

Live Objects Connector Deployment Guide for Flexible Engine Marketplace

Release Date: 2021-04-09



Contents

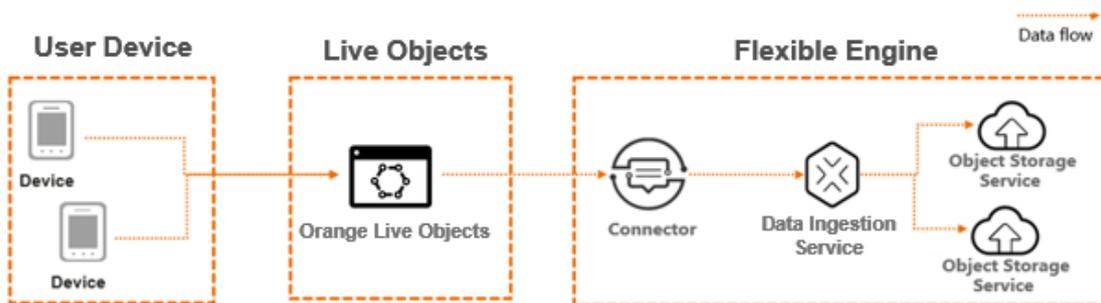
1 Live Objects – to – Flexible Engine Connector Overview	3
2 Connection Solution.....	3
3 Prerequisites	3
4 Connector Deployment	3
4.1 Configuring a FIFO Queue on Live Objects.....	3
4.2 Configuring a Flexible Engine Environment.....	4
4.3 Deploying the Connector.....	4
4.3.2 Detailed Configuration File Explanation	6
5 Acronyms	7

1 Live Objects – to – Flexible Engine Connector Overview

The LO-to-FE connector is used to transfer data from a Live Objects FIFO queue to Flexible Engine DIS (short for Data Ingestion Service). After data reaches DIS, it can be statically stored in OBS (short for Object Storage Service) and then transferred to MapReduce Service (MRS), Data Warehouse Service (DWS), or Cloud Stream Service (CS) for data analysis.

The LO-to-FE connector is an open-source tool and its code is hosted on [GitHub](#).

2 Connection Solution



1. The connector receives data from a Live Objects FIFO queue.
2. The connector transfers the data to DIS by calling the API of DIS.
3. DIS analyzes and processes the data based on your configurations. For example, DIS can store data to OBS or other Big Data services.

3 Prerequisites

It is recommended that you deploy the connector with more than 2 vCPUs and 4 GB RAM and use containers or virtual machines with the flavor of S type for deployment.

4 Connector Deployment

4.1 Configuring a FIFO Queue on Live Objects

Prerequisites

You have a Live Objects account. If you don't have one please apply it from:

https://liveobjects.orange-business.com/#/request_account

Procedure

Step 1 Log in to [Live Objects](#).

Step 2 Configure FIFO. For details, see the [Live Objects User Manual](#).

To have a data source, you need to at first configure a FIFO queue under your Live Objects account. For details about how to configure a FIFO queue, see the [Live Objects User Manual](#). You can also watch more related videos from [Datavenue Live Objects](#).

Step 3 Note down the name of the **FIFO queue** and the **API-Key**. You will use it when configuring the connector

----End

4.2 Configuring a Flexible Engine Environment

Prerequisites

You have a Flexible Engine account.

Refer to [this link](#) to get a Flexible Engine account.

Procedure

Step 1 Log in to Flexible Engine using your account.

With this account, you can access Flexible Engine and create relevant resources.

Step 2 Apply for OBS.

For more information, click [OBS Console Operation Guide](#).

This step allows you to dump data from a DIS stream to OBS.

Step 3 Apply for DIS.

For more information, click [Data Ingestion Service](#).

Step 4 Note down the Stream name of the DIS. You will use it for configuring Connector

----End

4.3 Deploying the Connector

In Flexible Engine Marketplace, you can deploy the connector based on a pre-built image. For more information, click

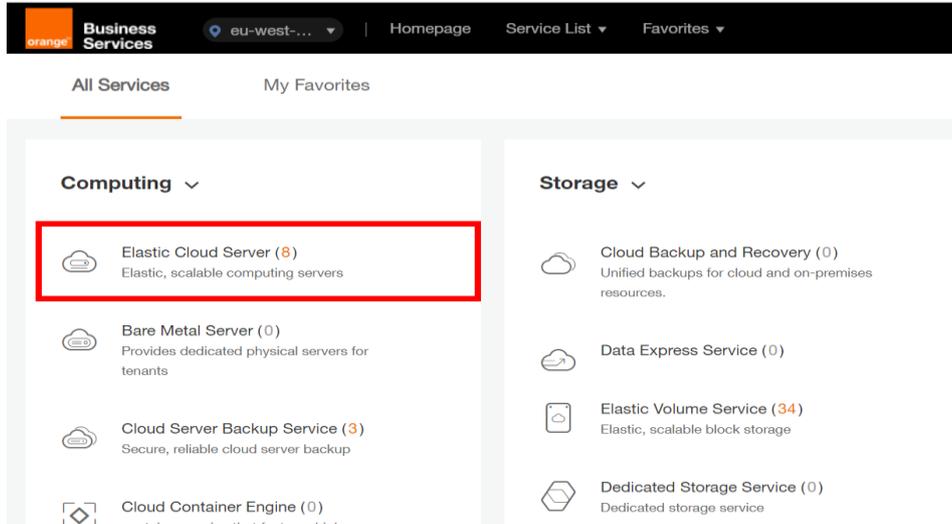
<https://cloud.orange-business.com/en/offers/infrastructure-iaas/public-cloud/appliance-catalog/>

Prerequisites

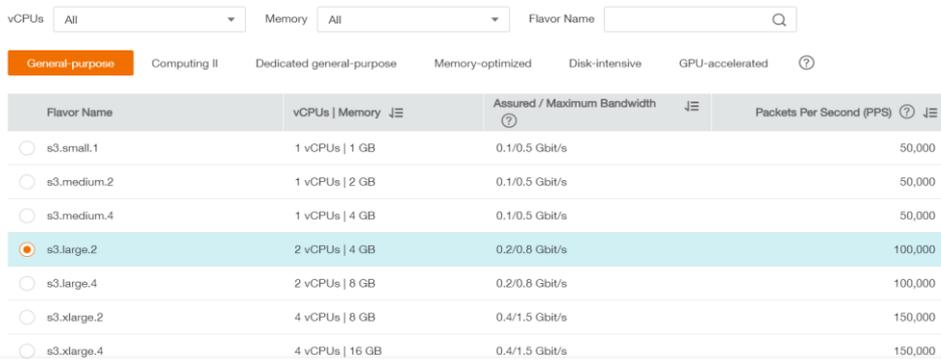
- VPC is available.

Procedure

1. Go to Flexible Engine technical console and choose Elastic Compute Service



2. Click on Create ECS; Choose flavor s3.large.2 or higher flavor



3. Choose public image and in 'Other', select Live Objects Connector



4. For Network Configuration, please choose the destination VPC & Subnet where you want to host your connector
5. For Security Group, please choose a security group that allows SSH port 22
6. For EIP you can either create one or use an existing one.
7. When choosing Key Pair please make sure you have it stored safely. If you lose the key there is no way to restore it.
8. Once the VM is up and running, you can use cloud@EIP + secret key for getting access to it
9. `vim /home/cloud/application.yml` and fill in the configuration file. You can refer to https://github.com/DatavenueLiveObjects/Flexible_Engine_DIS_LOconnector_to_install_on_FE or 4.3.2 for more information
10. `sudo systemctl restart lo-connector.service`

4.3.2 Detailed Configuration File Explanation

application.yml is the configuration file that gives you permissions for accessing both Live Objects and Flexible Engine. This file follows the following structure:

```
lo-mqtt:
  hostname: liveobjects.orange-business.com
  username: application
  api-key: XXXX
  topics:
    - test-fifo
  recovery-interval: 10000
  completion-timeout: 20000
  connection-timeout: 30000
  qos: 1
  keep-alive-interval-seconds: 30

flexible-engine:
  dis:
    endpoint: https://dis.eu-west-0.prod-cloud-ocb.orange-business.com
    ask: XXXX
    sk: XXXX
    projectId: XXXX
    region: eu-west-0
    stream-name: dis-lo-test-2911
    message-batch-size: 10
    message-sending-fixed-delay: 1000

management:
  endpoints:
    web:
      exposure:
        include: info, health, metrics, beans
```

To find the meaning for each parameter, click https://github.com/DatavenueLiveObjects/Flexible_Engine_DIS_LOconnector_to_install_on_FE.

You can also find a similar connector deployment at https://github.com/ErnestNamHee/FE_Lo2FE_Connector_Docker.

5 Acronyms

Acronym	Full Name
CS	Cloud Stream Service
DIS	Data Ingestion Service
DWS	Data Warehouse Service
ECS	Elastic Cloud Server
FE	Flexible Engine
LO	Live Objects
MRS	MapReduce Service
OBS	Object Storage Service
VPC	Virtual Private Cloud