

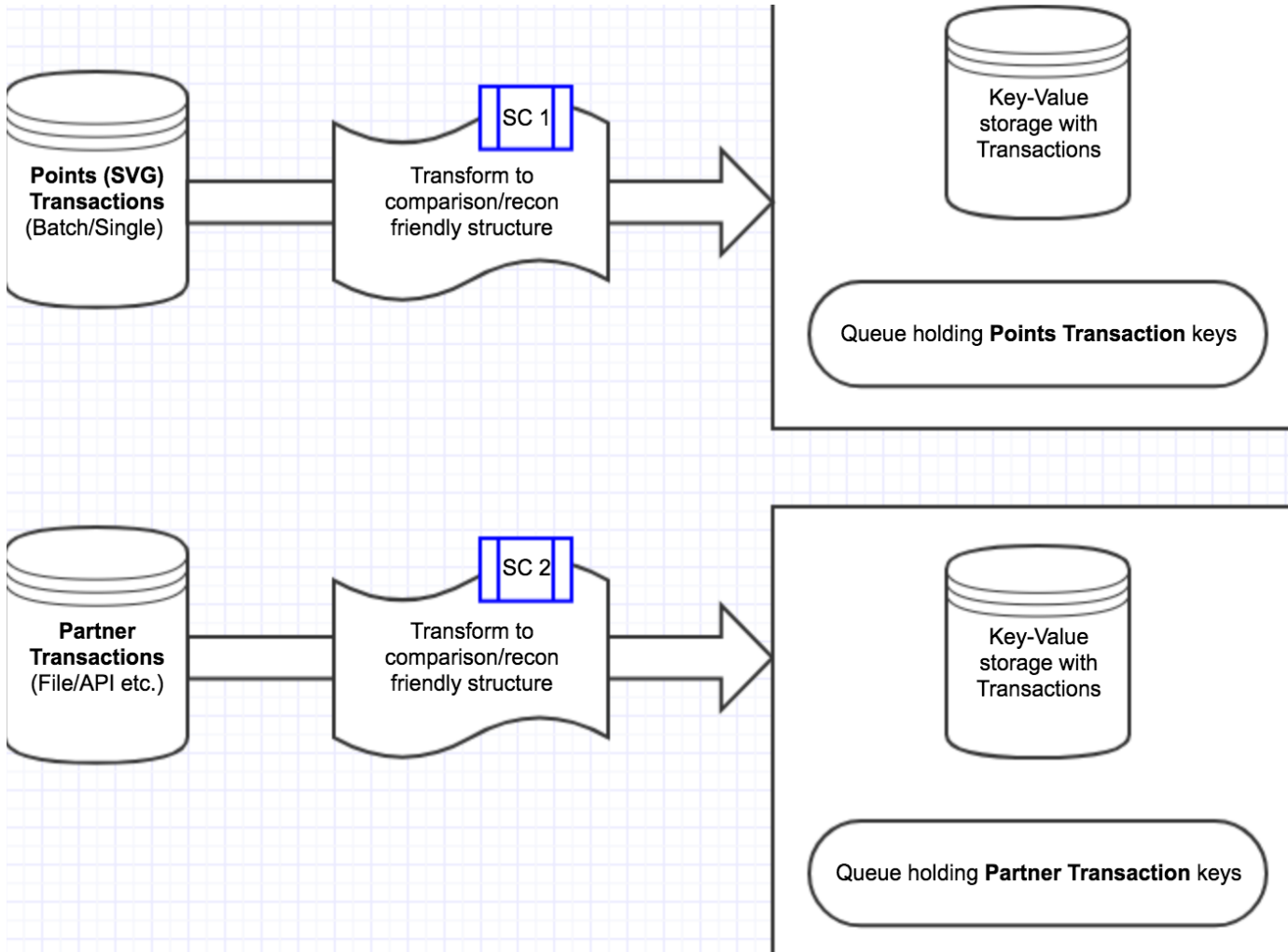
# Incentive Reconciliation to Cloud (AWS)

Expedia - FCTS

# Introduction

- ▶ Writing CFT scripts for allocating and linking various AWS resources.
- ▶ Linked those resources within.
- ▶ Deployed them on MAUI framework.

# Components



# Component #1

- ▶ API Gateway
- ▶ Lambda
- ▶ DynamoDb
- ▶ SQS

**Brief summary:** Any call to API Gateway triggers a lambda which executes code storing data in Dynamo and SQS.

# Component #2

- ▶ S3
- ▶ Lambda
- ▶ DynamoDb
- ▶ SQS

**Brief summary:** An object creation in S3 will trigger a lambda which executes code storing data in Dynamo and SQS.

# Component #3

- ▶ AWS Lambda (Triggered via scheduled cron)

# Some Snapshots

## ► Triggering API

The screenshot displays a REST client interface. On the left, a sidebar shows a list of API requests under the date 'July 4'. The main panel on the right shows a detailed view of a POST request to `https://8jm4hq2uab.execute-api.us-west-2.amazonaws.com/LATEST/greeting`. The request body is a JSON object with a 'transactions' array and 'transaction\_attributes'.

**History** **Collections** Clear all

▼ July 4

- POST** `https://8jm4hq2uab.execute-api.us-west-2.amazonaws.com/LATEST/greeting`
- POST** `https://8jm4hq2uab.execute-api.us-west-2.amazonaws.com/DummyStage/greeting`
- POST** `https://kvcaqd7pu9.execute-api.us-west-2.amazonaws.com/DummyStage/greeting`
- POST** `https://xit62k5e37.execute-api.us-west-2.amazonaws.com/DummyStage/greeting`
- POST** `https://xit62k5e37.execute-api.us-west-2.amazonaws.com/LATEST/greeting`
- POST** `https://18owiozdb7.execute-api.us-west-2.amazonaws.com/LATEST/greeting`
- POST** `https://72996dbpba.execute-api.us-west-2.amazonaws.com/LATEST/greeting`
- POST** `https://3j4q4vbxcc.execute-api.us-west-2.amazonaws.com/LATEST/greeting`
- POST** `https://3j4q4vbxcc.execute-api.us-west-2.amazonaws.com/greeting/LATEST`

**POST** `https://8jm4hq2uab.execute-api.us-west-2.amazonaws.com/LATEST/greeting` **Params** **Send** **Save**

Authorization Headers (1) **Body** Pre-request Script Tests

☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary **Text** ▼

```
1 {
2   "transactions": [{
3     "transaction_reference": {
4       "transaction_date": "2017-06-27T05:32:52Z",
5       "transaction_id": "816527-770326",
6       "transaction_resource_id": "F7D81C9D-258D-4341-A1C5-94B8F5E0787F",
7       "provider_reference_id": "c39aeb48-333e-499d-b729-77bd956fa976",
8       "operation_type": "adjustments",
9       "client_transaction_reference_id": "00b6bb0d-d48b-4779-89b9-5bcc5b869454",
10      "client_request_reference_id": "00b6bb0d-d48b-4779-89b9-5bcc5b869454",
11      "header_request_id": "C39AEB48-333E-499D-B729-77BD956FA976",
12      "header_transaction_id": "CF267419-4576-412C-A961-68135AD966C9",
13      "client_code": "SVG_TEST",
14      "reference_id": "770326",
15      "client_id": 3,
16      "message_guid": "59A8BDA4-4334-4D3B-B3E0-39B8D3272BCC",
17      "last_updated_date": "2017-06-27T05:32:52Z"
18    },
19    "transaction_attributes": {
20      "amount": 10.0000,
21      "country": "USA",
22      "company": "10132",
23      "..."
24    }
25  }]
26 }
```

**Response**

# On MAUI Framework

[Overview](#)[Organizations](#)[Mesos Applications](#)[Native Stacks](#)[Stateful Applications](#)[Secrets](#)[Datacenters](#)[Environments](#)[Docker Repositories](#)[Splunk](#)[Help](#)[Support](#)[New Deployment](#)

## Configuration

<b>ID:</b>	e911f39b-556f-4088-bc32-cdf59d8ba43c	<b>Created By:</b>	anonymous
<b>Application Group:</b>	com.expedia.globalpayments	<b>Application Artifact:</b>	IRCloudStack
<b>Configuration Group:</b>	com.expedia.globalpayments	<b>Configuration Artifact:</b>	IRCloudStackParams
<b>Read/Write Role:</b>	arn:aws:iam::769348183957:role/awsfnt-defaultteam-irstack		

## Deployment History

ID	Application Version	Configuration Version	Started At	State	Error
<a href="#">bf42f65f...</a>	0.1.7	0.1.8	Jul 24, 2017 2:49:02 AM	COMPLETED	
<a href="#">afab8217...</a>	0.1.5	0.1.6	Jul 24, 2017 2:38:14 AM	COMPLETED	
<a href="#">b406a6d7...</a>	0.1.5	0.1.6	Jul 24, 2017 2:26:38 AM	FAILED	'Resource update cancelled'
<a href="#">7f575215...</a>	0.1.3	0.1.4	Jul 23, 2017 11:23:23 PM	COMPLETED	
<a href="#">03ae5718...</a>	0.1.1	0.1.2	Jul 23, 2017 11:18:38 PM	COMPLETED	



# Deployment on MAUI framework

## ❑ Artifact preparation

- ❖ Step 1: Obtain permissions to publish to maven
- ❖ Step 2: Prepare CFT

Sphinx needs two artifacts:

- **Application artifact:** This artifact consists of the mandatory cloudformation template (namely *application.template*) and, optionally, any other asset that user might want to refer to in his/her cloudformation template.

Examples of such assets are lambda code and sql scripts.

- **Configuration artifact:** This artifact consists of the parameter file (namely *parameter.json*) required by the cloudformation template.

## ❑ Upload artifacts

Upload both the artifacts prepared to the maven repo of your desired account.

## ❑ Cloud Native app creation

Go to sphinx in your desired account and create your app corresponding to the stack, providing information such as artifact and group id published in previous step.

## ❑ Deployment

From the app page created above, simply deploy the cloud native application giving versions for both, the application as well as configuration artifact. These versions should have already been published to the corresponding AWS account.

**Thank You**