

# Intelligent Multi-Cloud Supply Chain & Operations Platform (IMSOP)

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This repository contains the documentation and source code for the **Intelligent Multi-Cloud Supply Chain & Operations Platform (IMSOP)**, a cloud-native platform for real-time supply chain visibility, predictive analytics, and intelligent automation.

## Project Overview

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IMSOP is designed to address the challenges of modern supply chains by providing a unified, intelligent platform that integrates data from various sources, applies machine learning to generate predictive insights, and enables both automated and human-in-the-loop decision-making. The platform is built on a microservices architecture, leveraging a multi-cloud strategy across Azure and AWS to ensure high availability, scalability, and cost-effectiveness.

For a detailed understanding of the project, please refer to the following documents:

- [Requirements Specification](#): Detailed functional and non-functional requirements for the platform.
- [Design Document](#): High-level system architecture, design principles, and technology stack.

## Getting Started

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This project is organized into the following directories:

- `/docs` : Contains all project documentation, including requirements, design, and architecture diagrams.
- `/src` : Will contain the source code for the various microservices and frontend applications.

- `/infra` : Will contain the Infrastructure as Code (IaC) scripts for provisioning the cloud environment.

To get started with the project, you will need to have the following tools installed:

- .NET Core SDK
- Node.js and npm
- Docker and Docker Compose
- Terraform
- Azure CLI
- AWS CLI

Detailed setup instructions will be provided in the respective service directories as the project evolves.