HKEX Data Marketplace

Data Destination Configuration Guide – AWS S3

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Document History

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1. Introduction

The target readers of this document are the technical personnel of the HKEX Data Marketplace participants.

This document specifies the setup and configuration of the AWS S3 data product delivery destination.

2. AWS S3 Delivery Location Configuration

This section describes how to set up an AWS S3 data product delivery destination in HKEX Data Marketplace. The data product delivery destination configuration needs the following resources and permissions to be able to deliver to your AWS S3 bucket:

1) **Bucket:** name of the storage bucket
2) **Prefix:** subfolder name in the bucket
3) **Region:** AWS region where the bucket is located
4) **Name:** display name for the data product delivery destination configuration

2.1. Steps to Configure an AWS S3 Bucket

Your AWS S3 bucket needs to be configured to allow HKEX Data Marketplace delivery service to write to the AWS S3 buckets; this is a one-off setup process.

Please run the following code snippet to apply the necessary permissions for the S3 bucket:

S3 bucket policy to be executed by Data Marketplace clients:

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "AllowDatahexS3Access",
            "Effect": "Allow",
            "Principal": {
                "AWS": [
                    "arn:aws:iam::211125354333:role/venus-hkexprod-airflow-ec-
AirflowTaskRoleWithUserSe-WHCZQtrzAmmC",
                    "arn:aws:iam::211125354333:role/dhx-managed-s3-access-role-hkexprod"
                ]
            },
            "Action": [
                "s3:GetBucketLocation",
                "s3:PutObject",
                "s3:ListBucket"
            ],
            "Resource": [
                "<client-bucket-arn>/*",
```

```
                "<client-bucket-arn>"
            ]
        }
    ]
}
```

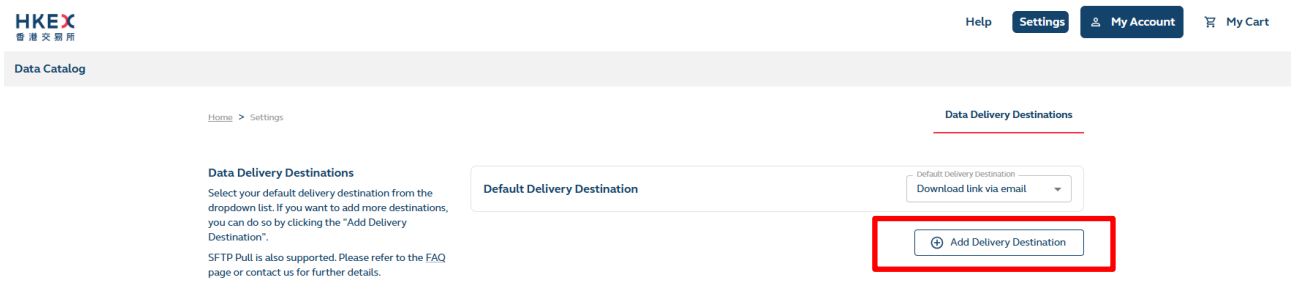
Please note the following regarding setting up the S3 bucket policy:

1) **Action**: HKEX Data Marketplace will require `GetBucketLocation`, `PutObject` and `ListBucket` permissions as a minimum
2) **Resource**: The Resource `"<client-bucket-arn>/*"` can also be limited to a sub-path if required, for example "Resource": ["`arn:aws:s3:::Bucket-name/Sub-path/*`"]
3) **ACL**: As per AWS recommended best practices, please disable ACL and use the bucket policy above

2.2. Steps to Set up a Delivery Destination for AWS S3

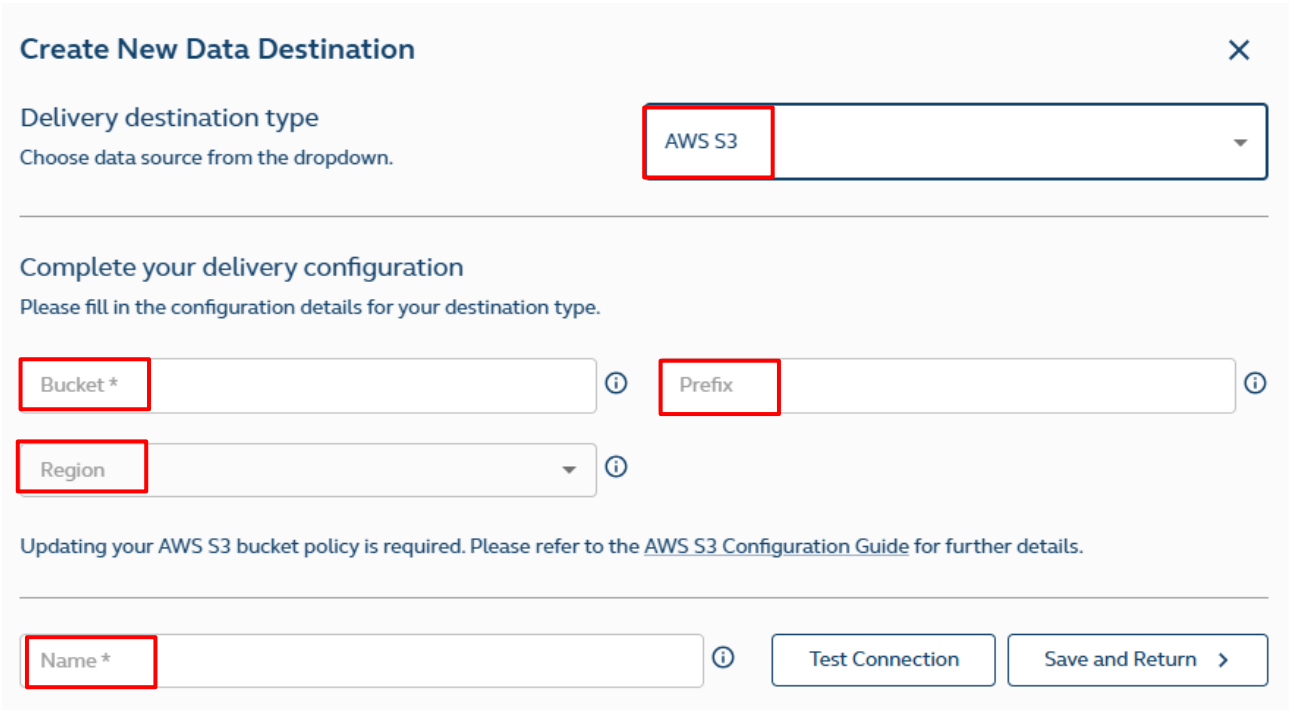
Create a new data product delivery destination via the user setting tab in Data Marketplace platform:

1) Click **Settings**
2) Click the **Add Delivery Destination button**
3) Select **AWS S3** as the delivery destination type



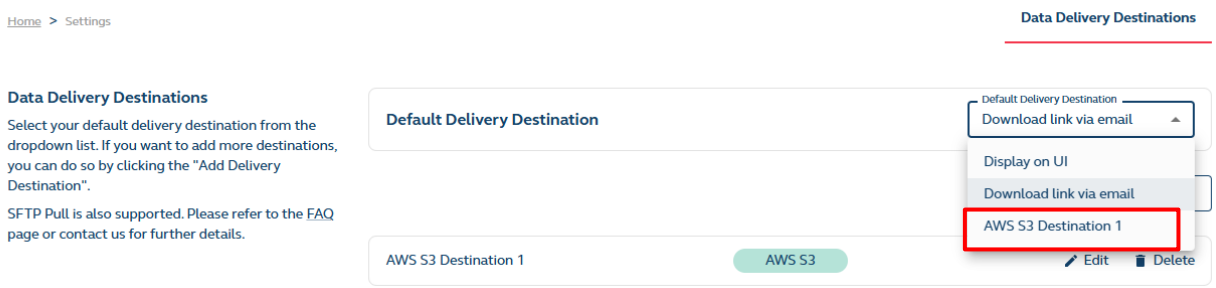
Enter the information in the **add delivery destination** screen:

1) **Bucket:** name of the storage bucket (destination where the files will be delivered)
2) **Prefix:** subfolder name in the bucket (for organising your storage bucket)
3) **Region:** AWS region where the bucket is located (select from the drop-down list)
4) **Name:** name of the delivery destination configuration (for your reference)



Test the connection by clicking the **Test Connection** button; if the delivery configuration is valid (the bucket and prefix path exists and has the required permissions) the platform will confirm the connection test was a success, and the configuration can now be saved by clicking the **Save and Return** button. Otherwise, it will provide feedback on any errors encountered which need to be resolved before being able to save the configuration.

The list of valid delivery destinations will appear in the **Default Delivery Destination** drop down box which can be changed as required.



Should you have any questions, please contact datamarketplace@hkex.com.hk for assistance.