
Deploy VOS Devices from Google Marketplace

 For supported software information, click [here](#).

This article describes how to deploy Versa Operating System™ (VOS™) devices from Google Cloud Platform Marketplace.

Before You Begin

Before you install a VOS branch device on Google Cloud Platform, ensure that you have done the following:

- Create three subnets for the VOS instance. Note that you must place the three subnets in three different private clouds (VPCs).
 - Management subnet
 - WAN subnet, to communicate with the SD-WAN Controller node
 - LAN subnet, to communicate with the LAN side
- Create firewall rules and associate them with the VPC and subnet. For more information, see [Firewall Requirements](#).

Deploy VOS Devices

1. Search for Versa Operating System solution in Google Marketplace.
2. Click the Launch button.



Versa Operating System

Versa Networks Inc

Enterprise and Service Provider grade Secure SD-WAN solution

LAUNCH

VIEW PAST DEPLOYMENTS

OVERVIEW

PRICING

DOCUMENTATION

SUPPORT

3. In the New Versa Operating System Deployment window, enter information for the following fields.

New Versa Operating System deployment

i Product preview. Go through the deployment flow available to Cloud Marketplace customers. Pricing info may not be reflected in the preview

Deployment name *
versa-operating-system-demo-1

Zone
us-west1-a

Machine type

Machine family

GENERAL-PURPOSE COMPUTE-OPTIMIZED MEMORY-OPTIMIZED

Machine types for common workloads, optimized for cost and flexibility

Series
N1

Powered by Intel Skylake CPU platform or one of its predecessors

Machine type
n1-standard-4 (4 vCPU, 15 GB memory)



vCPU
4

Memory
15 GB



Versa Operating System overview

Product provided by Versa Networks Inc

Launching a BYOL product

Versa Operating System is a BYOL (Bring Your Own License) product. Marketplace will deploy this product, but you are responsible for purchasing and managing the license directly from the provider

License for Versa Operating System VOS Billing Plan usage fee (BYOL) ?	Varies
Google does not collect this license fee.	
Infrastructure fee	
VM instance: 4 vCPUs + 15 GB memory (n1-standard-4)	USD 138.70/mo
Standard Persistent Disk: 81GB	USD 3.82/mo
Sustained use discount ?	- USD 41.61/mo
Estimated monthly total	USD 100.91/mo
	+ BYOL license fee

Field	Description
Deployment Name	Enter a name for the deployment.
Zone	Select the zone in which the deployment is planned.

https://docs.versa-networks.com/Getting_Started/Deployment_and_Initial_Configuration/Branch_Deployment/Initial_Configura...

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Field	Description
Machine Type	Select the machine type to use. For more information, see Qualified Google Cloud Instances .

4. Scroll down the New Versa Operating System Deployment screen, and enter information for the following fields.

New Versa Operating System deployment

admin SSH key

admin:ssh-rsa your-public-ssh-key

SSH key for admin user to access the instance

Software

Operating System ubuntu(18.04)

Boot Disk

Boot disk type *
Standard Persistent Disk

Boot disk size in GB *
81

Networking

Network interfaces

versa-vpc-mgmt management-subnet-versa (10.231.1.0/24)	▼
versa-vpc-wan wan-subnet-versa (10.231.2.0/24)	▼
versa-vpc-lan lan-subnet-versa (10.231.3.0/24)	▼
ADD NETWORK INTERFACE	

Firewall

Documentation

[Overview of Versa](#)
Versa Operating System overview

[VOS deployment on GCP](#)
VOS deployment guide for GCP

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Field	Description
Admin SSH Key	<p>Enter or paste the RSA public key for the admin user here. This key pair is used to log in to later VOS instance. Remove the text “your-public-ssh-key” and add actual RSA public key. For example:</p> <pre>admin SSH key admin:ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDvgZTNiWaCh SSH key for admin user to access the instance</pre>
Boot Disk	Use the default values.
Networking (Group of Fields)	Select the networks and network interfaces to use. You use a minimum of three networks interfaces.
<ul style="list-style-type: none"> First network interface 	<p>Select the network interface to use for management. In the External IP field, select Ephemeral to assign a public IP address to this interface. For example:</p> <p>Network interface</p> <pre>Network versa-vpc-mgmt Subnetwork management-subnet-versa External IP Ephemeral</pre>
<ul style="list-style-type: none"> Second network interface 	<p>Select the network interface to use for the WAN network. In the External IP field, select Ephemeral to assign a public IP address to this interface in case the Versa Controller node is reachable using a public IP address. For example:</p>

	<p>Network interface</p> <p>Network versa-vpc-wan</p> <p>Subnetwork wan-subnet-versa</p> <p>External IP Ephemeral</p>
◦ Third network interface	Select the network interface to use for the LAN network.

5. Scroll down the New Versa Operating System Deployment screen, and enter information for the following fields.

New Versa Operating System deployment

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Firewall ?

Add tags and firewall rules to allow specific network traffic from the Internet

⚠ Creating certain firewall rules may expose your instance to the Internet. Please check if the rules you are creating are aligned with your security preferences. [Learn more](#)

☒ Allow TCP port 22 traffic from the Internet

Source IP ranges for TCP port 22 traffic
0.0.0.0/0 ?

☒ Allow TCP port 2022 traffic from the Internet

Source IP ranges for TCP port 2022 traffic
0.0.0.0/0 ?

☒ Allow ICMP traffic from the Internet

Source IP ranges for ICMP traffic
0.0.0.0/0 ?

IP forwarding
On ?

^ SHOW LESS

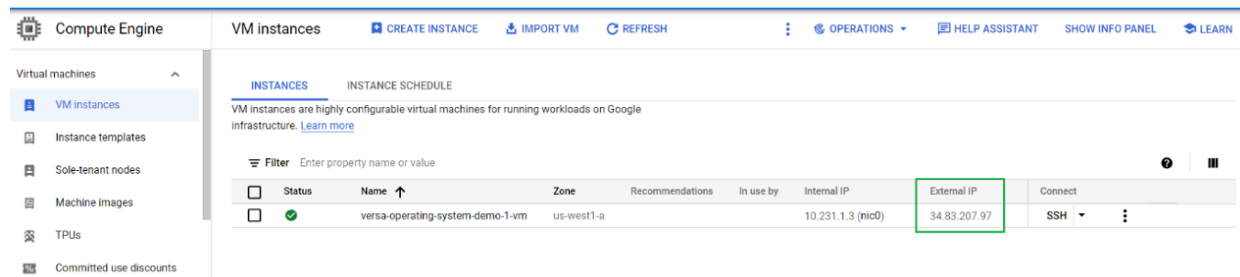
DEPLOY

Field	Description
Firewall (Group of Fields)	Allow traffic from these source IP addresses on TCP ports 22 and 2022 and to allow ICMP on the instance created by the deployment.
<ul style="list-style-type: none"> Allow TCP Port 22 Traffic from the Internet 	Add a source IP range to allow traffic from the internet over TCP port 22. To allow traffic from everywhere, enter the address range 0.0.0.0/0.
<ul style="list-style-type: none"> Allow TCP Port 2022 Traffic from the Internet 	Add a source IP range to allow traffic from the internet over port 2022. To allow traffic from everywhere, enter the address range 0.0.0.0/0.
<ul style="list-style-type: none"> Allow ICMP Traffic from the Internet 	Add a source IP range to allow ICMP traffic from the internet. To allow traffic from everywhere, enter the address range 0.0.0.0/0.
IP Forwarding	Select the default, which is On.

- Click Deploy to start the deployment.
- When the deployment successfully completes, click the instance name to display information about the instance.

The screenshot shows the Google Cloud Deployment Manager interface. On the left, the 'Deployments' tab is active, showing a tree view of the deployment 'versa-operating-system-demo-1'. The tree includes a folder 'versa-operating-system' which contains a file 'versa-operating-system-vm.tmpl' and a sub-folder 'versa-operating-system-demo-1-vm' which contains a file 'versa-operating-system-demo-1-vm-vm-instance'. The main panel shows the deployment status as 'versa-operating-system-demo-1 has been deployed'. On the right, the 'versa-operating-system' instance details are displayed, showing the instance name 'versa-operating-system-demo-1-vm', instance zone 'us-west1-a', and instance machine type 'n1-standard-4'. Below this, there are sections for 'Get started with Versa Operating System' (with an SSH button) and 'Suggested next steps' (including 'Request a license' and 'Assign a static external IP address to your VM instance'). A 'Documentation' section at the bottom provides links to 'Overview of Versa' and 'VOS deployment on GCP'.

- From the instance page, copy the Public/External IP address.



9. Log in to the instance using the Public/External IP address and the private RSA key with admin user that you configured in Step 4, above.



10. Edit the `sshd_config` file to add the IP addresses of the Versa Director northbound and southbound interfaces as match address exceptions. Doing this allows the Director node to log in to the node using a password and to perform the zero-touch provisioning (ZTP) process using the `staging.py` script. For example:

```
$ sudo vi /etc/ssh/sshd_config
...
Match address 10.192.220.193/32,192.168.220.193/32
  PasswordAuthentication yes
Match all
```

11. Restart SSH services on the instance:

```
$ sudo service ssh restart
```

12. Execute the `staging.py` script to trigger the ZTP process. Here, provide the required parameters as per your infrastructure and controller configuration. For example:

```

admin@versa-operating-system-demo-1-vm: scripts] $ sudo ./staging.py -l SDWAN-Branch@Versa-Provider.com -r Controller-Provider-staging@Versa-Provider.com -c
1. ... -d -n SR1400
=> Setting up staging config
=> Checking if all required services are up
=> Checking if there is any existing config
=> Generating staging config
=> Config file saved /opt/versa/scripts/staging.cfg
=> Saving serial number
=> Check if control-plane is up and running
=> Loading generated config into CDB

```

13. The ZTP process creates the appliance task on the Director node. For example:

<input type="checkbox"/>	▼	355	System	Create-Baremetal ...	Wed, Apr 13 2022,...	Wed, Apr 13 2022,...	createAppliance: ...	✓
Description : createAppliance: appliance Name:{Branch-GCP-Demo-1} Initiated by : System Running Messages : <ul style="list-style-type: none"> [2Factor Auth is skipped.] Connecting to appliance... Setting up appliance... Applying initial configuration Branch-GCP-Demo-1 is rebooting after applying template:{ Template-GCP-MktPlace-Test } Successfully Set Current Time. Successfully Created Branch Appliance. UUID = ee19d00b-3dc4-42e2-9506-132a76b20985 								

14. In the Director Appliance tab, check that the appliance has been created and is reachable. For example:

<input type="checkbox"/>	Branch-GCP-Demo-1	10.0.0.146	Branch	Tue, Apr 12 2022,...	Z1.2.2-GA	Pepsi,Versa-Provider		✓	✓	Up	⌵
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15. After ZTP completes, in Google Cloud Platform, add a custom route to pass the traffic from VOS interface instead of Google backbone network. For example:

VPC network

VPC networks

External IP addresses

Bring your own IP

Firewall

Routes

VPC network peering

Shared VPC

Serverless VPC access

Packet mirroring

← Create a route

Name *

route-lan-traffic

Lowercase letters, numbers, hyphens allowed

Description

Route to send traffic to VOS LAN interface from clients running on LAN network

Network *

versa-vpc-lan

Destination IP range *

10.0.0.0/16

E.g. 10.0.0.0/16

Priority *

100

Priority should be a positive integer (lower values take precedence)

Instance tags

Next hop

Specify an instance

Next hop instance *

versa-operating-system-demo-1-vm

CREATE

CANCEL

16. Click Create.

Supported Software Information

Releases 21.2.2 and later support all content described in this article.

Additional Information

[Qualified AWS, Azure, and Google Cloud Instances](#)