20TH ANNIVERSARY EDITION

WSO2CON ASIA

PLATFORMLESS MODERNIZATION

Accelerate Cloud Native Development with Choreo



Joseph Fonseka
Vice President & Distinguished Engineer
WSO2



Manjula Rathnayaka
Director of Engineering
WSO2

Agenda

- Business Context
  - Overview of the brand, loyalty program, and campaign direction
- From Strategy to Architecture
  - Translating business goals into system design decisions
- System Architecture
  - High-level layout of engagement and loyalty core layers
- User Journey
  - How users go from social interaction to earning points
- Project Mapping
  - How the solution maps into Choreo projects
- Lab Session
  - Hands-on implementation of the loyalty system using Choreo
- Q&A

Business Strategy: Grow the Loyalty Program Through Social Engagement

Brand Overview

- Well-known fashion brand with strong customer affinity
- Existing loyalty program (earn & redeem points)

Strategic Intent

- *"We want to grow our brand visibility by tapping into social media."*

Business Goals

- Encourage customers to share their looks on social platforms
- Reward customers who promote the brand
- Strengthen loyalty engagement through community-driven content
- Launch in time for the seasonal campaign push

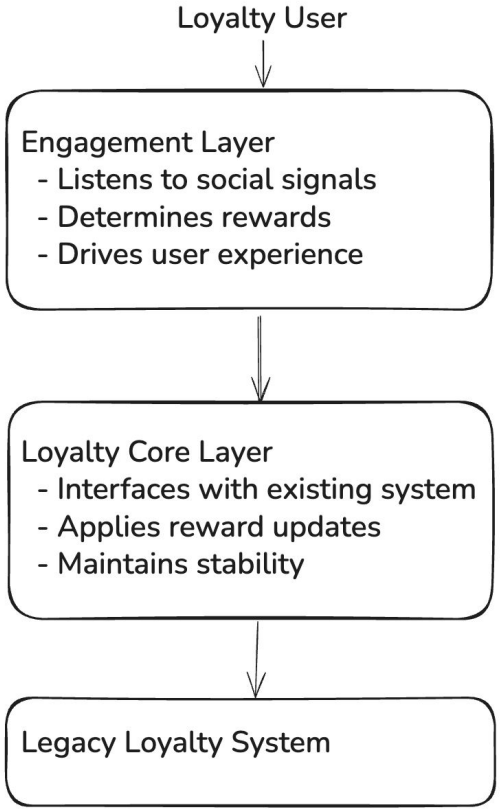
From Business Drivers to Architecture Decisions

Business Drivers	Architecture Thinking	Target Outcomes
Grow brand visibility	How do we capture and process social engagement signals?	Make social activity measurable and rewardable
Drive social engagement	How do we evaluate if content truly promotes the brand?	Use AI to score content relevance and encourage brand promotion
Launch fast	How do we integrate without modifying the legacy system?	Connect securely to legacy system with no changes required

System Architecture

Logical Layers of the System
We organized the system into two loosely coupled layers:

- The Engagement Layer introduces new capabilities — it listens to social activity, evaluates posts, and shapes the user experience.
- The Loyalty Core Layer acts as a safe bridge to the legacy backend — requiring no code changes to the existing system.



Loyalty Program Use Case

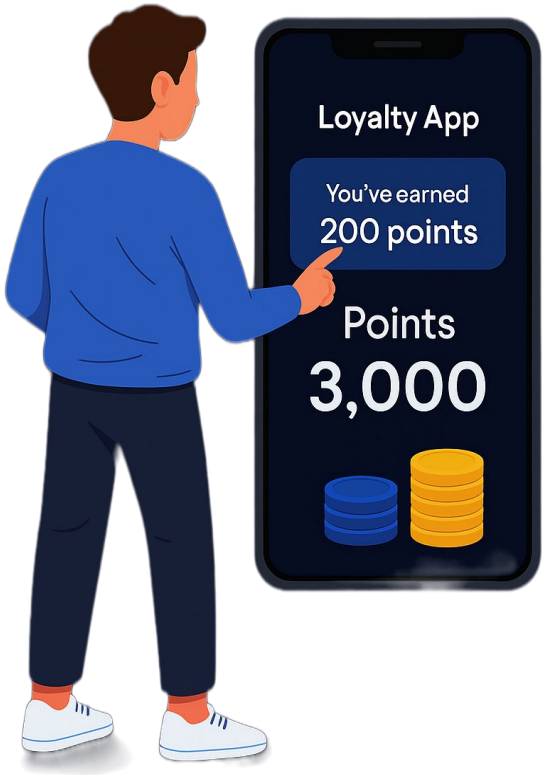
User Journey: From Campaign Interaction to Loyalty Reward

User posts on their social media profile.

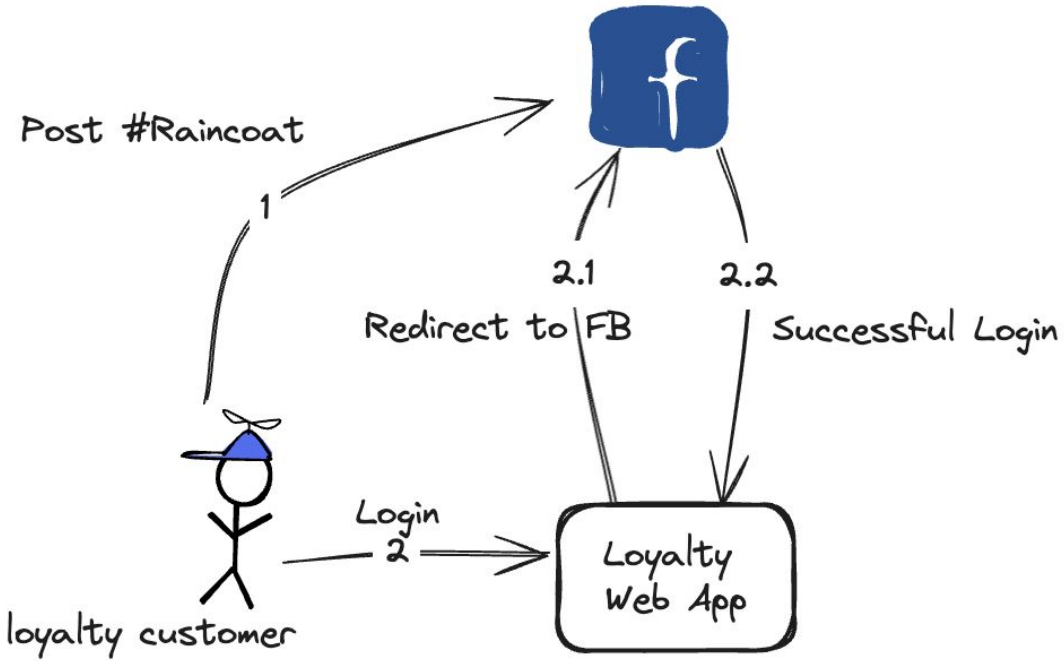


User Journey: From Campaign Interaction to Loyalty Reward

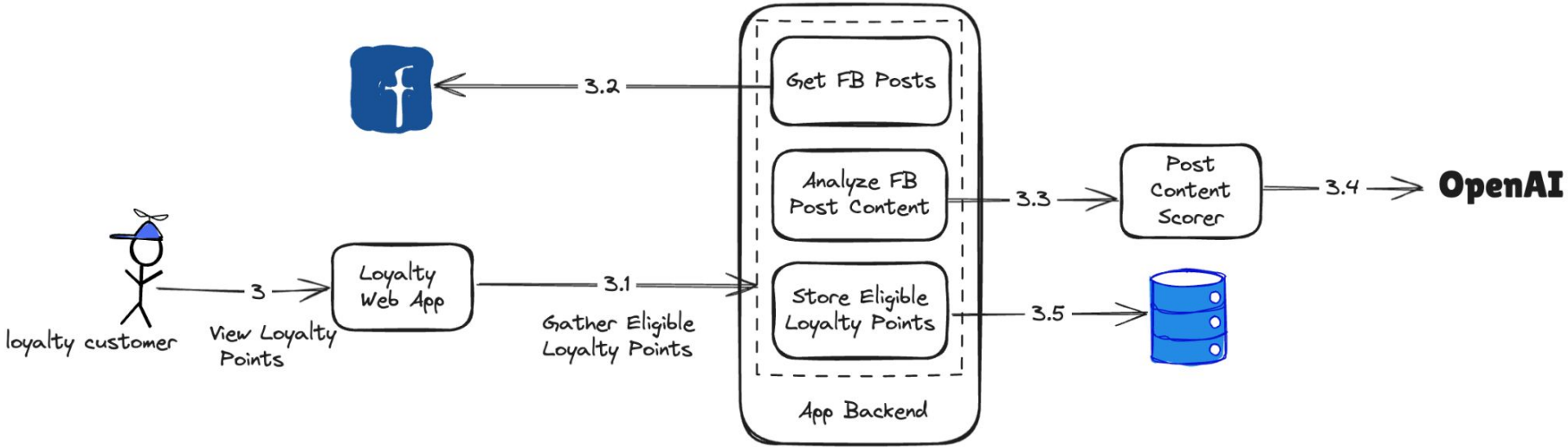
User claims loyalty points.



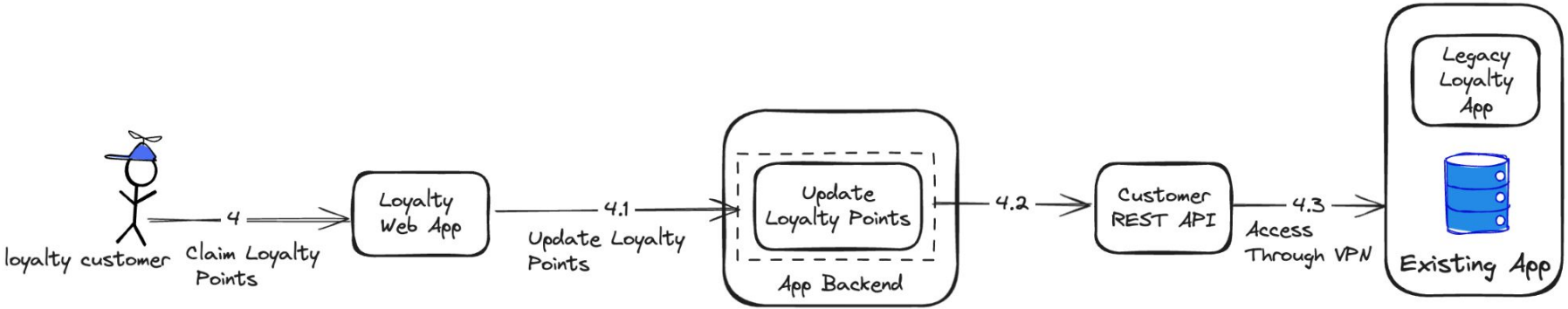
Journey Flow: Social Login with Facebook



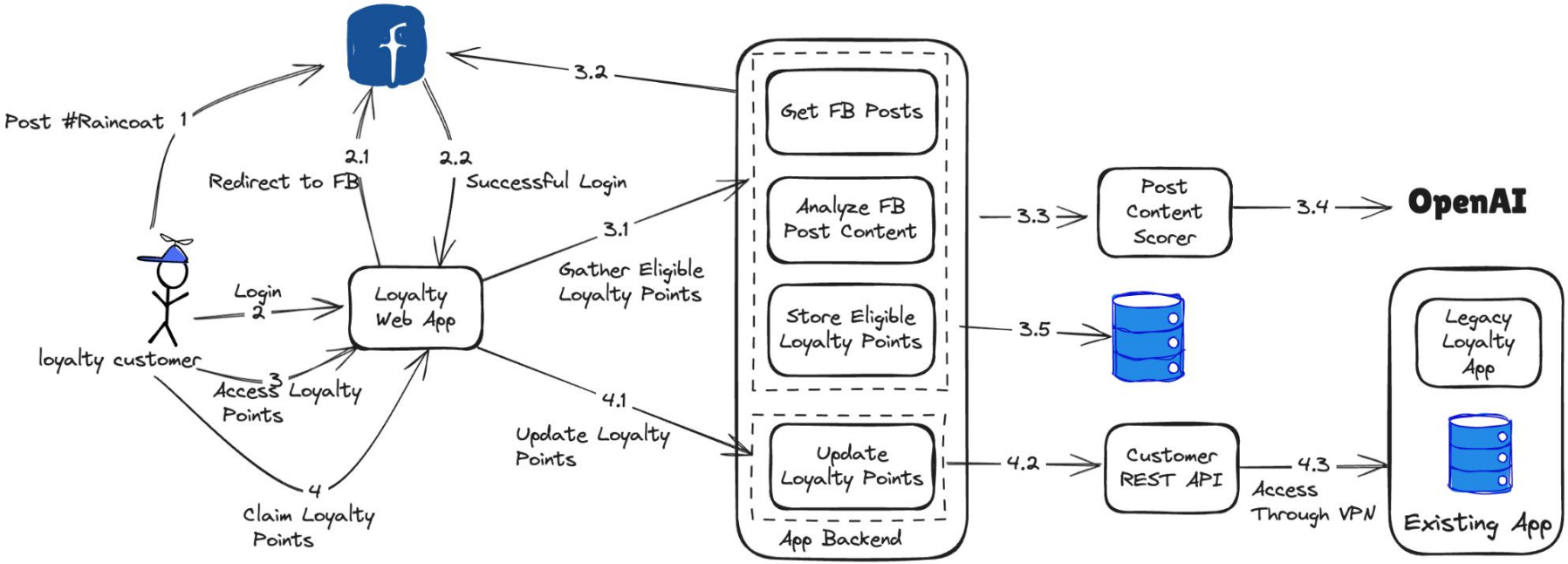
Journey Flow: Post Scoring and Points Allocation



Journey Flow: Claiming Points via Legacy System

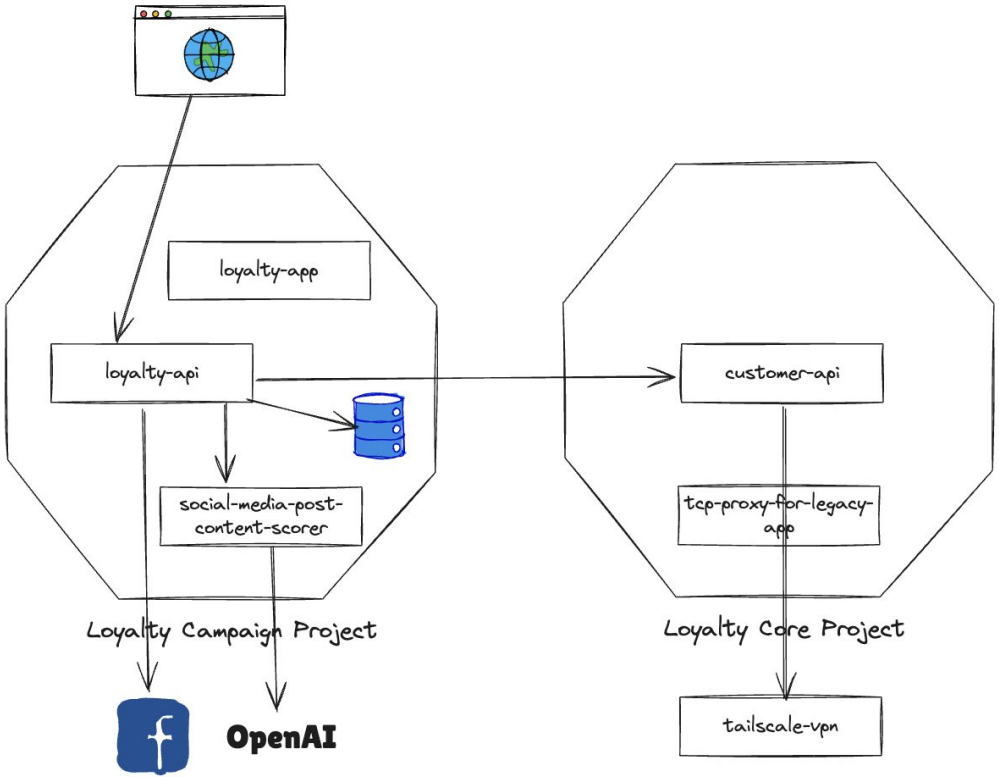


Journey Flow: End-to-End Loyalty Experience



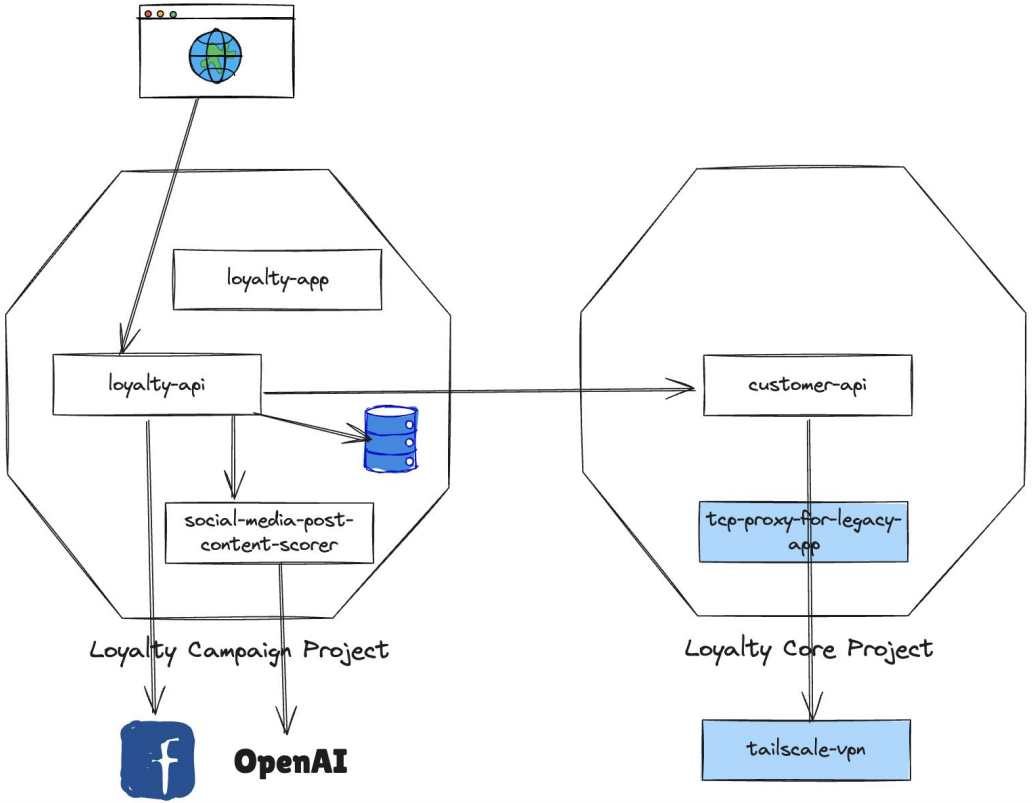
Choreo Architecture: Projects & Components

Choreo Architecture: Logical Layers to Project Mapping

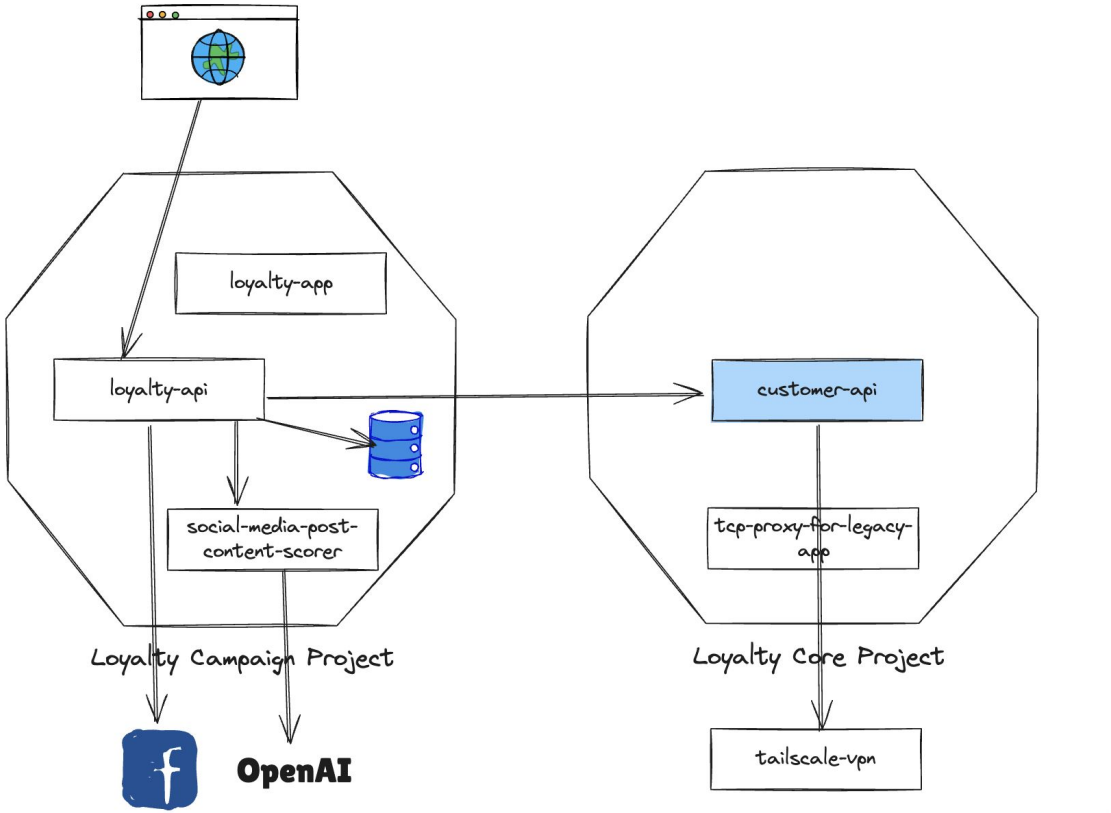


Choreo Lab Session

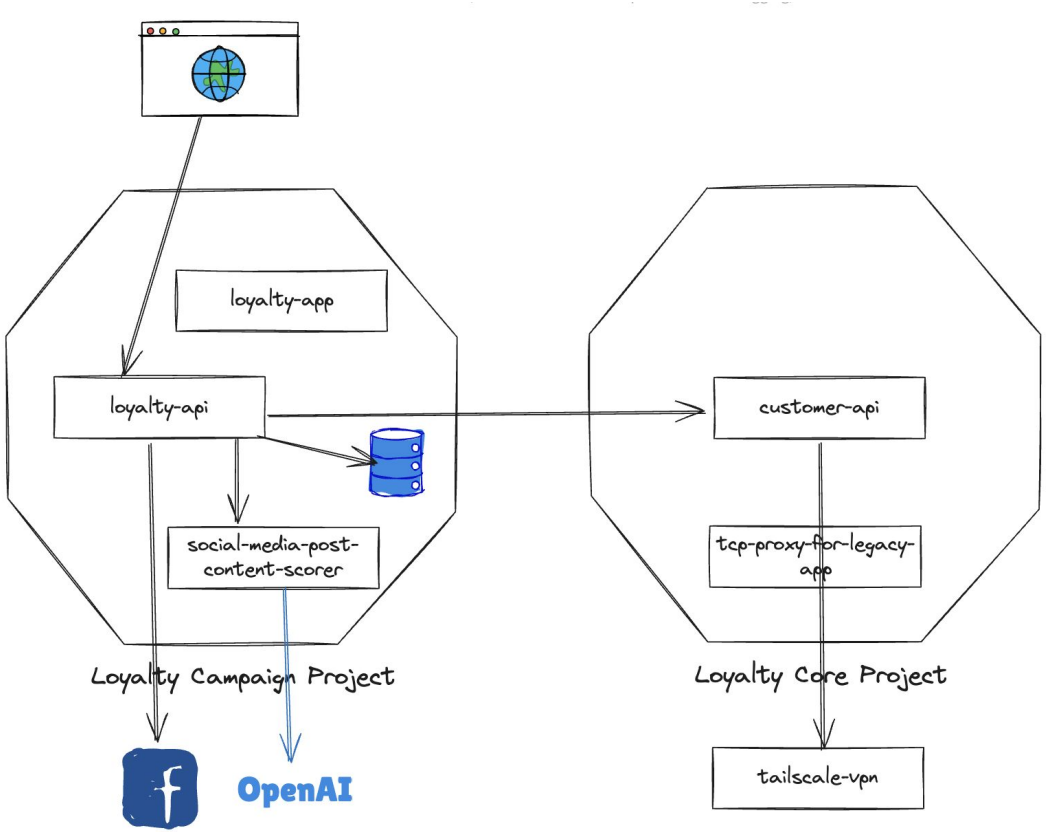
Lab Part 1: Use VPN to Bridge Choreo with On-Prem Backend



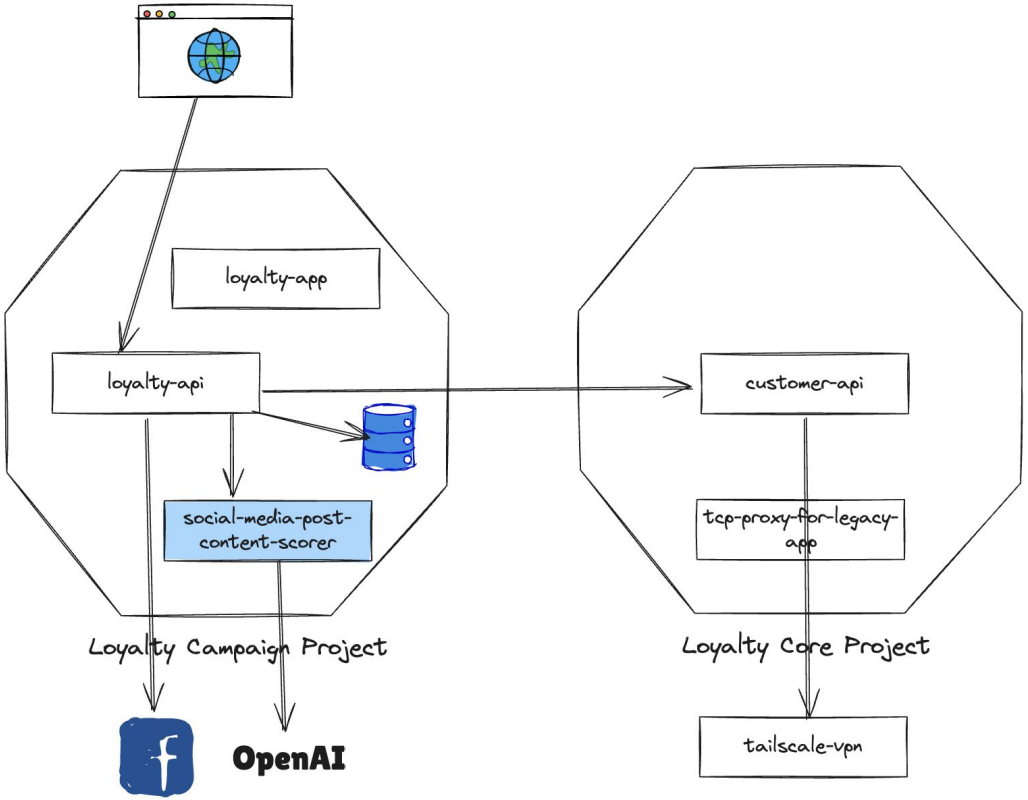
Lab Part 2: Wrap Legacy XML Services with RESTful API in Choreo



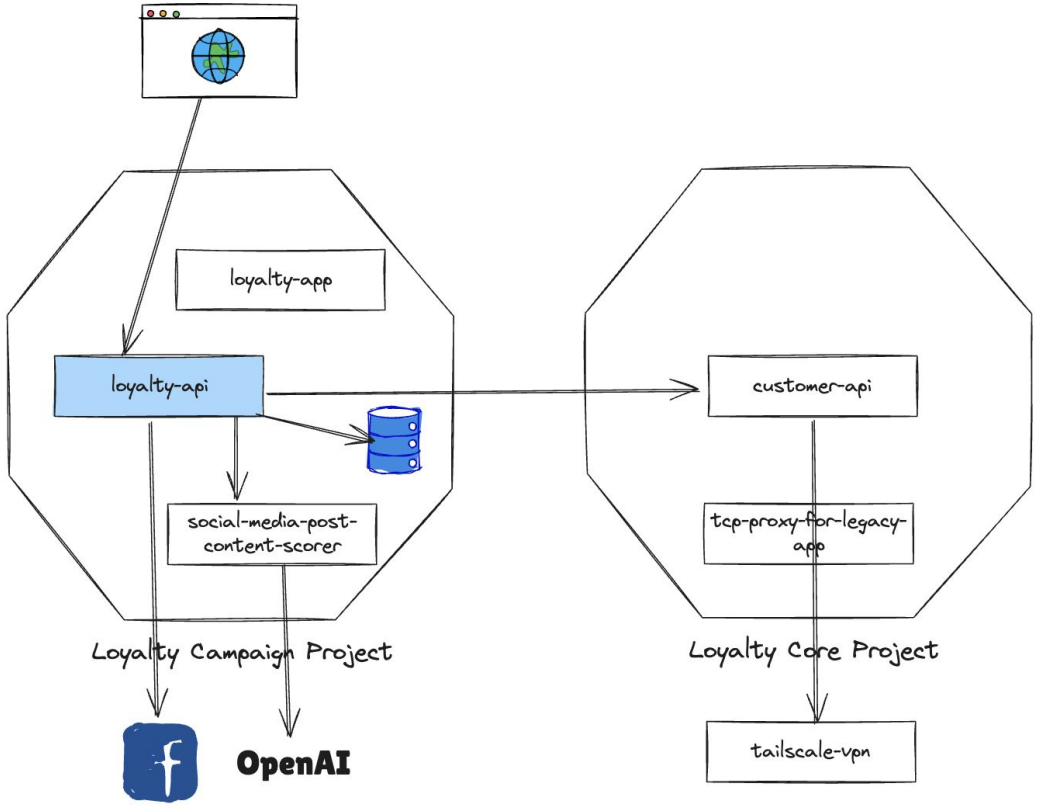
Lab Part 3: Connect External GenAI Services to Choreo



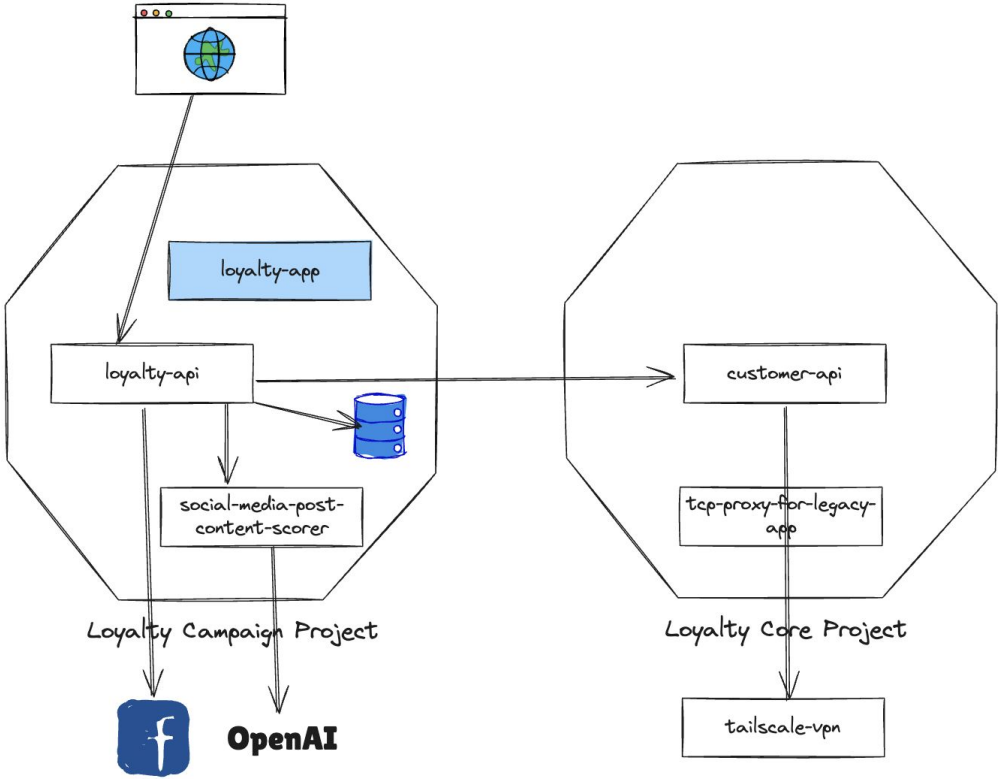
Lab Part 4: Consume GenAI via Choreo and Expose as Organization-Scoped API



Lab Part 5: Develop Loyalty API



Lab Part 6: Setup Facebook Login & Web App




Lets try it out..

Choreo in Action: Key Highlights

- Self-Service Provisioning of Infra Dependencies
  - Created components, APIs, and connectivity without external DevOps support
- Seamless Onboarding of Legacy Services
  - Exposed a legacy loyalty system via a modern, secure REST API
- Built-in Integration with Existing Systems
  - Connected on-premise APIs to cloud-native components using Tailscale TCP proxy
- GenAI Integration
  - Added OpenAI-powered content scoring with just config
- Support for Local Development
  - Developed and tested backend locally while consuming cloud-hosted APIs
- Integrated Authentication Out of the Box
  - Used managed authentication feature of Choreo to login with Facebook
- Choreo Copilot for Dev & Deploy
  - Accelerated implementation with VSCode and MCP-assisted capabilities

Modernization is an ongoing journey—not just about migrating from legacy systems, but about continuously evolving, adapting, and pushing the boundaries of what's possible.

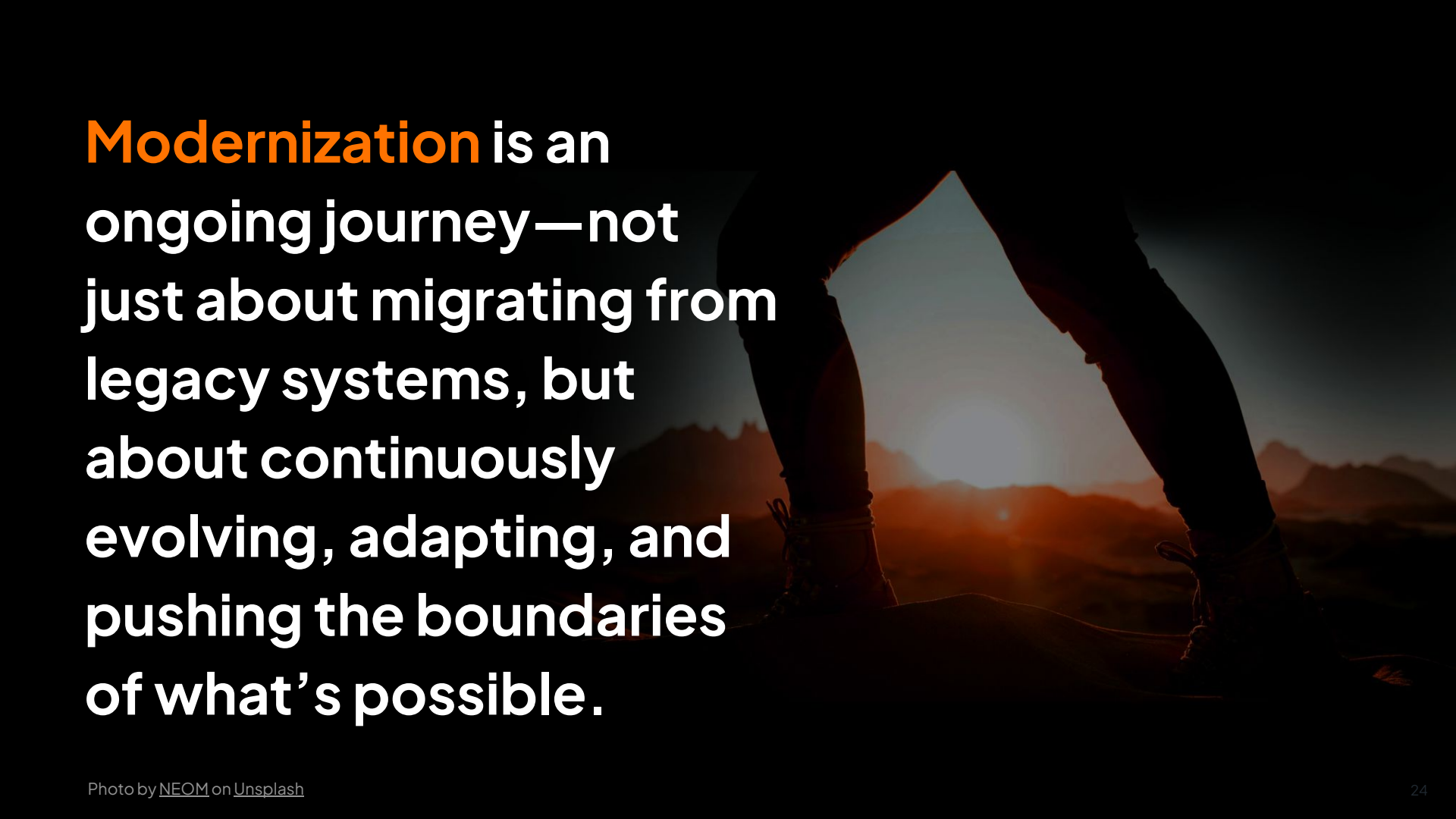


Photo by NEOM on Unsplash


Thank you!
20TH ANNIVERSARY EDITION
WSO2CONASIA
PLATFORMLESS MODERNIZATION