc)

DOCUMENTATION

## **Documentation**

**GOOGLE CLOUD BASICS** 

**Using VPC** 

Virtual Private Cloud documentation, how-to-guides, and support.
Learn more (/vpc/docs)
GOOGLE CLOUD BASICS
Creating a virtual private network (VPN)
How-to-guides, tutorials, and other support to create a VPN.
Learn more (/network-connectivity/docs/vpn)
GOOGLE CLOUD BASICS
Using Cloud Router
Documentation and resources for Cloud Router.
Learn more (/network-connectivity/docs/router)
GOOGLE CLOUD BASICS
Extend your on-premises network to Google with Interconnect
Learn how to use Dedicated Interconnect to connect directly to Google or use Partner Interconnect to connect to Google through a supported service provider.

Learn more (/network-connectivity/docs/interconnect)
TUTORIAL
Google Cloud Skills Boost: Networking in Google Cloud
A two-day class giving participants a broad study of networking options on Google Cloud in addition to common network design patterns and automated deployment.
Learn more (https://www.cloudskillsboost.google/courses/1419)
Not seeing what you're looking for?
View all product documentation (/vpc/docs)
Explore more docs
Get a quick intro to using this product.
Get a quick little to using this product.

(https://cloud.google.com/vpc/docs/overview) Learn to complete specific tasks with this product.

(/vpc/docs/how-to)

Browse walkthroughs of common uses and scenarios for this product.

(https://cloud.google.com/vpc/docs/create-modify-vpc-networks) <u>View APIs</u>, <u>references</u>, <u>and other resources for this product</u>.

### Release notes

Read about the latest releases for VPC

(/vpc/docs/release-notes)

**ALL FEATURES** 

### All features

#### **VPC** network

#### **VPC**

(https://cloud.google.com/vpc/docs/create-modify-vpc-networks)

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(https://cloud.google.com/vpc/docs/bring-your-own-ip)

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After you bring your own IPs, Google Cloud will advertise them globally to all peers. Your prefixes can be broken into blocks as small as 16 addresses (/28), creating more flexibility with your resources.

## **VPC** peering

## Configure private communication

(https://cloud.google.com/vpc/docs/vpc-peering) across the same or different organizations without bandwidth bottlenecks or single points of failure.

#### **Firewall**

Segment your networks with a globally distributed <u>firewall</u>

(https://cloud.google.com/vpc/docs/firewalls) to restrict access to instances. <u>VPC Firewall</u>

#### Rules Logging

(https://cloud.google.com/vpc/docs/firewall-rules-logging)

lets you audit, verify, and analyze the effects of your firewall rules. It logs firewall access and denies events with the same responsiveness of VPC flow logs.

#### **Routes**

### Forward traffic

(https://cloud.google.com/vpc/docs/routes) from one instance to another instance within the same network, even across subnets, without requiring external IP addresses.

#### **Shared VPC**

## Configure a VPC network to be shared

(https://cloud.google.com/vpc/docs/shared-vpc)
across several projects in your organization.
Connectivity routes and firewalls associated
are managed centrally. Your developers have
their own projects with separate billing and
quota, while they simply connect to a shared
private network, where they can communicate.

## Packet mirroring

Troubleshoot your existing VPCs by collecting and inspecting network traffic at scale, providing intrusion detection, application performance monitoring, and compliance controls with <a href="Packet Mirroring">Packet Mirroring</a> (https://cloud.google.com/vpc/docs/packet-mirroring)

#### VPN

#### Securely connect

connectivity/docs/vpn/concepts/overview)
your existing network to a VPC network over
IPsec.

(https://cloud.google.com/network-

#### Private access

#### Get private access

(https://cloud.google.com/vpc/docs/private-google-access)

to Google services, such as storage, big data, analytics, or machine learning, without having to give your service a public IP address.

Configure your application's front end to

receive internet requests and shield your backend services from public endpoints, all while being able to access Google Cloud services.

#### **VPC Service Controls**

Mitigate data exfiltration risks by enforcing a security perimeter

(https://cloud.google.com/vpc-service-controls/docs)

to isolate resources of multi-tenant Google Cloud services. Configure private communications between cloud resources from VPC networks spanning cloud and onpremise deployments. Keep sensitive data private and take advantage of the fully managed storage and data processing capabilities.

**PRICING** 

# **Pricing**

Pricing for VPC is based on egress traffic, traffic leaving a Google Cloud resource, such as a VM.

To get a custom pricing quote, connect with a <u>sales representative</u> (https://cloud.google.com/contact).

If you pay in a currency other than USD, the prices listed in your currency on <u>Google Cloud SKUs</u> (https://cloud.google.com/skus/) apply.

iew pricing details (https://cloud.google.com/vpc/pricing)

# **Packet Mirroring partners**























See all partners (https://cloud.withgoogle.com/partners/)

# Take the next step

Start building on Google Cloud with \$300 in free credits and 20+ always free products.

Try VPC free (https://console.cloud.google.com/freetrial)

Need help getting started?

Contact sales (https://cloud.google.com/contact/)

Work with a trusted partner

Find a partner (https://cloud.withgoogle.com/partners/)

Continue browsing

See all products (https://cloud.google.com/products/)