

VMware SD-WAN By VeloCloud

Orange Flexible Engine (FE) Virtual Edge Deployment Guide

Version beta 1.0

Overview

More customers are moving workload to Public Cloud infrastructure and expect to extend SD- WAN from remote sites to public cloud to guarantee SLA. There are multiple options offered by VeloCloud, leveraging distributed VCGs to establish IPSec towards public cloud private network or deploy virtual edge directly in Orange's Flexible Engine (FE). This document focus on how to deploy virtual edge on FE.

For small branch deployment that demand throughput less than 1G, single virtual edge can be deployed in the private network (FE VPC). For larger data center deployments that demand multi-gigabit throughput, hub clustering can be deployed.

Note: In the VeloCloud hub clustering design, we leverage a Layer 3 Instance on the LAN side to run BGP between hubs in the cluster and the Layer 3 Instance for route distribution in LAN. Since the FE VPC Router doesn't support dynamic routing protocol, a third-party virtual router is required in the FE infrastructure in case of a clustering deployment. This setup is not covered in this document, please get in touch with your dedicated VeloCloud point of contact to know more about this design option.

Table of Contents

<i>Flexible Engine virtual VCE deployment Overview</i>	<i>3</i>
Prerequisite	3
<i>Deploying Virtual Edge on FE</i>	<i>3</i>
<i>Basic Topology</i>	<i>4</i>
Create VPC	4
Create Security Group	6
<i>Add Virtual Edge to VeloCloud Orchestrator (VCO)</i>	<i>7</i>
Add Virtual Edge to VCO	7
Record Activation Key	7
Add VLAN IP	8
Configure Virtual Edge Interfaces	9
<i>Deploy Virtual Edge via ECS creation</i>	<i>10</i>
Navigate to Elastic Cloud Server	10
Create ECS	10
Select Virtual Machine Properties	10
Select Image	11
Configure Network Properties	11
Configure Advanced Settings	12
Configure Cloud-init information	12
Review and Create ECS	14
Attach Elastic IP	14
Monitor Deployment Progress	15
<i>Verify Virtual Edge is Activated In VCO</i>	<i>16</i>
<i>Final ECS configurations</i>	<i>16</i>
Source/destination Checks	16
Route tables	17

Flexible Engine virtual VCE deployment Overview

CAUTION: Make sure to review and understand this document before deploying. This is intended as a reference and may need to be altered to accommodate specific environments.

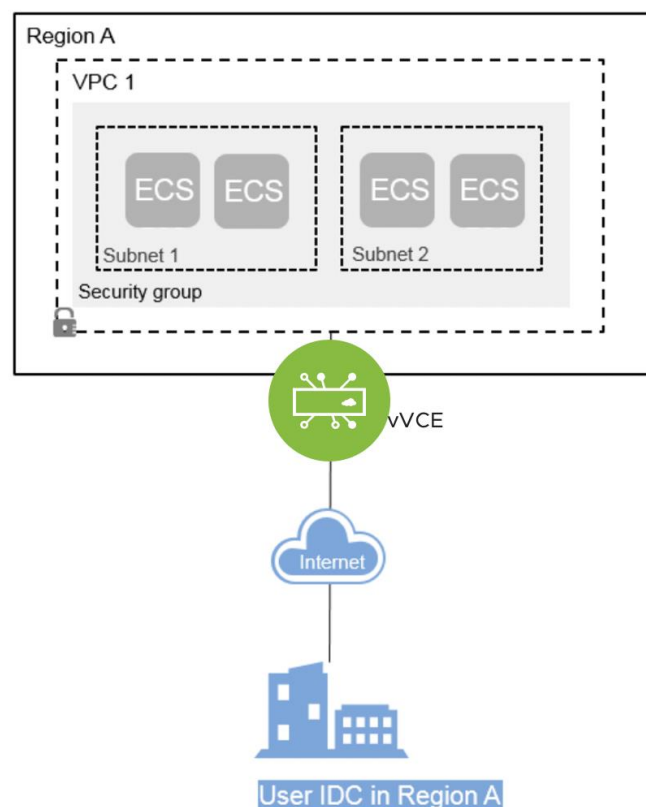
Prerequisite

The following are needed before you start:

1. FE account and login information
2. Familiarity with FE networking concepts (see: <https://docs.prod-cloud-ocb.orange-business.com/en-us/vpc/index.html>)
3. RSA Public Key (see: <https://docs.prod-cloud-ocb.orange-business.com/en-us/ac/index.html>)
4. VeloCloud Cloud-init template (given in the next section)
5. VCO target and admin account to login

Deploying Virtual Edge on FE

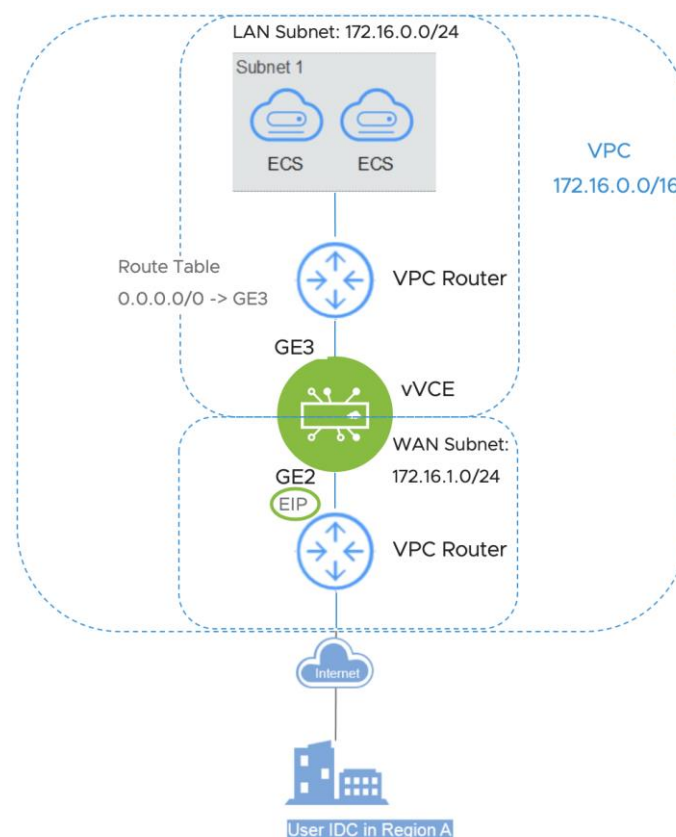
The default VeloCloud vVCE template that will be built is to achieve a common deployment within FE representative of the basic topology illustrated here:



In order to deploy a new VCE, it will be necessary to retrieve from the VCO where the site will be configured an activation key. This activation key is a One Time Password that is used to secure the onboarding of a new site. This key is retrieved directly from the VCO and will need to be pushed to the VCE at its creation via the CLOUD- INIT process. How to create the initial vVCE template and retrieve the activation will be explained in the next section.

Basic Topology

In this example, the FE VPC (172.16.0.0/16) is divided into a Public subnet (172.16.0.x/24) and a Private subnet (172.16.1.x/24). The Virtual Edge routes between the two subnets. The VPC Router will forward all offnet traffic to the Internet Gateway. The VPC Router in the Private subnet will forward all traffic to the LAN facing interface on the Virtual Edge (GE3). In this example, a default route is used to forward “ALL” traffic from the workloads but is not necessary. RFC1918 summarization or specific branch/hub prefixes can be used to narrow what is sent to the Virtual Edge. For example, if the workloads in the Private Subnet still need to be accessible via SSH from publicly sourced IPs then the VPC Router could be configured to point the default route (0.0.0.0/0) to Internet Gateway and RFC1918 summarization to Virtual Edge.

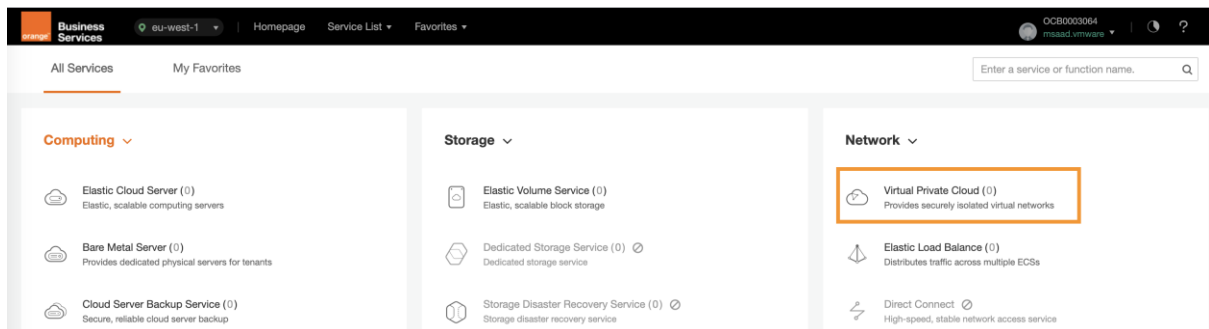


To get access to the outside world, an Elastic IP (EIP) will be tied to the WAN interface of the VCE. An EIP is a public IP address statically defined and linked to the WAN interface.

Create VPC

We assume familiarity with the VPC networking concepts of Flexible Engine. If the VPC configuration has not been done (green field), here are the steps to create the VPC and the different subnets:

- VPC Creation:



- Choose associated CIDR Block and configure default subnet:

< Create VPC ?

Basic Information

Region: eu-west-1

Name: vpc-d23d-VPC-OCB

CIDR Block: 172 · 16 · 0 · 0 / 16

Recommended: 10.0.0.0/8-24 (Select) 172.16.0.0/12-24 (Select) 192.168.0.0/16-24 (Select)

Advanced Settings ▾ Tag

Default Subnet

AZ: eu-west-1a

Name: subnet-d258-VCE-LAN

CIDR Block: 172 · 16 · 0 · 0 / 24 Available IP Addresses: 251

The CIDR block cannot be modified after the subnet has been created.

Advanced Settings ▾ Gateway DNS Server Address Tag

- Add another subnet:

Subnet 1 🗑

AZ: eu-west-1a

Name: subnet-a508-VCE-WAN

CIDR Block: 172 · 16 · 1 · 0 / 24 Available IP Addresses: 251

The CIDR block cannot be modified after the subnet has been created.

Advanced Settings ▾ Gateway DNS Server Address Tag

+ Add Subnet

Create Now

And Create Now.

Create Security Group

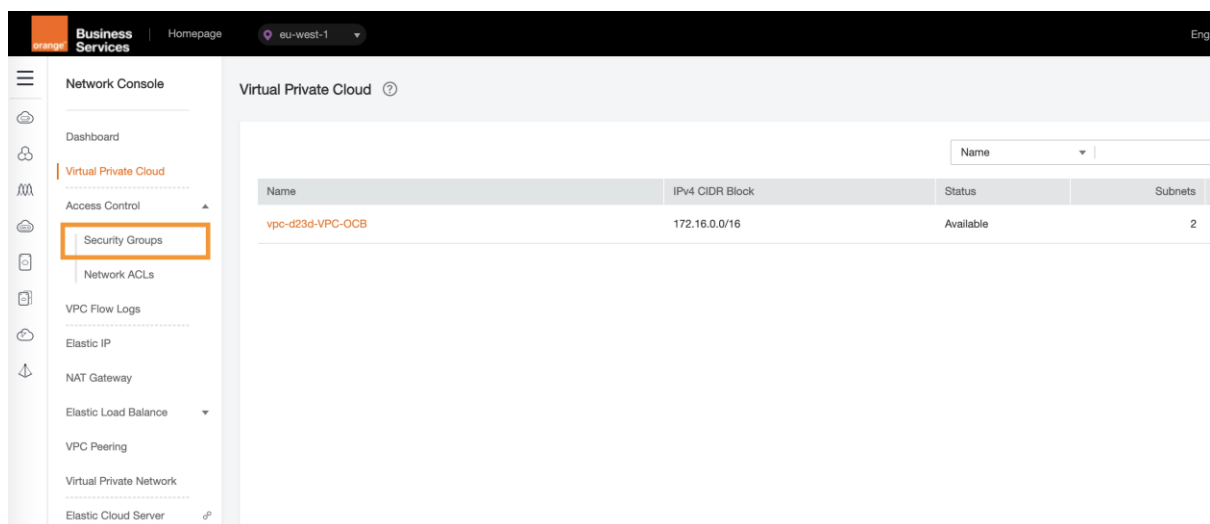
A security group will also need to be created in order to authorize communications from the outside to the VCE. We require the following ports to be allowed at a minimum on the WAN side:

- UDP/2426: for VeloCloud MultiPath Protocol (mandatory)
- TCP/22: for SSH access (optional but recommended for Support Access)
- UDP/161: for SNMP (optional but recommended)

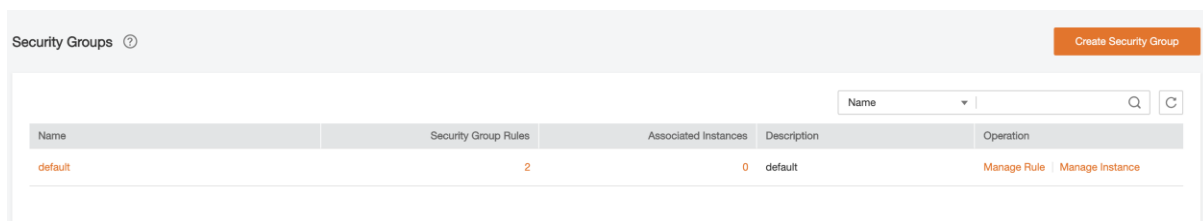
You can add additional protocols after deployment or modify the security group template as needed.

Here are the steps to create the security group:

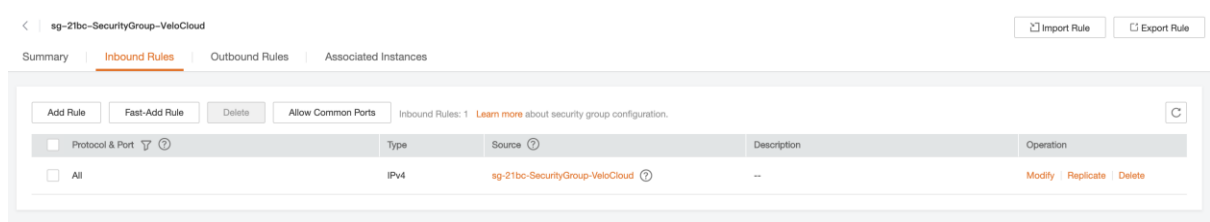
- Navitage to VPC > Access Control > Security Groups



- Create Security Group



- Inbound Rules > Add:



- Input desired rules:

Add Rule

Fast-Add Rule

Delete

Allow Common Ports

Inbound Rules: 4 [Learn more](#) about security group configuration.

C

<input type="checkbox"/> Protocol & Port	Type	Source	Description	Operation
<input type="checkbox"/> All	IPv4	sg-21bc-SecurityGroup-VeloCloud	--	Modify Replicate Delete
<input type="checkbox"/> TCP : 22	IPv4	0.0.0.0/0	For SSH	Modify Replicate Delete
<input type="checkbox"/> UDP : 161	IPv4	0.0.0.0/0	For SNMP	Modify Replicate Delete
<input type="checkbox"/> UDP : 2426	IPv4	0.0.0.0/0	For VCMP	Modify Replicate Delete

This security group will then be used later during the VCE deployment.

Add Virtual Edge to VeloCloud Orchestrator (VCO)

First step is to add the Virtual Edge to the Enterprise. This requires login credentials for the VCO.

Add Virtual Edge to VCO

Monitor

Configure

Edges

Profiles

Object Groups

Segments

Overlay Flow Control

Network Services

Edges

Search...

Cols

Reset View

Refresh

CSV

Display 12 items. 0 selected

Actions

<input type="checkbox"/>	Edge	Certificates	Profile	Software Image	HA	Device	Biz. Pol	Firewall	AI
<input type="checkbox"/>	VCE-OCF	0	Quick Start Profile	3.3.1 (build R331-20190925-GA-35295)					
<input type="checkbox"/>	VCE-OBS3	0	Quick Start Profile	3.3.1 (build R331-20190925-GA-35295)					
<input type="checkbox"/>	VCE-HUB	0	ProfileHUB	3.3.1 (build R331-20190925-GA-35295)					

Then input minimum information:

Provision New Edge

Name

Model

Profile

Authentication

Edge License

Custom Info:

vVCE-OCB

Virtual Edge

ProfileOCB

Certificate Disabled

ENTERPRISE | 1 Gbps | North Am

High Availability

Serial Number

Ex: VC00000490

When specified, the Edge must present this serial number on activation.

Contact Name

Contact Email

Location ⓘ

Super User

super@velocloud.net

[Set Location...](#)

Create

Cancel

Record Activation Key

This Edge has been provisioned with activation key: **RFUA-6RX6-J83B-H59V**

Edges > **vVCE-OCB (Pending)** Save Changes ?

Edge Overview **Device** Business Policy Firewall

Properties

Name: vVCE-OCB
 Description:
 Custom Info:
 Enable Pre-Notifications: ☒
 Enable Alerts: ☒
 Authentication Mode: Certificate Disabled
 License: ENTERPRISE | 1 Gbps | North America, Europe Middle East and Africa | 12 Months

Status: Pending
 Serial Number: Ex: VC00000490
 Activation Key: RFUA-6RX6-J83B-H59V expires in a month
 Send Activation Email...

This is the key that will need to be used in the cloud-init file.

Add VLAN IP

The VLAN configuration needs to have an IP address assigned in order to save the Device Settings but will not be used. Click on Device tab:

Edges > **vVCE-OCB (Pending)** Save Changes ?

Edge Overview **Device** Business Policy Firewall

Properties

Name: vVCE-OCB
 Description:
 Custom Info:
 Enable Pre-Notifications: ☒
 Enable Alerts: ☒
 Authentication Mode: Certificate Disabled
 License: ENTERPRISE | 1 Gbps | North America, Europe Middle East and Africa | 12 Months

Status: Pending
 Serial Number: Ex: VC00000490
 Activation Key: RFUA-6RX6-J83B-H59V expires in a month
 Send Activation Email...

Then on Configure VLAN Section:

Configure VLAN Add VLAN										
		Override ⓘ								Multicast
Action	VLAN	DHCP	VLAN	Network	IP Address	Interfaces	DHCP	Segment	IGMP	PIM
Edit ⓘ	×	×	1 - Corporate	169.254.0.0/24	169.254.0.1	GE1	Disabled	Global Segment		

- Use: 169.254.0.1 /24
- Advertised: Unchecked

- DHCP: Disabled

VLAN

* Segment: Global Segment

* VLAN Name: Corporate

* VLAN Id: 1

Assign Overlapping Subnets: ☒

* Edge LAN IP Address: 169.254.0.1

* Cidr Prefix: 24

Network: 169.254.0.0

Advertise: ☐

Multicast: Multicast is not enabled for the selected segment

Fixed IPs:

MAC Address	IP	Description
Ex: aa:bb:cc:dd:ee:ff	Ex: 10.0.2.5	Description (optional)

LAN Interfaces: GE1 GE2

SSID: There are no Wi-Fi SSIDs configured on this VLAN.

DHCP

Type: Enabled Relay **Disabled**

Enable Edge Override: ☒

OSPF

Enabled: ☒ OSPF not enabled for the selected Segment.

Update VLAN Cancel

Configure Virtual Edge Interfaces

CAUTION: The VCO needs the Device Settings configured first before activation. If this step is missed, the Virtual Edge activates but then goes offline a few minutes later.

Navigate to the Virtual Edge's Device Settings:

Edges > vVCE-OCB (Pending) Save Changes ?

Edge Overview **Device** Business Policy Firewall

Properties

* Name: vVCE-OCB

Description:

Custom Info:

Enable Pre-Notifications: ☒

Enable Alerts: ☒

Authentication Mode: Certificate Disabled

License: ENTERPRISE | 1 Gbps | North America, Europe Middle East and Africa | 12 Months

Status: Pending

Serial Number: VC00000490

Activation Key: RFUA-6RX6-J83B-H59V expires in a month

Send Activation Email...

Change the interface settings as follows:

1. Change the **GE2** interface capability from "Switched" to "Routed" and enable DHCP addressing and WAN overlay

- In the **GE3** interface, disable WAN overlay as this interface will be used for the LAN-side gateway. Also, disable NAT Direct Traffic

Interface Settings ➕ Add Subinterface ➕ Add Secondary IP									
		Switch Port Settings			Routed Interface Settings			Multicast	
Actions	Interface Override	Interface	Mode	VLANs	Addressing	WAN Overlay	Segment	IGMP	PIM
Edit	✕	GE1	Access	1 - Corporate			Global Segment		
Edit	✕	GE2			DHCP	Auto Detect	all segments		
Edit	✕	GE3			DHCP	disabled	Global Segment		
Edit	✕	GE4			DHCP	Auto Detect	all segments		
Edit	✕	GE5			DHCP	Auto Detect	all segments		
Edit	✕	GE6			DHCP	Auto Detect	all segments		
Edit	✕	GE7			DHCP	Auto Detect	all segments		
Edit	✕	GE8			DHCP	Auto Detect	all segments		

Based on architecture or needs, you can modify interfaces parameters such as defining a static IP address, modifying interfaces selected, etc.

Deploy Virtual Edge via ECS creation

Navigate to Elastic Cloud Server

Business Services

eu-west-0
Homepage
Service List
Favorites

All Services
My Favorites

Computing

Elastic Cloud Server (9)
Elastic, scalable computing servers

Bare Metal Server (0)
Provides dedicated physical servers for tenants

Cloud Server Backup Service (0)
Secure, reliable cloud server backup

Storage

Elastic Volume Service (9)
Elastic, scalable block storage

Dedicated Storage Service (0)
Dedicated storage service

Storage Disaster Recovery Service (0)
Storage disaster recovery service

Create ECS

Elastic Cloud Server
?
You can create 91 more ECSs. The ECSs can use up to 785 vCPUs and 1,573 GB of memory. [Quota details](#)
Create ECS

Start
Stop
Restart
Delete

All statuses
Name
Search by Tag

Name/ID	AZ	Status	Specifications/Image	IP Address	Operation
---------	----	--------	----------------------	------------	-----------

Select Virtual Machine Properties

Elastic Cloud Server

1 Configure Basic Settings
2 Configure Network
3 Configure Advanced Settings
4 Confirm

Region
eu-west-0
To select a different region, use the region selector at the upper left of the main menu bar. EC2s within the same region can communicate over an internal network. For low network latency and quick access, select the nearest region.

AZ
Random
eu-west-0b
eu-west-0a
eu-west-0c

Specifications
vCPUs
All
Memory
All
Flavor Name

General-purpose
Computing II
Dedicated general-purpose
Memory-optimized
Disk-intensive
GPU-accelerated

Flavor Name	vCPUs Memory	Assured / Maximum Bandwidth	Packets Per Second (PPS)
<input type="radio"/> s3.small.1	1 vCPUs 1 GB	0.1/0.5 Gbit/s	50,000
<input type="radio"/> s3.medium.2	1 vCPUs 2 GB	0.1/0.5 Gbit/s	50,000
<input type="radio"/> s3.medium.4	1 vCPUs 4 GB	0.1/0.5 Gbit/s	50,000
<input checked="" type="radio"/> s3.large.2	2 vCPUs 4 GB	0.2/0.8 Gbit/s	100,000
<input type="radio"/> s3.large.4	2 vCPUs 8 GB	0.2/0.8 Gbit/s	100,000
<input type="radio"/> s3.xlarge.2	4 vCPUs 8 GB	0.4/1.5 Gbit/s	150,000
<input type="radio"/> s3.xlarge.4	4 vCPUs 16 GB	0.4/1.5 Gbit/s	150,000
<input type="radio"/> s3.2xlarge.2	8 vCPUs 16 GB	0.8/3 Gbit/s	200,000

Selected specifications
General-purpose | s3.large.2 | 2 vCPUs | 4 GB

2vCPU and 4 GB of RAM are the minimum specifications supported

Select Image

Image
Public image
Private image
Shared image

edge400(8GB)
Create Private Image

System Disk
Common I/O
8
GB
IOPS limit: 8, IOPS burst limit: 1,000

Add Data Disk
You can attach 23 more disks.

Configure Network Properties

Elastic Cloud Server

1 Configure Basic Settings
2 Configure Network
3 Configure Advanced Settings
4 Confirm

Network
vpc-d23d-VPC-OCB(172.16.0.0/16)
subnet-2201-VCE-MGMT(172.16.250...
Automatically-assigned IP address
249 available private IP addresses

Create VPC.

Extension NIC
subnet-a508-VCE-WAN(172.16....
Automatically-assigned IP addr...
249 available private IP addresses

subnet-d258-VCE-LAN(172.16....
Automatically-assigned IP addr...
249 available private IP addresses

Add NIC
You can add 9 more NICs.

Security Group
sg-21bc-SecurityGroup-VeloCloud (32ad3b20-e44f-457...
Create Security Group

Ensure that the selected security group allows access to port 22 (SSH-based Linux login), 3389 (Windows login), and ICMP (ping operation).
Configure Security Group Rules
Security Group Rules

EIP
Do not use
Auto assign
Specify

An ECS without an EIP cannot access the Internet. However, it can still be used as a service ECS deployed in a cluster or on a private network.

With the following specifications:

- The first interface (eth0 or GE1) is the management interface; this interface will not be used and is tied to a dedicated MGMT subnet even if not used.
- The second interface (eth1 or GE2) is the WAN facing interface;
- The third interface (eth2 or GE3) is the LAN facing interface;
- Select the security group previously created;
- Do not assign an EIP, it will be done later.

Configure Advanced Settings

The screenshot shows the 'Configure Advanced Settings' step of the Elastic Cloud Server configuration process. The progress bar at the top indicates four steps: 1. Configure Basic Settings, 2. Configure Network, 3. Configure Advanced Settings (current), and 4. Confirm.

ECS Name: A text input field contains 'ecs-7fb6-vCE-OCB'. Below it, a note states: 'If multiple ECSs are created at the same time, the system automatically adds a hyphen followed by a four-digit incremental number to the end of each ECS name. For example, if you enter name will be ecs-0001. If an ECS with the name ecs-0010 already exists, the name of the first new ECS will be ecs-0011.'

Login Mode: A button labeled 'Key pair' is selected. Below it, a note states: 'To click Remote Login to log in to a Linux ECS in key pair login mode, you must set a login password after the ECS is created. [Learn how](#) to set the password. The private key will be required for logging in to the ECS and for reinstalling or changing the OS. Keep it secure.'

Key Pair: A dropdown menu shows 'KeyPair-vVCE-OCB'. To the right are links for 'Create Key Pair' and a help icon. Below the dropdown, a checkbox is checked with the text: 'I acknowledge that I have obtained private key file KeyPair-vVCE-OCB.pem and that without this file I will not be able to log in to my ECS. After a Linux ECS is created, use this key pair to log in to the ECS. After a Windows ECS is created, locate the row that contains the ECS in the ECS list, click Get Password in the Operati password. [Learn how](#) to obtain the Windows ECS login password.'

If you do not have created a Key Pair previously, you can create it here at the same time.

Configure Cloud-init information

Click on the Advanced Options > Configure Now:

The screenshot shows the 'Configure Now' section for Advanced Options. It includes the following fields and options:

- Advanced Options:** A checkbox labeled 'Configure now' is checked.
- User Data Injection:** Two buttons are present: 'As text' (selected) and 'As file'. A link '[Learn how](#) to inject user data.' is to the right.
- User data:** A large text input field is empty. A character count '0/32,768' is at the bottom right.
- Tag:** A note states: 'It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View Predefined Tags](#)'. Below this are two input fields: 'Tag key' and 'Tag value'.
- Agency:** A dropdown menu shows '--Select--'. To the right are links for 'Create Agency' and a help icon.

This is where you will input necessary information for the virtual VCE to register itself towards the VCO and take input configuration parameter you choose to include.

This configuration information must be passed following the cloud-init formatting. Cloud-init is a Linux package responsible for handling early initialization of instances. If available in the distributions, it allows for configuration of many common parameters of the instance directly after installation. This creates a fully functional instance that is configured based on a series of inputs. The cloud-init config is composed of two main configuration files, the metadata file and the user-data file. The meta-data contains the network configuration for the Edge, and the user-data contains the Edge Software configuration. The cloud-init file provides information that identifies the instance of the VMware SD-WAN Virtual Edge being installed.

Cloud-init's behavior can be configured via user-data. User-data can be given by the user at the time of launching the instance like we will do here. This file contains three main modules: SD-WAN Orchestrator, Activation Code, and Ignore Certificates Errors.

Module	Description
vco	IP Address/URL of the SD-WAN Orchestrator.
activation_code	Activation code for the Virtual Edge. The activation code is generated while creating an Edge instance on the SD-WAN Orchestrator.
vco_ignore_cert_errors	Option to verify or ignore any certificate validity errors.

The activation code is generated while creating an Edge instance on the SD-WAN Orchestrator (see previous steps).

Important There is no default password in SD-WAN Edge image. The password must also be provided in the user-data file.

```
#cloud-config
password: passw0rd
chpasswd: { expire: False }
ssh_pwauth: True
velocloud:
  vce:
    vco: 34.208.100.185
    activation_code: RFUA-6RX6-J83B-H59V
    vco_ignore_cert_errors: true
```

You can copy/paste this template into the required field:

The screenshot shows the 'Advanced Options' section with 'Configure now' checked. Below it, the 'User Data Injection' section has two buttons: 'As text' (selected) and 'As file'. To the right of these buttons is a link that says 'Learn how to inject user data.' Below the buttons is a large text area containing the cloud-init configuration template shown in the previous block. A character count '212/32,768' is visible at the bottom right of the text area.

Using a file (option on the right) is also possible. In that case you need to put the content into a text file.

Review and Create ECS

Elastic Cloud Server

1 Configure Basic Settings

2 Configure Network

3 Configure Advanced Settings

4 Confirm

Configuration

Basic

Region

eu-west-1

AZ

eu-west-1a

Image

VCE-400

System Disk

Common I/O, 8 GB

Specifications

General-purpose | s3.large.2 | 2 vCPUs | 4 GB

Network

VPC

vpc-d23d-VPC-OCB(172.16.0.0/16)

Security Group

sg-21bc-SecurityGroup-VeloCloud

Primary NIC

subnet-d258-VCE-LAN(172.16.0.0/24)

Extension NIC

subnet-a508-VCE-WAN(172.16.1.0/24)

Extension NIC

subnet-d258-VCE-LAN(172.16.0.0/24)

EIP

Not required

Advanced

ECS Name

ecs-26f8-vVCE-OCB

Login Mode

Key pair

Key Pair

KeyPair-98aa-VCE-OCB-EUwest1

ECS Group

--

Quantity

-

1

+

You can create 100 more ECSs.

Previous

Create New

Attach Elastic IP

The next step is to attach an EIP to enable the VCE instance to communicate with the outside. This EIP will be attached to the WAN interface (on subnet 172.16.1.0/24 here).

Once the ECS has been created, click on its name:

Elastic Cloud Server

You can create 100 more ECSs. The ECSs can use up to 800 vCPUs and 1,600 GB of memory. [Quota details](#)

Create ECS

Start

Stop

Restart

Delete

All statuses

Name

Search by Tag

<input type="checkbox"/>	Name/ID	AZ	Status	Specifications/Image	IP Address	Operation
<input type="checkbox"/>	ecs-26f8-vVCE-OCB e4b668db-fdb4-445d-8510-6b1f8e98b...	eu-west-1a	Running	2 vCPUs 4 GB s3.large.2 VCE-400	172.16.0.180 (Private IP)	Remote Login More

Go to the EIP Section:

ecs-26f8-vVCE-OCB

Start

Stop

Restart

Remote Login

More

C

Name

ecs-26f8-vVCE-OCB

Status

Running

ID

e4b668db-fdb4-445d-8510-6b1f8e98b...

Disks

1

AZ

eu-west-1a

Key Pair

KeyPair-98aa-VCE-OCB-EUwest1

License Type

None

Agency

-- Create Agency

ECS Group

-- Create ECS Group

VPC

vpc-d23d-VPC-OCB

Specifications

General-purpose | s3.large.2 | 2 vCPUs | 4 GB

Image

VCE-400

NICs

3

Created

2020-06-22 17:41:30 GMT+02:00

Launched

2020-06-22 17:42:06 GMT+02:00

Disks

NICs

Security Groups

EIPs

Monitoring

Tags

Attach Disk

You can attach 23 more disks.

ecs-26f8-vVCE-OCB | System Disk | 8GB

View Monitoring Data

Expand Capacity

Detach

Select Bind EIP:

Disks

NICs

Security Groups

EIPs

Monitoring

Tags

Bind EIP

View EIP

Select an EIP and bind it to NIC2:

Bind EIP

×

ECS Name

ecs-ce88-vVCE-OCB

Select NIC

NIC3(172.16.1.9)(Extension NIC)

Select EIP

View EIP

Enter an EIP.

Q

↺

EIP	Status	Bandwidth...	Bandwidth...	Bandwidth...
<input checked="" type="radio"/> 57.100.102.228	Unbound	Bandwidth_2020...	Dynamic BGP	5 Mbit/s
<input type="radio"/> 57.100.98.131	Unbound	Bandwidth_2020...	Dynamic BGP	5 Mbit/s

OK

Cancel

If you have not created any EIP before, you can do it at the same time.

Additional help on EIP creation is available at this location: https://docs.prod-cloud-ocb.orange-business.com/en-us/api/vpc/en-us_topic_0020090596.html

Monitor Deployment Progress

If everything has been done correctly, the instance will be created, in a running state and you can view associated EIP:

Start

Stop

Restart

Delete

All statuses

Name

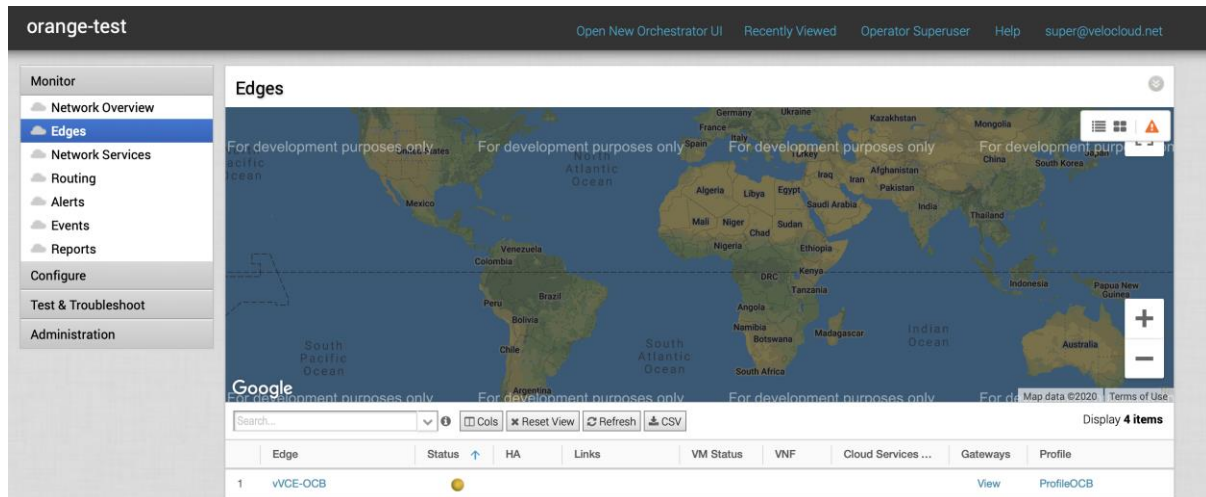
Q

Search by Tag

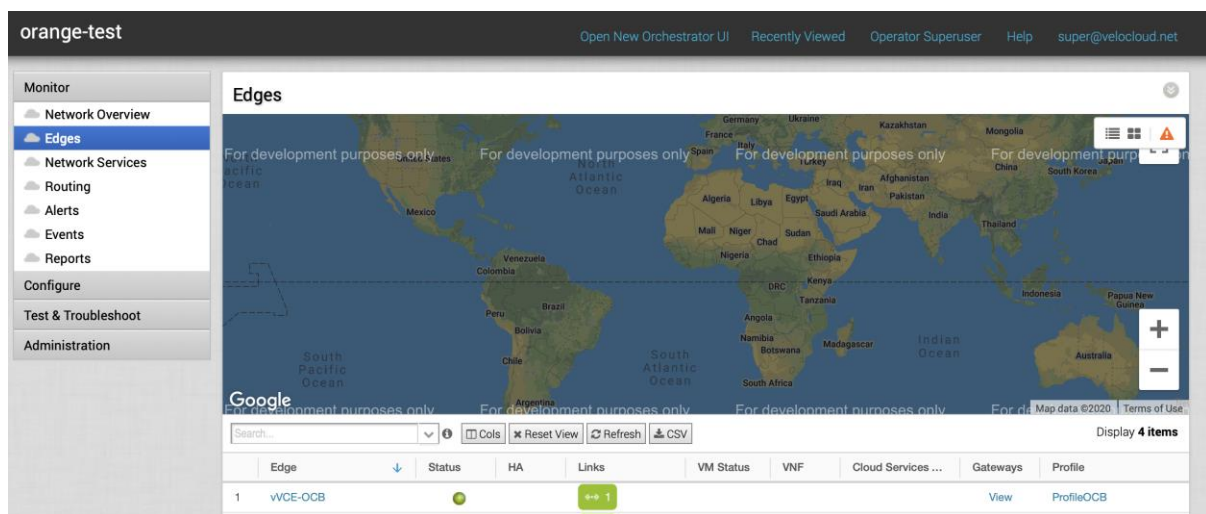
<input type="checkbox"/>	Name/ID	AZ	Status	Specifications/Image	IP Address	Operation
<input type="checkbox"/>	ecs-ce88-vVCE-OCB 358c88f1-a604-4fe6-98e1-c3e7fed4e5...	eu-west-1a	<div><div></div>Running</div>	2 vCPUs 4 GB s3.large.2 VCE-400	57.100.102.228 (EIP) 5 Mbit/s 172.16.250.237 (Private IP)	Remote Login More

Verify Virtual Edge is Activated In VCO

Once the instance is running in FE and all information provided were correct, the virtual edge will reach out to the VCO with the activation key, activate and perform software update if needed (and reboot if upgraded). Typical deployment time is between 3 to 4 minutes.



Status orange indicates the VCE has reached out to the VCO and is getting its configuration, software updates, etc. After a few minutes, the status will become green and the VCE will be ready to forward traffic:



Final ECS configurations

Source/destination Checks

As with any routing ECS, you will need to make sure that source and destination checks are disabled for interfaces that will be routing traffic:

172.16.0.238		Manage Virtual IP Address Change Security Group Delete	
Name	--	Subnet	subnet-d258-VCE-LAN (172.16.0.0/24)
NIC ID	211bdd6e-1378-4a32-9ec2-36b999aeb73a	Private IP Address	172.16.0.238
Status	Activated	Virtual IP Address	--
EIP	--	MAC Address	fa:16:3e:1e:fb:85
Security Group	sg-21bc-SecurityGroup-VeloCloud		
Source/Destination Check	<input checked="" type="checkbox"/> ⓘ		

172.16.1.9 57.100.102.228		Manage Virtual IP Address Change Security Group Delete	
Name	--	Subnet	subnet-a508-VCE-WAN (172.16.1.0/24)
NIC ID	f42eabe4-75b7-414c-8bb6-d30ae348a928	Private IP Address	172.16.1.9
Status	Activated	Virtual IP Address	--
EIP	57.100.102.228[5 Mbit/s]	MAC Address	fa:16:3e:3d:08:ef
Security Group	sg-21bc-SecurityGroup-VeloCloud		
Source/Destination Check	<input checked="" type="checkbox"/> ⓘ		

After deactivation:

172.16.0.238		Manage Virtual IP Address Change Security Group Delete	
Name	--	Subnet	subnet-d258-VCE-LAN (172.16.0.0/24)
NIC ID	211bdd6e-1378-4a32-9ec2-36b999aeb73a	Private IP Address	172.16.0.238
Status	Activated	Virtual IP Address	--
EIP	--	MAC Address	fa:16:3e:1e:fb:85
Security Group	sg-21bc-SecurityGroup-VeloCloud		
Source/Destination Check	<input type="checkbox"/> ⓘ		

172.16.1.9 57.100.102.228		Manage Virtual IP Address Change Security Group Delete	
Name	--	Subnet	subnet-a508-VCE-WAN (172.16.1.0/24)
NIC ID	f42eabe4-75b7-414c-8bb6-d30ae348a928	Private IP Address	172.16.1.9
Status	Activated	Virtual IP Address	--
EIP	57.100.102.228[5 Mbit/s]	MAC Address	fa:16:3e:3d:08:ef
Security Group	sg-21bc-SecurityGroup-VeloCloud		
Source/Destination Check	<input type="checkbox"/> ⓘ		

Route tables

Once the VCE has been deployed, it will now need to be the default GW for all workloads hosted in the subnet carried by the VCE. Different options can be used based on architecture needs. For the sake of simplicity here, we will modify the default VPC route table to add a default route pointing towards the VCE LAN interface.

To modify a Route Table, go to VPC > Route Table:

vpc-d23d-VPC-OCB

Name

vpc-d23d-VPC-OCB

ID

as740a02-3a65-4221-9705-fbc60990e60f

Subnets

3

Status

Available

CIDR Block

172.16.0.0/16

Subnets

Route Tables

Topology

Tags

Custom Route Table

Add Route

Destination	Next Hop	Operation
<div><div></div><div>No data available.</div></div>		

VPC Peering Route Table

Destination	Next Hop	Operation
<div><div></div><div>No data available.</div></div>		

Click on Add Route:

×

Add Route

Destination

0

.

0

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0

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0

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0

/

0

?

Next Hop

172

.

16

.

0

.

238

?

OK

Cancel

Specify default route and VCE Lan interface IP address for Next Hop.