

Cloud-Ops Central

Phase 1: Problem Understanding & Industry Analysis

Goal - The primary objective of the "Cloud-Ops Central" project is to build a functional Minimum Viable Product . The goal is to create a multi-cloud resource dashboard that demonstrates all key concepts from the project documents, providing a unified platform for multi-cloud resource management, cost tracking, and DevOps automation. The project's unique value is its ability to centralize fragmented cloud operations into a single, intelligent Salesforce platform.

Requirement Analysis: The core features of the MVP, which serve as the key requirements, include:

- A dashboard for managing resources across multiple cloud providers (AWS, Azure, GCP).
- Functionality for cost tracking and automated budget alerts.
- Monitoring of simple deployment pipelines.
- The ability to generate basic reports and analytics.
- A user interface that is mobile-responsive.

Stakeholder Analysis: The target users, or stakeholders, for this project are:

- **Cloud Architects:** Responsible for the overall design and strategy of the cloud environment.
- **DevOps Engineers:** Manage CI/CD pipelines and automation.
- **Platform Engineers:** Focus on building and managing the cloud platform itself.
- **Site Reliability Engineers (SREs):** Ensure the reliability and performance of the cloud infrastructure.
- **Cloud Financial Analysts:** Manage and optimize cloud spending (FinOps).

Business Process Mapping: The project streamlines the following business process:

1. **Cloud Resource Provisioned:** A new cloud resource is created.
2. **Cost Data Ingestion:** The system simulates fetching cost data for the new resource from the cloud provider via a mock API.
3. **Budget Check:** The ingested cost is automatically compared against predefined budgets.
4. **Alert Trigger:** If the budget is exceeded, an automated alert is sent to the relevant stakeholders.
5. **Reporting and Analytics:** The data is compiled into reports and dashboards, allowing managers and financial analysts to monitor spending and resource utilization.

Industry-specific Use Case Analysis: The "Cloud-Ops Central" project addresses several critical industry challenges:

- **Multi-Cloud Sprawl:** It tackles the problem of having resources spread across multiple cloud providers and dozens of accounts, which can lead to inefficiencies and security risks.
- **Cost Optimization:** The project provides a solution to the lack of intelligent cost recommendations, which can result in significant cloud waste (estimated at 40%).
- **Fragmented DevOps Visibility:** It offers a unified view of CI/CD pipeline monitoring and IaC deployments, which are often fragmented across multiple tools.
- **Manual FinOps:** The platform automates manual tasks like cost analysis, chargeback, and budget planning, helping companies become more proactive with their cloud finances.

AppExchange Exploration

The project acknowledges the existence of existing cloud management applications on the Salesforce AppExchange. However, the project's goal is to build a custom solution from scratch to demonstrate a comprehensive range of skills. This approach provides a holistic, hands-on learning experience and results in a unique, portfolio-ready project that showcases an understanding of data modeling, process automation, integration, and UI development.