

# Virtual ION on GCP Deployment Guide

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# Plan a Prisma SD-WAN GCP Virtual Deployment

The Prisma SD-WAN virtual ION devices can be deployed to Google GCP. It is intended for network administrators who plan to extend the Prisma SD-WAN fabric between existing OR to be deployed data centers in GCP VPCs, thereby allowing administrators to align their WAN policies with business intent for performance, security, and compliance.

- Prerequisites
- Prisma SD-WAN GCP Reference Architecture
- Virtual ION Licensing and Token Management

## Prerequisites

### Prisma SD-WAN

An active Prisma SD-WAN subscription with sufficient licenses to install at least 1 x v7108 ION.

### Google GCP

A GCP account with access to the following APIs:

- Compute Engine API
- Cloud Deployment Manager V2 API
- Cloud Runtime Configuration API

# Prisma SD-WAN GCP Reference Architecture

The Prisma SD-WAN GCP reference architecture shows an example of branch deployments connecting to applications hosted in different GCP VPCs with the Prisma SD-WAN ION in GCP, acting in a data center deployment model.



With cloud services such as GCP, there may be a single VPC with workloads behind it as previously shown. However, there may be instances where there are multiple workloads and associated VPCs. In order to accomplish this, Google implements VPC Peering.



For more complex deployments where HA (High Availability) Virtual Appliances are needed and/or multi-region support with deployment automation, see the **GCP-NCC** *CloudBlade Integration Guide* on the Prisma SD-WAN Documentation.

# Virtual ION Licensing and Token Management

For virtual form factors in Prisma SD-WAN, the instance(s) are bound to an authorization token. This provides a set of controls to prevent unauthorized virtual devices to be added to an environment.

In order to deploy a Virtual ION using the Prisma SD-WAN deployment template in GCP, you must first log in to the Prisma SD-WAN portal and generate a token for the appropriate model.



Only a **Super User** role can generate the authorization tokens.

# **STEP 1** Log in to the Prisma SD-WAN portal and select **Settings** > **ION License Management** > **Manage Tokens**.

| •          | ION License Manage       | ement                   |              |                    |               |        |
|------------|--------------------------|-------------------------|--------------|--------------------|---------------|--------|
| *          | Search                   |                         |              |                    |               |        |
| ۵          | NODE                     |                         |              |                    |               |        |
| <u> </u>   | MODEL                    | AVAILABLE LICENSE COONT | ALLOCATED BI | USED LICENSE COUNT |               |        |
| 20 ×       | ion 3104v                | 109                     |              | 0                  | Manage Tokens | Return |
| 🛛 >        |                          |                         |              |                    |               |        |
| $\diamond$ |                          |                         |              |                    |               |        |
| •          |                          |                         |              |                    |               |        |
| *          |                          |                         |              |                    |               |        |
| \$         | Settings                 |                         |              |                    |               |        |
| ۰          | Subscriptions            |                         |              |                    |               |        |
| ?          | Tenants                  |                         |              |                    |               |        |
| •          | Device Associations      |                         |              |                    |               |        |
| •          | Identity & Access        |                         |              |                    |               |        |
| Ho         | Audit Logs               |                         |              |                    |               |        |
| $\bigcirc$ | Torre License Management |                         |              |                    |               |        |

#### **STEP 2** Create **Create Token**.

Single-use or Multi-use tokens can be generated through the Prisma SD-WAN portal. If deploying more than one ION device of the same model type within a 48-hour period, select **Multi Use** token, otherwise select **Single Use** token.

| toN Leener Management / Token Manager ← Ion 3104v Token Manager |              |           |                       |            |         |             |              |  |
|---|--------------|-----------|-----------------------|------------|---------|-------------|--------------|--|
| Search  | Only Valid 🗸 |           |                       |            |         |             | Create Token |  |
| ID  | USED         | MULTI USE | ION KEY               | SECRET KEY | REVOKED | EXPIRATION  |              |  |
| 17229   | false        | false     | 128 -f489-<br>4c 8933 |            | false   | Aug 10, 114 | :            |  |

**STEP 3** Copy the **ION Key** and **Secret Key** that will be used during the AWS deployment. These are mapped to the values of ion\_key and secret\_key in the AWS environment.

| ← Ion 3104v Token Manager |              |           |                    |            |         |              |              |  |  |
|---------------------------|--------------|-----------|--------------------|------------|---------|--------------|--------------|--|--|
| Search                    | Only Valid 🗸 |           |                    |            |         |              | Create Token |  |  |
| ID                        | USED         | MULTI USE | ION KEY            | SECRET KEY | REVOKED | EXPIRATION   |              |  |  |
| 17229/ :2396              | false        | false     | 128 489-<br>4c 733 |            | false   | Aug 10 17:14 | :<br>Copy    |  |  |
|                           |              |           |                    |            |         |              | Revoke       |  |  |

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# Prisma SD-WAN to GCP Deployment

- Prisma SD-WAN Virtual ION Deployment on GCP Prerequisites
- Use the Prisma SD-WAN GCP Deployment Template
- Claim the Prisma SD-WAN ION and Assign to a Site
- Configure GCP
- Use GCP Serial Console to Access Virtual ION Device

# Prisma SD-WAN Virtual ION Deployment on GCP Prerequisites

Before deploying the Virtual IONs you will need to create 3 VPCs and associated subnets in the region you intend to deploy the ION. For example,

### Controller VPC

• Controller Subnet: 10.0.1.0/24

### Internet VPC

• Internet Subnet: 10.0.2.0/24

### Peering VPC

• Peering Subnet: 10.0.3.0/24

| VPC networks         | CREATE V | PCNETWORK                    | С изменн |        |                   |          |                |                |
|----------------------|----------|------------------------------|----------|--------|-------------------|----------|----------------|----------------|
|                      |          |                              |          |        |                   |          |                |                |
| Name 🎍               | Fagion   | Subrets                      | MTE 😜    | Mode   | IP address ranges | Gateways | Finewall Rules | Global dynamic |
| + ion-peering-vpc    |          | 1                            | 1460     | Custom |                   |          |                | 01             |
|                      | us-east1 | kan-<br>peering-<br>sabret   |          |        | 10.0.3.6/24       | 92.0.3.1 |                |                |
| w ion internet spc   |          | 1                            | 1460     | Custom |                   |          |                | 01             |
|                      | us-east1 | ion-<br>internet-<br>subret  |          |        | 10.0.2:6/24       | 92.0.2.1 |                |                |
| + ion-controller-vpc |          | 1                            | 1460     | Custom |                   |          | 0              | 01             |
|                      | us-east1 | ion-<br>centrolle-<br>salvat |          |        | 10.0.1 8/24       | 10.0.1.1 |                |                |

# Use the Prisma SD-WAN GCP Deployment Template

**STEP 1** | Login to the GCP web interface, search and select **Prisma SD WAN ION Virtual Appliance** to launch.

| ۹          | prisma so                | d-wan   | ×    | ~ |
|------------|--------------------------|---|------|---|
| MAR        | KETPLACE                 |   |      |   |
| ¥          | Prisma Ao<br>Palo Alto N | ccess Private Offer<br>letworks, Inc.   |      |   |
| 峉          | Prisma SI<br>Palo Alto N | D WAN ION Virtual Appliance<br>letworks, Inc.   |      |   |
| 堂          | SD-WAN<br>Palo Alto N    | letworks, Inc.  |      |   |
|            |                          |   |      |   |
|            |                          | Prisma SD WAN ION Virtual App   | lian | c |
| ¢ PR       | D-WAN                    | Prisma SD WAN ION Virtual App<br>Pelo Alto Networks, Inc.   | lian | C |
| < PR<br>SI | D-WAN                    | Prisma SD WAN ION Virtual App<br>Palo Alto Networks, Inc.<br>Prisma® SD-WAN Virtual Instant-On Network (vION) | lian | C |

If you do not have the required APIs enabled you can do so here:

| Required AP                                    | ls                         |
|--|----------------------------|
| The following APIs are required to deploy a VN | I product from Marketplace |
| Compute Engine API                             | •                          |
| Cloud Deployment Manager V2 API                | •                          |
| Cloud Runtime Configuration API                | •                          |
| ENABLE   |                            |

- **STEP 2** On the deployment screen, complete the following sections:
  - 1. Deployment Name (can use default).
  - 2. Availability **Zone** to deploy ION, should match the region for the subnets you created previously.
  - 3. Current **version** is 5.5.3, ION can be upgraded to latest version once deployed from the Prisma SD-WAN web interface.
  - 4. Use the License Key that was generated from the Prisma SD-WAN web interface.
  - 5. Use the License Secret that was generated from the Prisma SD-WAN web interface.
  - 6. On the **Controller Interface**, select the **Controller VPC/Subnet** you created previously and ensure **Enable Public IP** is selected.
  - 7. On **Internet Interface**, select the **Internet VPC/Subnet** you created previously and ensure **Enable Public IP** is selected. Add 0.0.0/0 to the Source IP GCP Firewall to permit VPN traffic from the Prisma SD-WAN Branches
  - 8. On **Peering Interface**, select the **Peering VPC/Subnet** you created previously.

| Ĵ   | Google Clou<br>Marketplace<br>Terms of Ser<br>account, you<br>your Google   | d Marketplace does n<br>solutions, as stated i<br>vice. If you are transa<br>cannot purchase Ma<br>Cloud Partner Sales I   | ot permit the res<br>in the <u>Marketplac</u><br>icting under a rea<br>rketplace solution<br>Aanager for more  | eling of any<br>e Customer<br>eller billing<br>ss. Contact<br>information. |
|---|---|--|--|--|
| Deploye<br>prisma   | sent name *<br>sci-wan-1  |  |  |  |
| Zone  | 1-b   |  |  | - 0  |
| Prisma<br>5.5.3   | SD-MAN Version  |  |  |  |
| Machin  | e type  |  |  |  |
| GENER   | family<br>AL-PURPOSE  | COMPUTE-OPTIM  | ZED MEMOR  | Y-OPTIMIZED  |
| Machine 1   | ypes for cemmo  | n workloads, optimized   | for cost and field   | ilty   |
| Series  |   |  |  |  |
| Powered   | by Intel Cascade  | Lake and ice Lake CPU  | olatforms  |  |
| Machine   | 1994  |  |  |  |
| n2-star   | dard-8 (8 vCPU  | , 32 GB memory)  |  | •  |
|   | 2   | VCPU<br>R  | Memor<br>32 GB   | v  |
| ~   |   |  |  |  |
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9. Click **Deploy** to start the deployment of the virtual appliance.

Once deployment is complete you will see the following screen.

| ģ | Deployment Manager | ← prisma-sd-wan-1 👔 teutre  |
|---|--------------------|---|
| 0 | Deployments        |   |
| - | Type registry      | prisma schwar-1 has been deployed   |
|   |                    | <ul> <li>Cversiew - plana od was 1</li> </ul>   |
|   |                    | · In present was writing in the coupy   |
|   |                    | priama-ad-wan-1-em um instance  |
|   |                    | w promo of was 1-bs firecal_templete.py   |
|   |                    | <ul> <li>In planead-san bits (recall templete p)</li> <li>In planead-san bits (recall)</li> </ul> |

**STEP 3** | Finally, reserve the external IP address assigned to your internet port (nic1).

This IP address is used to terminate the SD-WAN VPNs and must be static. Navigate to VPC networks -> External IP addresses, you should see the output below.



**STEP 4** | Select the external IP address associated with nic1 and reserve it.



## Claim the Prisma SD-WAN ION and Assign to a Site

The ION will show up as **Unclaimed:Online** under the **Map > Unclaimed Devices** section of the Prisma SD-WAN web interface when connected to the Prisma SD-WAN controller.



It can take up to 10 minutes for the ION to show up in the Controller.

# **STEP 1** | Claim the device by selecting Workflows > Prisma SD-WAN Setup > Devices > Unclaimed Devices > Claim the device.

It will transition to an offline state while going through the claiming process.

**STEP 2** Create a Data Center Site while the device is being claimed.

Although this workflow depicts how to assign the vION to a data center site, you can also assign the vION to a branch site or a branch gateway site. However, Prisma SD-WAN does not support high availability for vIONs deployed at a branch site or a branch gateway site.

- 1. Select Workflows > Prisma SD-WAN Setup > Data Centers > Add Site.
- 2. Enter a name for the site and other site details and click **Next**.
- 3. Add an Internet Circuit in the Circuits section and click Next.

| ← Add Data Center                             | Site                                    |                     |                 |   |             |
|---|---|---------------------|-----------------|---|-------------|
| <ul> <li>General</li> <li>Circuits</li> </ul> | Circuits<br>Internet Circuits - 0 Added |                     |                 |   |             |
| 3 Devices                                     | Circuit                                 | Circuit Category    | WAN             | ] |             |
|   | Internet Circuits •                     |                     |                 |   | ×           |
|   | Circuit Category                        | WAN Manage Networks | Circuit         |   |             |
|   | - •                                     | - •                 | Circuit<br>Edit | • |             |
|   |   |                     |                 |   |             |
|   |   |                     |                 |   | Cancel Save |

4. Assign the device to the data center by selecting **Assign Devices** and selecting the ION device from the list of **Select Devices** and **Save**.

| General          |   |                            |               |  |              |          |
|------------------|---|----------------------------|---------------|--|--------------|----------|
| Circuits Devices | Assign Devices<br>Select up to 2 Devices to a | Assign Devices             |               | Create Device Shells  Create up to 2 Device Shells to pre-provision and assign Data Center Site. |              | n to the |
|                  | Select Devices                                | Search by name, software Q | a X Models X  | State X  | Y Add Filter | Reset    |
|                  | Device Name                                   | Model SW Version           | Serial Number | State  | Status       |          |

Add Data Center Site

**STEP 3** Once the device is successfully assigned, click on the device name (ion 7108v) to enter the device configuration screen.

| C CCP US-Ent-1  |                      |   | Renduze, VH, | Restor, VH, United States                                       |                     |  |  |
|---|----------------------|---|--------------|---|---------------------|--|--|
| Configurations  | (herein)             | Connex Norn   |              |   | Atlantal v 🖉 brinds |  |  |
| CONNECTIVITY<br>Physical<br>Secure Fabric:<br>Renderd VPN | 2.40<br>2.40<br>2.40 | MODE<br>Dudine V  |              |   |                     |  |  |
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Provide a **Device Name**.

| EVICE NAME                       | GEP-US-East-1-ION                    |  |  |  |
|----------------------------------|--------------------------------------|--|--|--|
| ESCRIPTION                       | Optional                             |  |  |  |
|                                  | optional                             |  |  |  |
| 65                               |                                      |  |  |  |
|                                  | optional, 4 logo man                 |  |  |  |
| DDEL                             | ion 7108v                            |  |  |  |
| RAL NUMBER                       | 0as72735-643b-f5e5-6d7b-b7c45442e03f |  |  |  |
| OFTIMARE VERSION                 | 553-64 🛆                             |  |  |  |
| IRCE VPN TO VPN TRAFFIC TO LOCAL | No                                   |  |  |  |
|                                  |                                      |  |  |  |
|                                  |                                      |  |  |  |
|                                  |                                      |  |  |  |
|                                  |                                      |  |  |  |
|                                  |                                      |  |  |  |
|                                  |                                      |  |  |  |

### **STEP 4** | Configure **Port 1**.

Assign the Internet WAN **Circuit Label** you created in step 2, the IP address assigned to the interface (nic1) in the Internet VPC and providing the external NAT address and port. To determine the interface and external (ephemeral) IP addresses navigate to the GCP portal and find the Public IP address provisioned for the internet interface **Compute > VM > Select VM**.

| etwork tags       |                            |                          |                  |                       |        |                              |                                |              |
|-------------------|----------------------------|--------------------------|------------------|-----------------------|--------|------------------------------|--------------------------------|--------------|
| prisma od wan 1 o | Aphyment                   |                          |                  |                       |        |                              |                                |              |
| etwork inter      | rfaces                     |                          |                  |                       |        |                              |                                |              |
| Name 🕇            | Network                    | Subnetwork               | Primary Interna  | P Alas P.s            | anges  | External IP                  | Network tier O                 | P forwarding |
| nică              | ian-<br>controller-<br>vpc | ion-controller<br>sabret | 10.01.2          |                       |        | 34,74,69,221<br>(Ephometal)  | Promium                        | 0n           |
| nic1              | ion internet-<br>vpc       | ion-intornet-<br>subnet  | 10.0.2.2         |                       |        | 35.227.79.236<br>(Ephomeral) | Promium                        | 0n           |
| nic2              | ian peoring-<br>vgs        | ion-peering-<br>subnet   | 10.0.3.2         |                       |        | None                         | 1                              | 0n           |
|                   |                            |                          |                  |                       |        |                              |                                | _            |
|                   | CCP-U                      | JS-East-1-ION            | •                |                       |        |                              | Basic Durine B<br>Mip Touhit B | ta faces     |
|                   |                            |                          |                  |                       |        | 2                            | 1                              |              |
|                   | Config                     | pure interface: 1        |                  |                       |        |                              |                                |              |
|                   | Maind                      | Configuration Sal        | - Interfaces (2) |                       |        |                              |                                |              |
|                   | NUM                        | WALE STATUS              |                  | et 1                  |        |                              |                                |              |
|                   | ADAD                       | 1.007                    |                  | No 🖲 Yes              |        |                              |                                |              |
|                   | NUME                       |                          | 1                |                       |        |                              |                                |              |
|                   | DESCR                      | PTION                    |                  |                       |        |                              |                                |              |
|                   | MO                         | MAK 20                   |                  |                       |        |                              |                                |              |
|                   | NUM                        | VALUE TYPE               |                  | et                    |        |                              |                                |              |
|                   | USE 11                     | IS PORT FOR              |                  | Connect to Internet   |        |                              |                                |              |
|                   | CRCU                       | T LABOL                  |                  | olis-12 (GCP Blendod) | opdate |                              |                                |              |
|                   | CONFI                      | OURATION                 |                  | STATIC                | ~      |                              |                                |              |
|                   | IP ACC                     | RESERVER (10.000)        | • 0              | 10.0.2.2              | / 24   |                              |                                |              |
|                   | DEFAI                      | ET GATEMAR INCOME        | ••               | 13 . 0 . 2 . 1        |        |                              |                                |              |
|                   | Dec S                      | DEVERS (2 MAUE)          | ļ                | 0 Aut 200 January     |        |                              |                                |              |
|                   | 0708                       | NR, NAT ADDRESS & I      | oer 🛛            | 15 . 227 . 79 . 236   | : 4500 |                              |                                |              |
|                   |                            |                          |                  |                       |        |                              |                                |              |

### **STEP 5** | Configure **port 2**.

Select Admin Up as Yes, Use this port to Peer with a Network, and set for DHCP.

**STEP 6** | Configure a static default route pointing to the gateway of port 2 (the 1st IP address of the private subnet specified in the peering subnet).

| DE     | STINATION PREFIX       | 0                         |   |
|--------|------------------------|---------------------------|---|
| NE     | XTHOP REACHABILITY PRO | 386                       |   |
| C      | Fase                   |                           |   |
| 500    | OPE                    |                           |   |
|        | E Cocal                |                           |   |
| *<br>* | NEXT HOP (MAX 8)       |                           | • |
|        | 1 <sup>0</sup>         | ADMIN DISTANCE            |   |
|        | 10.0.3.1               | 1                         |   |
| 1      | INTERFACE              | SELF                      |   |
|        | choose                 | <ul> <li>false</li> </ul> | ~ |
|        |                        |                           |   |
|        |                        |                           |   |

**STEP 7** Switch the site to **Control** mode and verify the VPNs are up and active.

Proceed to the next section to finalize the GCP deployment steps.



# Configure GCP

- **STEP 1** Login to the GCP portal and navigate to **VPC Network**. First, peer the Prisma SD-WAN peering VPC to an App VPC.
- **STEP 2** Enter the **VPC Network Peerings** configuration section to set up VPC peering between the Prisma SD-WAN VPC and each of your application VPCs.



**STEP 3** Create a VPC Connection from the Prisma SD-WAN VPC to the Application VPC.

Specify the SD-WAN peering VPC and the remote VPC you wish to peer with from the provided list. Ensure that **Export Custom Routes** is selected on this peering.

| Creat   | e peering connection  |
|---|---|
| O You<br>me<br>aut  | If VPC network will be fully connected to the peered VPC network (full<br>shi topology). Ractes to subnets in the peered VPC network will be<br>iomatically created.  |
| Name*   |   |
| sdwan-to-app  | •   |
| Lowercase let   | ters, numbers, hyphens allowed  |
| - Your VPC nets   | work *  |
| ion-peeting-st  | pc • 0  |
| <ul> <li>In project r</li> <li>In another</li> </ul>  | ienaro gep-doc<br>project   |
| () In another   | project   |
| MDD metership   | rane*   |
| W-C BEOWER  | -   |
| app-spc   | •   |
| app-vpc   | om routes 🖗   |
| Exchange cust   | cm roctes  to import or export static and dynamic rostes over the VPC peering connection  |
| Exchange cust<br>You can choose   | com souther     of     to import or expert static and dynamic routes over the VPC peering connection     to hom noutes  |
| Exchange cust<br>You can choose<br>Import cus   | mm routes   |
| Exchange cust<br>You can choose<br>Import cus<br>Exchange subr  | zon noutes ()<br>Is import or expert static and dynamic noutes over the VPC pareng convectors<br>tern noutes ()<br>Ten noutes ()<br>Hartones with public ()<br>()   |
| App-upc Exchange cust You can choose import cus Exchange subt You can choose connection   | son muture<br>to impose or expected table and dynamic modes over the VVC peering convections<br>them muture<br>to impose the<br>second with places P<br>to impose for expecti subject induces with public IP event the VVC peering<br>to impose for expecti subject induces with public IP event the VVC peering  |
| Exchange cust<br>You can choose<br>import cus<br>Exchange subt<br>You can choose<br>connection<br>import sub                                    | en moder. ©<br>In insport or event statis and sprund; modes unor the VPC peering convection.<br>International Constraints of the Institute of the VPC peering on the VPC peering<br>with strates and public to Constraints of public the Ones the VPC peering<br>on strates with public the Ones.   |
| Exchange cust<br>You can choose<br>Import ous<br>Exchange subt<br>You can choose<br>Exchange subt<br>You can choose<br>connection<br>Import sub | section and a section of provide modes over the VVC prevents     section over the section of the VVC prevents     section over the section of the VVC prevents     or modes and provide and provide the section over the VVC prevents     or modes and provide VVC prevents |

**STEP 4** A second peering must be done in the opposite direction for the two VPCs to be fully peered.

Ensure that Import Custom Routes is selected on this peering.

When both the peerings are complete, the status will show as Active.

| Crea                       | ate peering connection  |                                     |
|----------------------------|---|-------------------------------------|
| •                          | Your VPC network will be fully connected to the peered<br>mesh topology). Routes to subnets in the peered VPC n<br>unormatically created. | VPC network (full<br>etwork will be |
| Nome*                      |   |                                     |
| appitoisdw                 | ran   |                                     |
| Lowercase                  | letters, numbers, hyphens allowed   |                                     |
| Your VPC n                 | etwork *  |                                     |
| app-vpc                    |   | - 0                                 |
| ion-peering                | a Abe   | •                                   |
| Exchange cu                | ustom routes 😧  |                                     |
| You can choo               | se to import or export static and dynamic routes over the V   | PC peering connectio                |
| 🗾 Import o                 | sustam routes 💿   |                                     |
| Export o                   | ustom routes  |                                     |
| Exchange su                | abnet routes with public IP   |                                     |
| You can choo<br>connection | ise to import or export subset routes with public IP over the   | VPC peering                         |
| lmport s                   | subnet routes with public IP  |                                     |
| Deport s                   | ubnet routes with public IP   |                                     |
|                            |   |                                     |

**STEP 5** In order for return traffic from the application back to the on-premise networks to be sent through the Prisma SD-WAN virtual appliance we need to add a static route in the peering

VPC subnet route table pointing back to the ION device as the next-hop for corporate subnets.

In the example shown, 10.0.3.2 is the IP address of the peering port of the Virtual ION device and 192.168.0.0/18 is the summary prefix of all remote sites that have Prisma SD-WAN ION devices deployed.

| Name *<br>schwan-supernet   |  |
|---|--|
| CONDITION MILITY JOINTON & VALUES AND |  |
| Description   |  |
| Prisma SD-WHN Branch Supernet   |  |
| Network *   |  |
| kan peering-spc   |  |
| Destination IP range *  |  |
| 192.168.0.0/18  |  |
| LE TALLON   |  |
| Priority *  |  |
| Priority should be a positive integer (lower values take procedence)      |  |
| instance tags   |  |
| Next hop  |  |
| Specify IP address  |  |
| Next hap IP address *   |  |
| 10.5.3.2  |  |

The route is imported in your App VPC.

By default VPCs have GCP Firewall enabled and incoming traffic from outside your network is blocked. You must enable inbound firewall rules in SD-WAN and App VPC to permit Branch to Application Traffic.

**STEP 6** | From the Prisma SD-WAN web interface, go to **Map** > **GCP Site** to bring up the menu and **Add IP Prefixes**.

Advertise the GCP application VPC prefixes into the Prisma SD-WAN fabric by defining them on the GCP data center site.



Traffic destined to the prefix (10.0.1000.0/24) is sent directly to GCP over one or more Prisma SD-WAN Internet VPN paths. This assumes that the traffic destined to these applications and prefixes match a path policy rule that allows VPN over a public path.

# Use GCP Serial Console to Access Virtual ION Device

You must connect the console of the Virtual ION device for troubleshooting.

### **STEP 1** Navigate to VM Instances and select the Virtual ION device.

The serial port is disabled by default.

| prisma-sd-wa                                | 🖌 EDIT    | O RESET         | CREATE MACHINE IMAGE |
|---|-----------|-----------------|----------------------|
| DETAILS OBSERVABILITY                       | osi       | NFO NEW         | SCREENSHOT           |
| SSH  Connecting to serial parts is disabled | L CONSOLE | *               |                      |
| Logs  |           |                 |                      |
| Serial port 1 (console)                     |           |                 |                      |
| Basic information                           |           |                 |                      |
| Name  | р         | risma-sd-wan-1- | VTT                  |
| Instance Id                                 | 8         | 5667166849039   | 42922                |

1. Edit the Virtual Machine and select Enable connecting to serial ports.

| Basic information         |                                   |
|---------------------------|-----------------------------------|
| Name                      | prisma-sd-wan-1-vm                |
| Instance ID               | 8566716684903942922               |
| Status                    | 🔮 Running                         |
| Creation time             | Dec 8, 2021, 5:47:03 PM UTC 05:00 |
| Zone                      | us-east1-b                        |
| Reservation               | Automatically choose (default)    |
| Confidential VM service 🔮 | Disabled                          |
| -                         |                                   |

- 2. Click Save.
- **STEP 2** | Select **Connect to Serial Console**.





- For an unclaimed device the default credentials are:
  - Login: elem-admin
  - Password: hackle628)bags

For a claimed device use the device toolkit usernames and passwords.