



Connect to
Google Cloud



Purpose

This document describes the prerequisites and procedure needed to create an L2 connection to Google Cloud through the Console Connect web portal.



Who is it for



Network
Admins



Network
Engineers



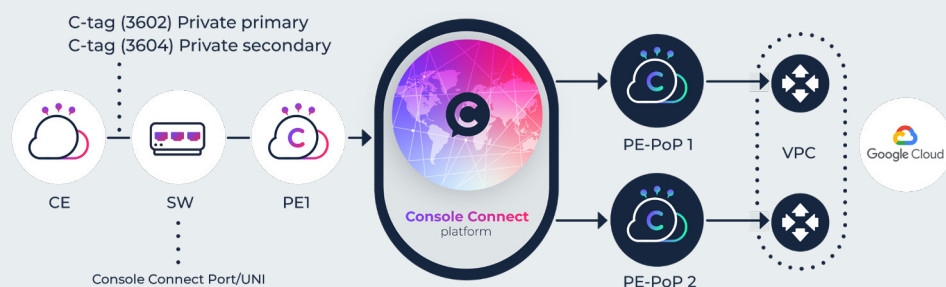
System
Admins



IT Managers

Introduction

The following diagram shows the network architecture that we will create using Console Connect and Google Cloud:



CE: customer edge device

SW: access layer switch on the Console Connect network. The CE has a physical port onto this device. Once the Google Cloud is provisioned, two ctags will be presented on this port that define the primary and secondary circuits

PE1: provider edge device. This is the entry point into the PCCW Global MPLS network.

PE-PoP 1 and 2: redundant edge routers in diverse locations facing Google Edge

Google Cloud Platform & VPC: a basic example of connecting a VPC within the Google Cloud Platform. The CE will BGP peer with the Google Cloud Router

This document will guide you step-by-step to:

1. Creating redundant Interconnect VLANs on Google Cloud Console, getting the two pairing keys
2. Creating a L2 connection to Google Cloud on Console Connect with the pairing keys
3. Configuring BGP from your router to the Google Cloud routers

Prerequisites

A Google Cloud console account. If you do not have one, [apply here](#)

A Console Connect account. If you do not have one, [sign up here](#)

At least one active Console Connect port

Procedure

Step 1

Create connection in Google Cloud Platform.

First, you will need to log in to your Google Cloud Platform to create VLAN attachments and get your pairing keys.

Once logged in, click the dropdown and select **'Hybrid Connectivity'**, then select **'Interconnect'**.

Next, select **'Get Started'**, then select **'Partner Interconnect'** on the next screen and click **'Continue'**.

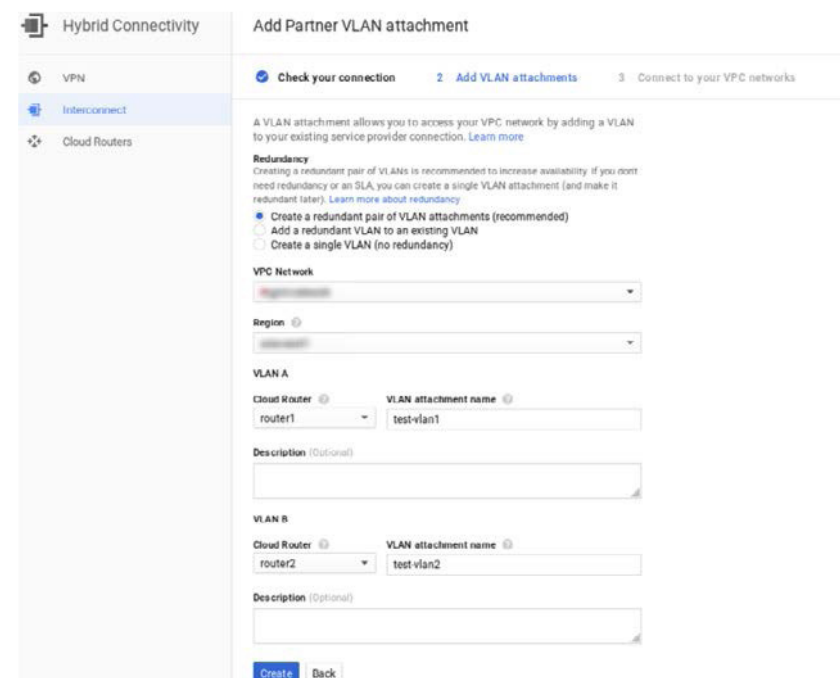
Click **'I already have a service provider'**.

Next leave the default option selected of **'Create a redundant pair of VLAN attachments'**, this will give you a 99.9% SLA.

You will need to select your VPC network, your region where you want to create your VLAN attachments, and then create two cloud routers and name your VLANs.

Click **'Create'**. You will need to wait about 30 seconds for the VLAN attachments to be created, and for the pairing keys to be generated. Under the pairing keys, there is a checkbox to **'Pre-activate these VLAN attachments'**. This needs to be ticked in order for your connection to be automatically created.

Copy the two pairing keys generated and go to **'Console Connect Portal'**.



Hybrid Connectivity

Add Partner VLAN attachment

1 Check your connection 2 **Add VLAN attachments** 3 Connect to your VPC networks

A VLAN attachment allows you to access your VPC network by adding a VLAN to your existing service provider connection. [Learn more](#)

Redundancy
Creating a redundant pair of VLANs is recommended to increase availability. If you don't need redundancy or an SLA, you can create a single VLAN attachment (and make it redundant later). [Learn more about redundancy](#)

☒ Create a redundant pair of VLAN attachments (recommended)
☐ Add a redundant VLAN to an existing VLAN
☐ Create a single VLAN (no redundancy)

VPC Network

Region

VLAN A
 Cloud Router: VLAN attachment name:
 router1 test-vlan1
 Description (Optional):

VLAN B
 Cloud Router: VLAN attachment name:
 router2 test-vlan2
 Description (Optional):

Create **Back**

Step 2

- ▼ Create Connection in Console Connect.
In network, from the '**Connections**' tab, select the '+' to begin the connection creation flow.
- ▼ Select '**Google Cloud**' from the '**Cloud Service**' grouping.
Enter a connection name.
Enter both your pairing keys.
- ▼ Select the source port to use for the Google Cloud Interconnect.
Select the Google Interconnect location where you wish to establish the Google Cloud Interconnect. This will only give you eligible locations that are eligible that you selected in the Google Cloud Platform e.g. if you selected Europe-West1, it will give an Interconnect location of Frankfurt.
- ▼ Select the rate limit (in Mbps) at which you wish to establish the Google Cloud Interconnect (note that the Console Connect platform allows you to specify a rate limit lower than the established Google bandwidth tiers, however Google Cloud charges will still be incurred at the identified bandwidth tier). Select the duration/term for the Google Cloud Interconnect.
Enter payment information.
Accept the terms and conditions which govern this interconnection request.
- ▼ Select '**Next**' to enter credit card details and submit the Google Cloud Interconnect provisioning request to Google Cloud.
You will receive a message indicating that provisioning is in progress. You will be notified once the circuit has been provisioned, and is available for final acceptance via the Google Cloud Platform.

Step 3

Accept connection in Google Cloud Platform.

Once you receive notification that your Google Cloud Interconnect connection has been provisioned, and is ready for final acceptance:

▼ Open your **Google Cloud Platform**.

In the Google Cloud Platform, under the '**Hybrid Connectivity**' section, you will find the VLAN attachments just created in the console under Interconnect. It will take a few minutes from the time you deploy the connection on Console Connect to the VLAN attachments showing up in the Google Cloud Platform.

▼ Select the VLAN attachment to view its details page.

If the status of your attachment is '**Waiting for service provider**', wait another minute for us to finish configuring our network.

Review the Interconnect information to check that PCCW Global is the service provider that configured the VLAN attachment.

Now you must configure BGP settings. For layer 2 connections, you must add the ASN of your on-premises router to your cloud router, before any traffic will start passing.

Step 4

Configure cloud router in Google Cloud Platform.

▼ Go to the VLAN attachments tab in the **Google Cloud Platform**.

Select the VLAN attachment that you activated to view its detail page.

▼ Click '**Configure BGP**'.

In the '**Peer ASN**' field, add the ASN of your on-premises router.

Click '**Save and Continue**'.

Configure customer on-premises router.

For layer 2 connections, configure a BGP session from your on-premises router to cloud router. For more information, see [Configuring On-premises Routers](#).

FAQ_

My VLAN attachment went into defunct status?

This can mean either you have deleted your connection on the Console Connect side, or you have used this pairing key before and it is still attached to a VLAN that is in use in the Google network.

I can't see my VLAN in the Google Console?

This information is available in the Console Connect platform, or via the Google Cloud Platform.

How do I **sign up?**

- Take control
- Cut complexity
- Make interconnection effortless

Easy as a click! Try it for free:

Register now

Australia

Level 3 | 200 Mary Street | Brisbane QLD 4000 | Australia

United Kingdom

7/F 63 St. Mary Axe | London EC3A 8AA | UK

France

2/F 16 rue Washington | 75008 Paris | France

Greece

340 Kifisias Avenue/340 Olimpionikon | Neo Psychiko 154 51 | Athens | Greece

Germany

Schillerstr. 31 | 60313 Frankfurt/M. | Germany

United States

475 Springpark Place | Suite 100 | Herndon | VA 20170 | USA

Singapore

6 Temasek Boulevard | #41-04A/05 | Suntec Tower Four | 038986 | Singapore

Hong Kong

20/F, Telecom House | 3 Gloucester Road | Wan Chai | Hong Kong

Japan

11F – 11A-3 | Imperial Hotel Tower | 1-1-1, Uchisaiwaicho, Chiyoda-ku
Tokyo 100-0011 | Japan

South Africa

Building 12 | 1 Woodmead Drive | Woodmead | Johannesburg 2191 | South Africa

UAE, Dubai

Office 401 & 408 | Level 4 | Arjaan Business Tower | Dubai Media City | Dubai

Have other questions we didn't cover?

Join our community

of experts.



www.consoleconnect.com

Talk to us: sales@consoleconnect.com