Business Services

Flexible Engine User Guide

Direct Connect through Equinix Cloud Exchange

The present document will guide you through the steps to implement the Flexible Engine Direct Connect option through Equinix Cloud Exchange.

Its usage is restricted to Flexible Engine customers.

Orange Cloud for Business

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Contents

1   Overview

1.1   pre-requisites

To implement the Flexible Engine Direct Connect option through Equinix Cloud Exchange, you must have the following:

- a subscription to Equinix Cloud Exchange with an account to access Equinix Cloud Exchange portal
- a subscription to Flexible Engine with an access to the console and the online support

If not, you may contact our sales support for assistance.

1.2   subscription to a virtual connection (layer 2)

In this section, we will guide you to order a virtual connection to Flexible Engine from your Equinix Cloud Exchange subscription.

1.3   BGP configuration (layer 3)

In this section, we will guide you to establish the BGP connectivity.

1.4   VPC configuration (layer 3)

In this section, we will guide you to establish the IP routing (layer 3) over the virtual connection.

2 Detailed instructions

2.1 Subscription to a virtual connection with Flexible Engine

You should log in the Equinix Cloud Exchange portal (https://cloudexchangeportal.equinix.com/) and create a connection to Flexible Engine service.

To fill-in the request, you should provide the below information:

connection name

this name will serve to identify your virtual connection when interacting with our support

contract ID (OCBxxxxxxx)

this is your Flexible Engine domain ID (format is OCB0009999) ; you can find it in your Flexible Engine portal (https://selfcare.cloud.orange-business.com/).

connection speed

select the required bandwidth

Note : it can be modified at any time on the Equinix Cloud Exchange portal

VLAN ID

Your VLAN identifier to be used by the ECX (this VLAN is ignored by Flexible Engine)

After having submitted the creation form, your request will appear as 'Pending approval' and our Flexible Engine operations will be automatically notified.

Upon reception of your connection request, our operations will contact your Flexible Engine domain reference user (*) to confirm the request and process with the layer 3 BGP connectivity.

Your connection will then appear as 'approved' in the Equinix Cloud Exchange portal.

(*) the Flexible Engine domain reference user is the contact provided during the Flexible Engine subscription ; its name (and email) is displayed in the Flexible Engine portal in the Contracts section. In case the reference user is not available, please inform our support by email (mailto: obs-cloud-z3.servicedesk@orange.com)

2.2 Layer 3 BGP configuration

To configure the BGP connectivity on your side, you should use the below Flexible Engine details:

- Flexible Engine (PAR) ASN : 64583

- BGP peering local link (your side): 169.254.192.2/29

- BGP peering parameters:

  BGP version 4

  Ports: (Local = 51595), (Remote = 179)

  Hold Time: 90 sec

  Keepalive Time: 30 sec

  Peer optional capabilities:

    Peer supports bgp multi-protocol extension

    Peer supports bgp route refresh capability

    Peer supports bgp 4-byte-as capability

    Graceful Restart Capability: received

    Address family IPv4 Unicast: advertised and received

If any of those values does not comply with your network constraints, please warn our Service Desk (mailto: obs-cloud-z3.servicedesk@orange.com) so we can contact you to arrange more suitable settings.

On Flexible Engine side, our Service Desk will contact to receive the below information to establish the BGP peering:

your private or public ASN

Your BGP Autonomous System Number (AS Number)

It can be compliant with the RFC 6996 or not, but it must be different from our ASN (64583).

BGP interconnect addressing

By default, we are proposing to use the below subnets to establish the BGP peering (RFC 3330):

>> Customer side: 169.254.192.2/29

>> Flexible Engine side: 169.254.192.1/29

If you cannot use this subnet, please inform us about your constraints.

2.3   VPC configuration (layer 3)

To connect your Flexible Engine subnets to your ECX port, please send the below information by email to our support (mailto: obs-cloud-z3.servicedesk@orange.com):

Flexible Engine Direct Connect – Connection through Equinix Cloud Exchange	
connection name	*name of your virtual connection (used in the first step)*
domain name	your Flexible Engine contract ID (format: OCB0009999)
VPC ID	ID of the VPC to be connected (eg. 18086997-e37b-4c8e-88b8-4c8b577dc5c0)
local subnet(s)	the CIDR block(s) of the subnets to be connected (eg. 192.168.0.0/16) If you have several subnets, use a comma separator (eg. 192.168.1.0/24, 192.168.2.0/24)
remote subnet(s)	RFC1918 (10.0.0.0/8, 172.16.0.0/16, 192.168.0.0/16)
local test ECS	IP of an ECS in one of the local subnets
remote test machine	IP of a machine in one of the remote subnets
primary contact	technical contact for our operations if need be: name, email, phone number
secondary contact	(optional) alternate technical contact for our operations if need be: name, email, phone number

Notes about …

remote subnet(s): we will configure static routes in the Flexible Engine routing tables to forward those remote subnet(s) towards your ECX connection. Only those subnets will be reachable from your Flexible Engine VPC (acting as a filter). If your addressing plan is compliant with the rfc1918 (private IP addresses), we do recommend to configure the full rfc1918 (as specified in the table above). If your Flexible Engine VPC need to reach public IP subnets though your ECX connection, please specify those IP subnets in that field (note: we have a limitation of 100 routes maximum).

local test ECS, remote test machine: our operations will perform an ICMP test with those test IP to verify the configuration.

primary contact, secondary contact: if our test fails at the end of the configuration, we might need to contact you to check the data and identify the root cause of the failure

Important notes:

> Before submitting your request, please make sure the Security Group which is protecting your test ECS enables the ICMP traffic between the local test ECS and the remote machine. Otherwise, our operations will not be able to test the connectivity.

> Our BGP peer will accept up to 100 routes from your network connection (maximum number of routes that you can advertise towards Flexible Engine)

> In case you want to connect several VPC to your virtual connection, please fill in one form for each VPC.