

## Project Design Phase

### Solution Architecture

Date	25June2025
Team ID	LTVIP2025TMID31104
Project Name	Field Service Work Order Optimization
Maximum Marks	4 Marks

#### Solution Architecture:

The **Solution Architecture** for the Field Service WorkOrder Optimization project is designed to address key inefficiencies in field service management—especially around technician assignment, scheduling delays, and communication gaps. It utilizes Salesforce’s customizable platform, automation tools, and reporting capabilities to build a scalable, cloud-native solution.

- Automate and optimize technician assignment based on skills, availability, and location
- Provide real-time visibility into work order status for stakeholders
- Improve operational efficiency using Apex triggers, workflows, and batch jobs
- Enable technician and customer communication through automated email notifications
- Create insightful dashboards and reports for monitoring service performance

#### Architecture Overview

This project uses **Salesforce** as a centralized cloud platform. The system architecture includes:

- **Custom Objects:** Technician, WorkOrder, Assignment
- **Lightning App:** Unified interface for managers to view/manage assignments
- **Apex Classes & Triggers:**
  - WorkOrderClass for auto-assignment logic
  - AssigningEmail to notify technicians
  - CompletionMail to notify customers upon resolution
- **Batch Apex & Scheduled Class:**
  - Record Deletions to clean old records
  - ScheduleClass for monthly cleanup
- **Reports & Dashboards:**
  - Technician performance, WorkOrder completion, and status tracking

#### Features:

<b>Automated Technician Assignment</b>	Improves dispatch efficiency and reduces manual errors
<b>Email Alerts to Technicians &amp; Customers</b>	Enhances communication and satisfaction
<b>Scheduled Data Cleanup</b>	Ensures system remains optimized and clutter-free

## Reports & Dashboards

Provides operational insights and tracks KPIs

## Custom App Interface

Easy navigation and usability for admin and technicians

### Example - Solution Architecture Diagram:

#### Field service work order optimization

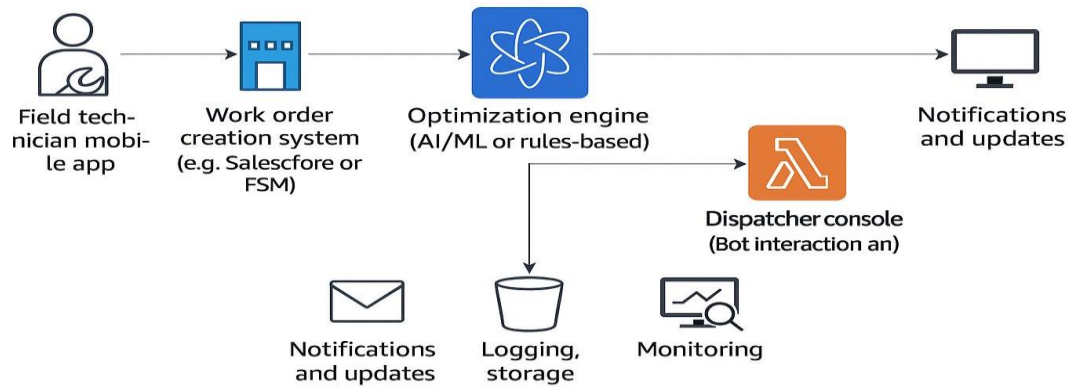


Figure 1: Architecture and data flow of the voice patient diary sample application