

# Snow Pipe

Tuesday, July 25, 2023 10:47 PM

# Snow Pipe Creation

## Continuing with the External stage creation .....

## Step 1: Create pipe stage :

```
Kousikdutta#COMPUTE_WH@MYFIRSTDATABASE.SALESSCHEMA>create or replace stage MYFIRSTDATABASE.SALESSCHEMA.pipe_stage3
    url = 's3://bucketproductnew/'
    storage_integration = s3_int2
    file_format = MYFIRSTDATABASE.SALESSCHEMA.my_csv_format;
+-----+
| status
|-----|
| Stage area PIPE_STAGE3 successfully created. |
+-----+
```

## **Step 2: Next Create the pipe :**

```
1 Row(s) produced. Time Elapsed: 0.639s
Kousikdutta#COMPUTE_WH@MYFIRSTDATABASE.SALESSCHEMA>create or replace pipe MYFIRSTDATABASE.SALESSCHEMA.productpipe
auto_ingest=true as
copy into productnew
from @pipe_stage3;
+-----+
| status
+-----+
| Pipe PRODUCTPIPE successfully created.
+-----+
1 Row(s) produced. Time Elapsed: 0.671s
```

### **Step 3: Copy the notification channel from Show pipe code:**

Kousikdutta@COMPUTE_WH@MYFIRSTDATABASE.SALESSCHEMA:show pipes;						
created_on	name	database_name	schema_name	definition	owner	notification_channel
n_error_integration	owner_role_type	invalid_reason				
2023-07-24 03:54:22.691 -0700	KYPIPE1	MYFIRSTDATABASE	SALESSCHEMA	copy into product   from @MYFIRSTDATABASE.SALESSCHEMA.pipe_stage   on_error = CONTINUE	ACCOUNTADMIN	arn:aws:sqs:us-east-2:942624237177:sf-snowpipe-AIDA5W6GIMZ45BXSGQBQ4-zoCH9MapSMdhjD9IxsfLOA
2023-07-24 03:32:35.240 -0700	PRODUCT	MYFIRSTDATABASE	SALESSCHEMA	copy into PRODUCT   from @MY_S3_STAGE	ACCOUNTADMIN	arn:aws:sqs:us-east-2:942624237177:sf-snowpipe-AIDA5W6GIMZ45BXSGQBQ4-zoCH9MapSMdhjD9IxsfLOA
2023-07-25 10:24:13.018 -0700	PRODUCTPIPE1	MYFIRSTDATABASE	SALESSCHEMA	copy into productnew   from @MY_S3_STAGE3	ACCOUNTADMIN	arn:aws:sqs:us-east-2:942624237177:sf-snowpipe-AIDA5W6GIMZ45BXSGQBQ4-zoCH9MapSMdhjD9IxsfLOA
2023-07-24 20:48:47.246 -0700	TITANIC_PIPE	MYFIRSTDATABASE	SALESSCHEMA	copy into titanic3   from @titanic_pipe_stage	ACCOUNTADMIN	arn:aws:sqs:us-east-2:942624237177:sf-snowpipe-AIDA5W6GIMZ45BXSGQBQ4-zoCH9MapSMdhjD9IxsfLOA

**Step 4: Go to AWS and create event notification and SQS settings :**

**Go to S3, and then click on the properties :**

## bucketproductnew Info

[Objects](#)[Properties](#)[Permissions](#)[Metrics](#)[Management](#)[Access Points](#)

### Objects (1)

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

[Copy S3 URI](#)[Copy URL](#)[Download](#)[Open](#)[Delete](#)[Actions ▾](#)[Create folder](#)[Upload](#)[Find objects by prefix](#)

1



Name



Type



Last modified

Size



Storage class



click on event notification :

### Event notifications (0)

Send a notification when specific events occur in your bucket. [Learn more](#)

[Edit](#)[Delete](#)[Create event notification](#)

Name

Event types

Filters

Destination type

Destination

No event notifications

Choose [Create event notification](#) to be notified when a specific event occurs.

[Create event notification](#)

Give event name

## Create event notification Info

To enable notifications, you must first add a notification configuration that identifies the events you want to publish and the destinations where you want Amazon S3 to send the notifications.

### General configuration

Event name

newproductevent

Event name can contain up to 255 characters.

Event name can contain up to 255 characters.

**Prefix - optional**  
Limit the notifications to objects with keys starting with specified characters

**Click on all object create events :**

**Object creation**

All object create events  
s3:ObjectCreated:\*

Put  
s3:ObjectCreated:Put

Post  
s3:ObjectCreated:Post

Copy  
s3:ObjectCreated:Copy

Multipart upload completed  
s3:ObjectCreated:CompleteMultipartUpload

**Object removal**

**Next click on SQS queue :**

Destination  
Choose a destination to publish the event. [Learn more](#)

- Lambda function  
Run a Lambda function script based on S3 events.
- SNS topic  
Fanout messages to systems for parallel processing or directly to people.
- SQS queue  
Send notifications to an SQS queue to be read by a server.

Specify SQS queue

- Choose from your SQS queues
- Enter SQS queue ARN

SQS queue

Cancel

Save changes

**Paste the ARN -> (notification channel) value copied in above CLI :**

### Specify SQS queue

- Choose from your SQS queues
- Enter SQS queue ARN

SQS queue 

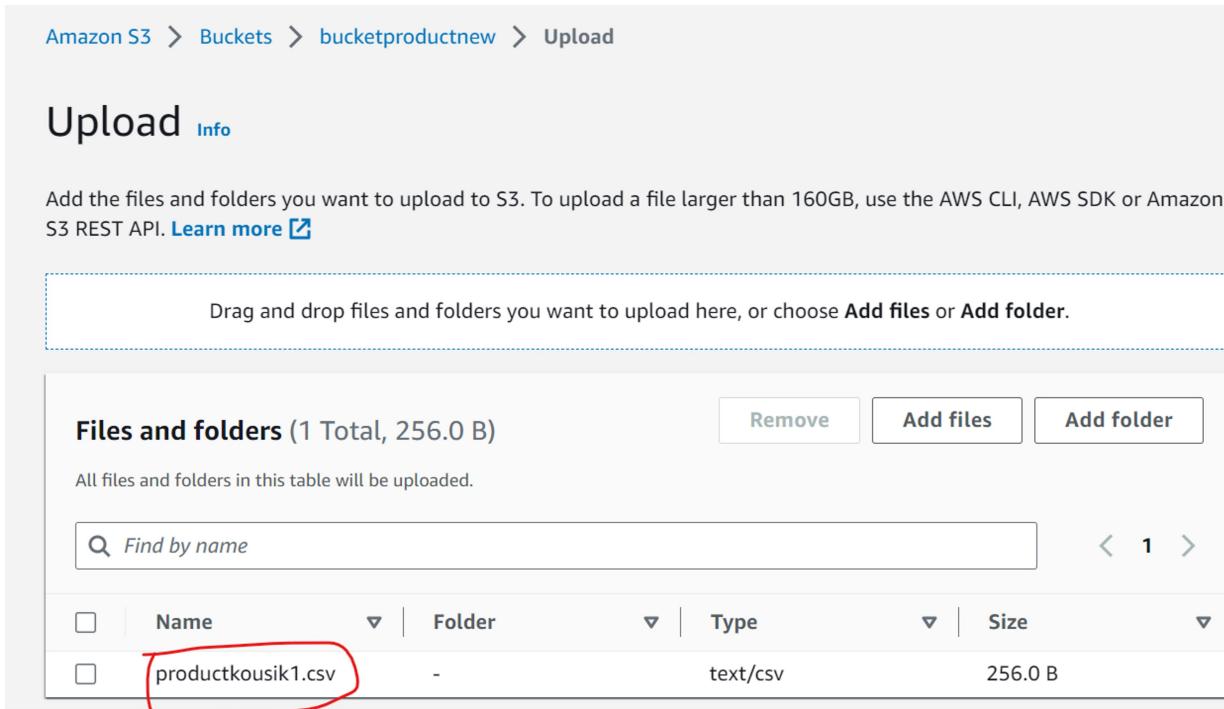
```
arn:aws:sqs:us-east-2:942624237177:sf-snowpipe-AIDA5W6GIMZ45BXSGQBQ4-zoCH%
```

Click on the save changes and then you will see something like this :



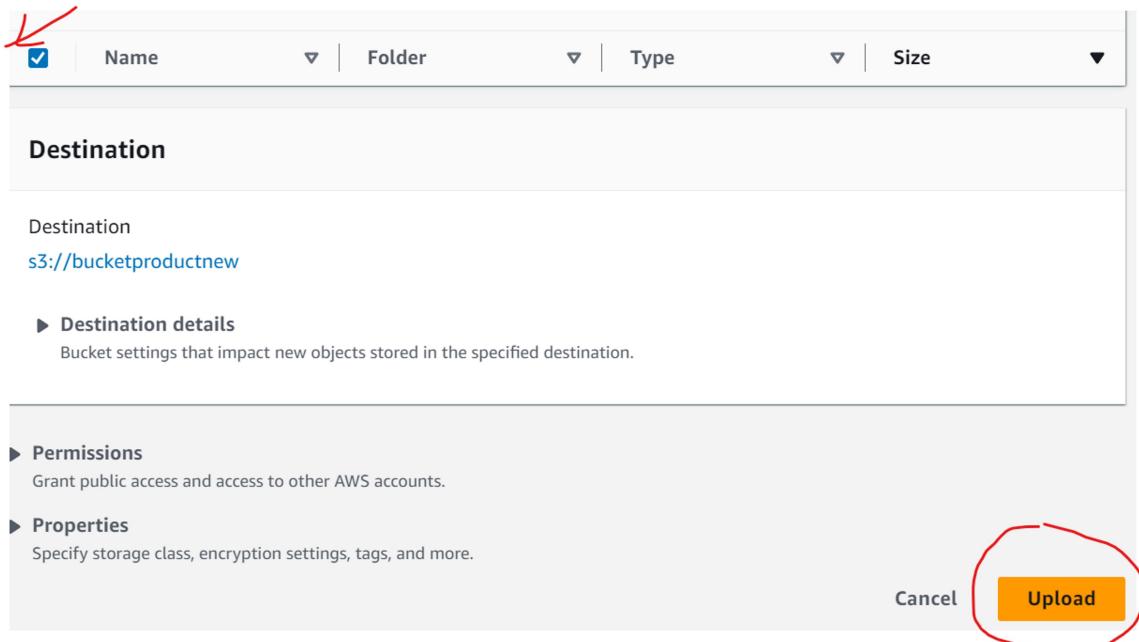
The screenshot shows a green success message box with the text: "Successfully created event notification "newproductevent". Operation successfully completed." Below the message, the navigation path is shown as "Amazon S3 > Buckets > bucketproductnew". The bucket name "bucketproductnew" is displayed with an "Info" link.

### Step 5: Upload updated data in S3 :



The screenshot shows the "Upload" interface in the AWS S3 console. The path is "Amazon S3 > Buckets > bucketproductnew > Upload". A large blue "Upload" button is visible. Below it, instructions say "Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)". A dashed blue box contains the text "Drag and drop files and folders you want to upload here, or choose Add files or Add folder." A table titled "Files and folders (1 Total, 256.0 B)" shows one file: "productkousik1.csv" (text/csv, 256.0 B). The file name is circled in red.

<input type="checkbox"/>	Name	Folder	Type	Size
<input type="checkbox"/>	productkousik1.csv	-	text/csv	256.0 B



### Step 5: Force Resume of the pipeline :

```
Kousikdutta#COMPUTE_WH@MYFIRSTDATABASE.SALESSCHEMA>select system$pipe_force_resume('MYFIRSTDATABASE.SALESSCHEMA.productpipe')
;
+-----+
| SYSTEM$PIPE_FORCE_RESUME('MYFIRSTDATABASE.SALESSCHEMA.PRODUCTPIPE') |
|-----|
| operation completed successfully                                |
+-----+
```

### Step 6: Check the updated data :

#### Previous data :

```
Kousikdutta#COMPUTE_WH@MYFIRSTDATABASE.SALESSCHEMA>select * from productnew;
+-----+
| PRODUCTID | PRODUCTNAME | COST | SHIPPINGLOCATION | SELLERNAME |
|-----+
| 1          | LEDTV       | 32990 | Delhi           | ABC Pvt      |
| 2          | Printer      | 5990  | Delhi           | ABC Pvt      |
| 3          | Split AC     | 32050 | Pune            | XY Corp      |
| 4          | Microwave    | 12670 | Mumbai          | PQ Corp      |
+-----+
```

#### Current data after updating or running pipeline :

```
Kousikdutta#COMPUTE_WH@MYFIRSTDATABASE.SALESSCHEMA>select * from productnew
```

PRODUCTID	PRODUCTNAME	COST	SHIPPINGLOCATION	SELLERNAME
1	LEDTV	32990	Delhi	ABC Pvt
2	Printer	5990	Delhi	ABC Pvt
3	Split AC	32050	Pune	XY Corp
4	Microwave	12670	Mumbai	PQ Corp
1	LEDTV	32990	Delhi	ABC Pvt
2	Printer	5990	Delhi	ABC Pvt
3	Split AC	32050	Pune	XY Corp
4	Microwave	12670	Mumbai	PQ Corp
5	Fridge	54664	Kolkata	Kou Corp
6	Washing machine	34345	Bangalore	no corp

**Yes!!! We have successfully created pipeline.**