Notification App Pattern

1. API Gateway sends the request to AWS Simple Notification Services. The Api Gateway transforms data, deals with authentications, TLS encryption, throttling, monitoring and logging, and security.

2. Lambda Function sends the notification using AWS SNS

3. AWS Simple Notification Service (SNS) sends the notification as a push, sms, or plain txt email.

App Mesh provides security, observability, ability to collect logs, and route traffic. App Mesh adds mTLS authentication and encryption communication to the services. This is for the entire app.

This design is made to scale up 1 million notifications per hour, per user.

Cloudwatch, Cloudtrail, and App Mesh (optional) will help with the logging and observability of the notification platform. X-ray will trace a request through the Api Gateway through the serverless landscape.

AWS Simple Notification Service (SNS) handles all three notification types. Push, SMS and plain txt or JSON email. With the use of a Lambda function we can setup the message format for SNS.

The only trade off is you have to use plain txt or JSON email.

AWS X Ray

Amazon CloudWatch

Logs

AWS App Mesh

1
Amazon API Gateway

2
AWS Lambda

3
Amazon Simple Notification Service

SMS

Push Notification

Email