

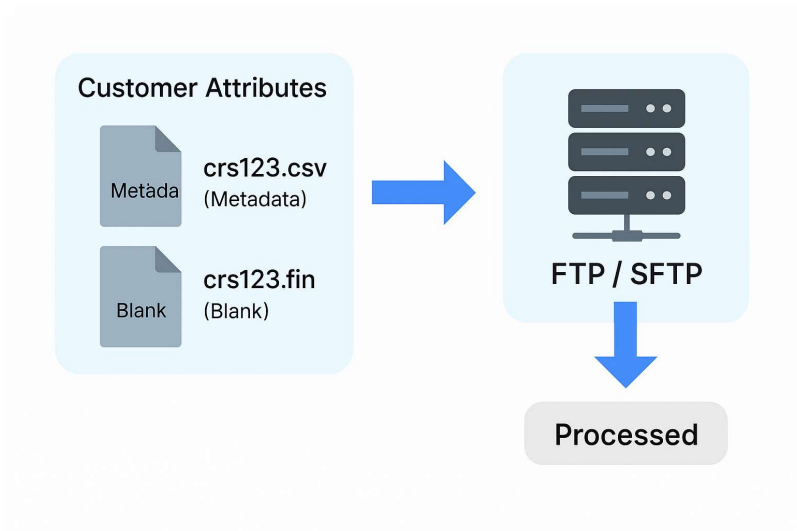


# Automating AA Classifications & Customer Attributes via GCP & Python

Sumit Kumar  
Shell

**Adobe**

## Classification Importer or Customer Attributes



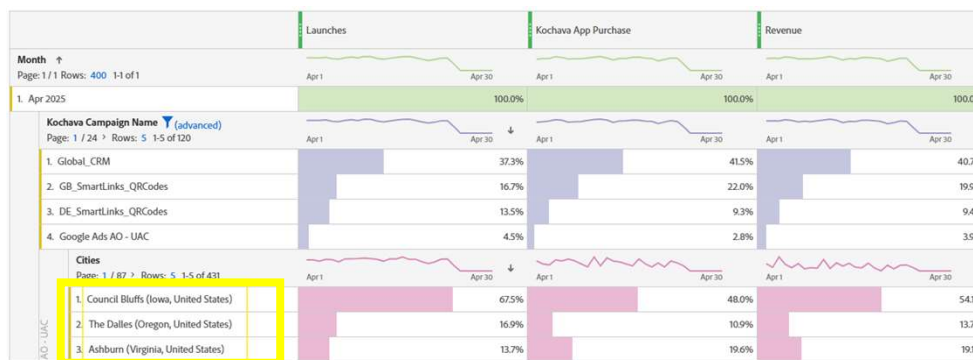
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## 'Cities' Classification in Adobe Analytics

Issue: Default Geo 'City' dimension showed inaccurate data in AA

✓ Solution: Used Kochava device ID to classify city/country data via scheduled reports

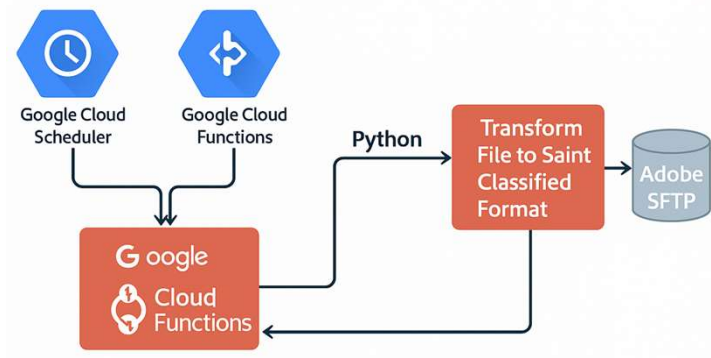


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## Automating 'City' Saint Classification Uploads

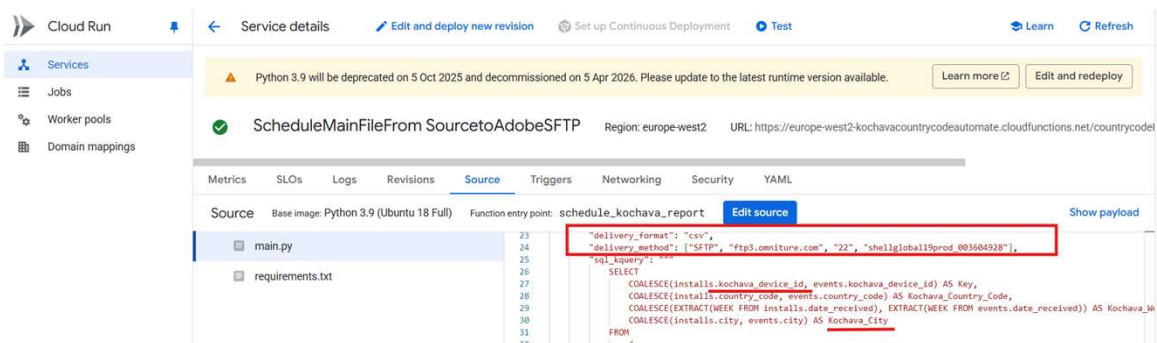
- Used GCP (Cloud Scheduler, Cloud Functions) to automate:
  - Adobe's SFTP file download
  - Transform to .tab/.fin files
  - Upload to Adobe SFTP
- Result: Accurate city campaign insights



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## Cloud Function fetches Kochava Device ID & City via API



## Automating 'City' Saint Classification : Transform data to .tab & .fin format

Cloud Krun Service details Edit and deploy new revision Set up Continuous Deployment Test

countrycode Region: us-central1 URL: https://us-central1-kochavacountrycodeautomate.cloudfunctions.net/countrycode Scaling: Auto (min: 0)

Service is healthy and serving traffic.

Metrics SLOs Logs Revisions Source Triggers Networking Security YAML

Source Base image: Python 3.9 (Ubuntu 18 Full) Function entry point: main Edit source

main.py requirements.txt

```

48
49 def process_csv_and_upload(ftp, csv_file):
50     print(f"Processing CSV file: {csv_file}")
51
52     # Read the CSV file with UTF-8 encoding
53     with open(csv_file, 'r', encoding='utf-8') as file:
54         csv_lines = file.readlines()
55
56     # Modify the CSV content as needed
57     tab_delimited_lines = ['## SC\\SiteCatalyst SAINT Import File\\v2.1',
58                             '## SC\\## SC' indicates a SiteCatalyst pre-process header. Please do not remove these lines.',
59                             '## SC\\tD:2023-08-21 15:09:02\\tA:100069139:141',
60                             'Key\\tKochava Country Code\\tKochava Week Number\\tKochava City"]']
61
62     # Convert CSV lines to tab-delimited format and append to tab_delimited_lines
63     for line in csv_lines[1:]:
64         tab_delimited_lines.append('\\t'.join(line.strip().split(',')))
65
66     # Upload the processed files to Google Cloud Storage
67     tab_delimited_content = '\\n'.join(tab_delimited_lines)
68     upload_to_gcs(csv_file.replace('.csv', '.tab'), tab_delimited_content)
69
70     # Create a .fin file
71     upload_to_gcs(csv_file.replace('.csv', '.fin'), "")
72
73     # Upload the processed files back to FTP
74     ftp.storbinary('STOR ' + csv_file.replace('.csv', '.tab'), io.BytesIO(tab_delimited_content.encode('utf-8')))
75     ftp.storbinary('STOR ' + csv_file.replace('.csv', '.fin'), io.BytesIO(b''))
76
77     # Delete the original CSV file

```

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## Cloud Scheduler automates periodic runs

Cloud Scheduler / Jobs / Edit job: SFTPdeliveryKochCC

SFTPdeliveryKochCC

## Define the schedule

Region  
us-east1

Description

Frequency \*

0 \* \* \* \*

Schedules are specified using unix-cron format. e.g. every minute: \* \* \* \* \*, every 3 hours: 0 \*/3 \* \* \*, every Monday at 9:00: 0 9 \* \* 1. [Learn more](#)

Minute:

Equal to 0

Time zone \*

British Summer Time (BST)

Jobs set in timezones affected by daylight saving time can run outside of cadence during DST change. Using a UTC timezone can avoid the problem. [Learn more](#)

CONTINUE

## Configure the execution

Target type \*

HTTP

URL \*

https://europe-west2-kochavacountrycodeautomate.cloudfunctions.net/countrycode

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Cloud Scheduler / Jobs / Edit job: kcountrycode

kcountrycode

## Define the schedule

Region  
us-central1

Description

Frequency \*

0 \* \* \* \*

Schedules are specified using unix-cron format. e.g. every minute: \* \* \* \* \*, every 3 hours: 0 \*/3 \* \* \*, every Monday at 9:00: 0 9 \* \* 1. [Learn more](#)

Minute:

Every minute

Time zone \*

British Summer Time (BST)

Jobs set in timezones affected by daylight saving time can run outside of cadence during DST change. Using a UTC timezone can avoid the problem. [Learn more](#)

CONTINUE

## Configure the execution

Target type \*

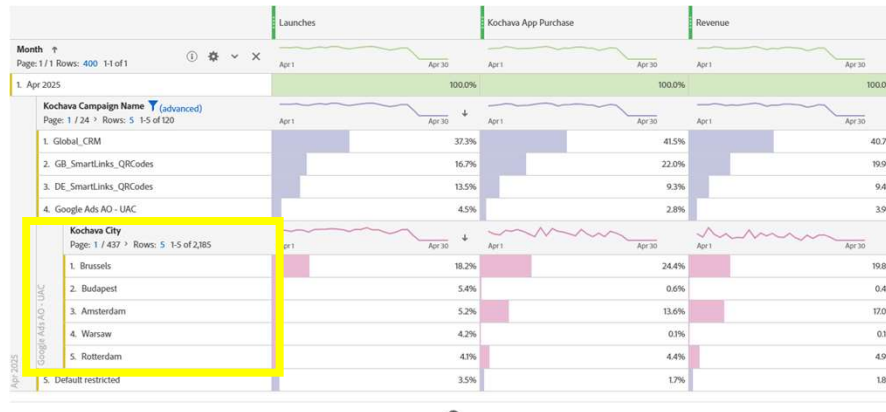
HTTP

URL \*

https://us-central1-kochavacountrycodeautomate.cloudfunctions.net/countrycode



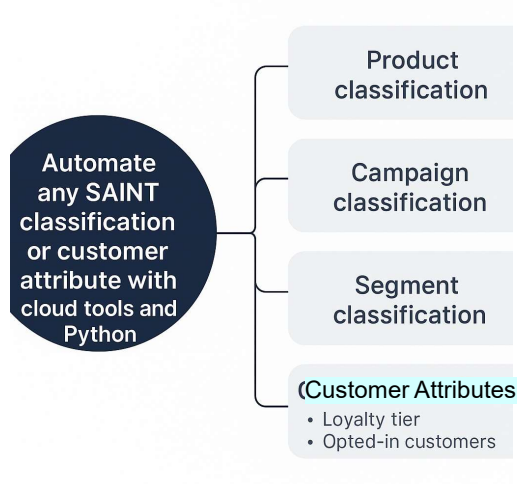
## Fixed 'Market' in AA: Saint Classification Automation



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## Summary: Automating Adobe Analytics Saint Classifications



⚡ End-to-end automation for classifications:

✂ Cloud Functions +Python: Upload metadata, transform data

📅 Cloud Scheduler: Schedule classification uploads

🚀 Adobe SFTP Integration: Auto upload .tab & .fin files

🎯 Result: No manual effort, faster insights, scalable process

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## Bonus Tip: Update 100s of Launch Rules with Reactor API



### Browser Extension

- One click to update multiple rules
- Change conditions & actions across environments
- Simplifies bulk edits in Adobe Launch



### Adobe Launch Reactor API

- REST API for Adobe Launch
- Fetch, update & publish rules programmatically
- Ideal for managing 100s of rules efficiently



**One Click → Update 100s of Rules Instantly**

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# Thank you

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