

MailFlow

Reclaiming 20 Hours
a Week for
Foothill-De Anza CC's Account
Team

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Problem:

- Receives 200 emails/day in their inbox
- Staff spends 4-5 hours everyday manually reading and routing emails to the right person
- This wastes the accounting team 15-20 hours per week





Recommended Solution

An invisible AI-powered workflow operating in the background on Outlook.

The moment an email hits the shared inbox, our AI-powered router:

1. intercepts it
2. evaluates it against predefined rules
3. forwards it to the right person.





Tech Overview



Email Arrives
in Shared
Outlook Inbox



EventBridge
"Listens" for
new emails



Amazon Lambda
Function to move email
assets to **S3 Bucket**



Amazon Lambda
Runs AI Model (Amazon
Nova Lite) to sort emails
and forward



Backend of an email getting routed

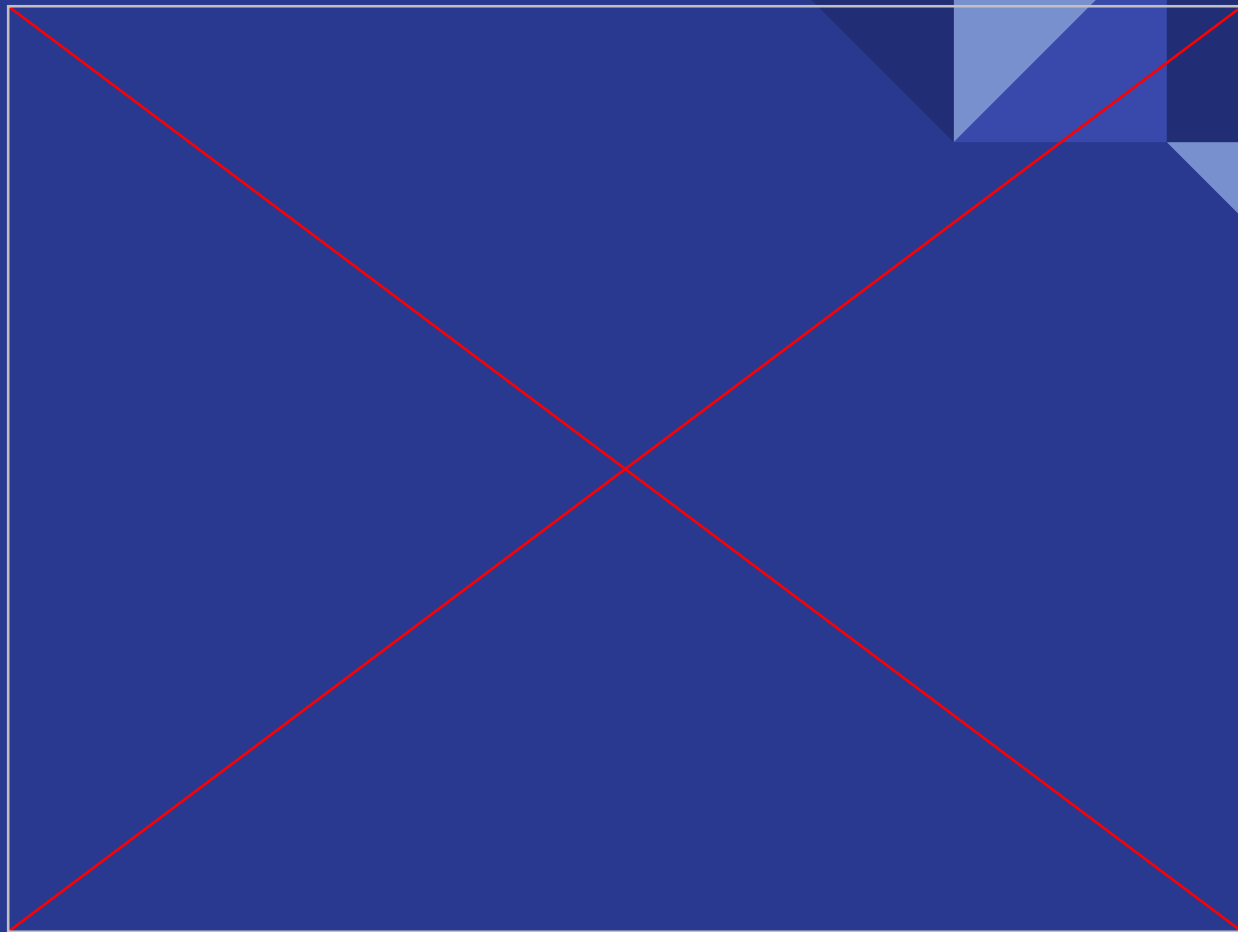
▶	Timestamp	Message
		No older events at this moment. Retry
▶	2026-07-23T22:19:53.041-07:00	INIT_START Runtime Version: python:3.14.v50 Runtime Version ARN: arn:aws:lambda:us-west-2::runtime:c...
▶	2026-07-23T22:19:53.612-07:00	START RequestId: 9fe9e376-9f91-497b-ac37-f3f5f9bc0517 Version: \$LATEST
▶	2026-07-23T22:19:53.612-07:00	Received event: {"Records": [{"eventVersion": "2.5", "eventSource": "aws:s3", "awsRegion": "us-west-...
▶	2026-07-23T22:19:54.549-07:00	Bedrock AI routing result: {'destination': 'Desk 3', 'target_folder': 'Desk 3', 'copy_folder': None,...
▶	2026-07-23T22:19:56.337-07:00	Successfully forwarded Outlook message AAMkAGZiZWVjZDk... to ['Desk3@Team4DxHub.onmicrosoft.com']
▶	2026-07-23T22:19:56.340-07:00	END RequestId: 9fe9e376-9f91-497b-ac37-f3f5f9bc0517
▶	2026-07-23T22:19:56.356-07:00	REPORT RequestId: 9fe9e376-9f91-497b-ac37-f3f5f9bc0517 Duration: 2727.97 ms Billed Duration: 3296 ms...
		No newer events at this moment. <i>Auto retry paused.</i> Resume

Analysis

- Reads through both the email text and attachments to spot key routing clues
- Searches specifically for Purchase Order (PO) numbers, vendor names, or employee last names
- Uses the accounting team's rules to automatically send the file to the right desk



Demo:



✨ **Impact:**

- Frees up 15–20 hours in total weekly, so the accounting team can prioritize other work
- Eliminates the daily chore of manually sorting 200 emails
- Reduces errors by sending emails directly to the right desk





Lessons Learned:

We learned how to:

- build cloud automation workflows
- cloud debugging and troubleshooting
- Use powerful APIs & solved permission issues



If We Had More Time:

- Create a chatbot that can summarize multiple emails for the client
- Allow the client to edit the code
- Route emails that contain multiple attachments correctly



Thank You!
Questions?