Salesforce Integration & External Access

Understanding the key concepts and foundational steps required for making Salesforce communicate with external software systems through Phase 7 integration mastery.

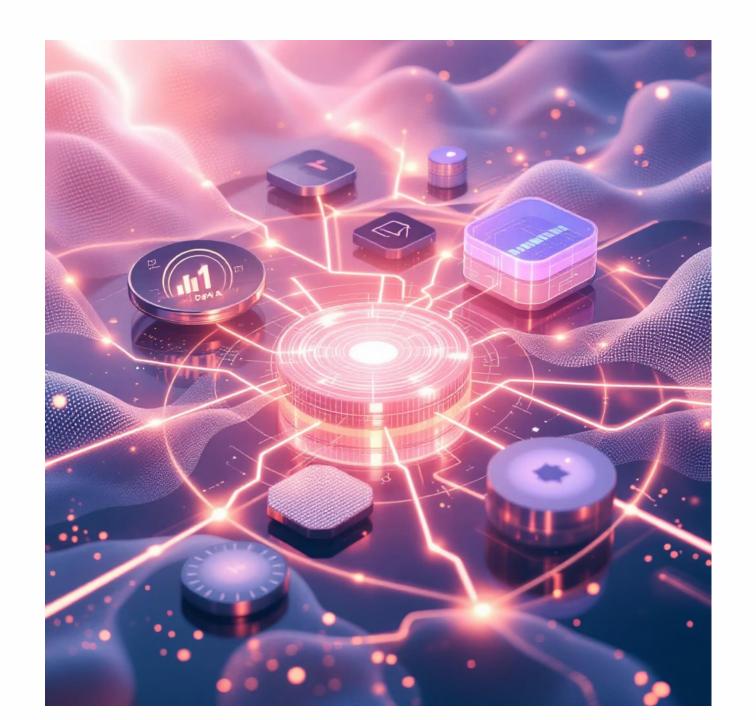


Integration Foundation

The Challenge

Modern businesses rely on multiple software systems that need to work together seamlessly. Salesforce rarely operates in isolation - it must communicate with external applications, databases, and services to provide comprehensive business solutions.

This integration capability transforms Salesforce from a standalone CRM into a central hub that orchestrates data and processes across your entire technology ecosystem.



Core Integration Concepts

Named Credentials

A secure place in Setup to store the URL and login details for an external system. It's like a secure password locker for your code, ensuring sensitive authentication information is protected and centrally managed.

External Services

A clicks-not-code tool that allows a Flow to connect to an external system, acting like a pre-built remote control. This empowers administrators to create integrations without writing complex code.

Web Services & Callouts

When Apex code makes a phone call to an external system to ask for data or give a command. These REST and SOAP callouts enable real-time communication between Salesforce and external applications.



Communication Patterns

01

Platform Events

A way for Salesforce to send a radio broadcast message (e.g., "New appointment booked!") that other authorized systems can listen for. This enables real-time event-driven architecture across your technology stack.

02

Change Data Capture

A specialized broadcast that acts like a security camera, sending detailed notifications whenever a specific record is created, updated, or deleted. This ensures external systems stay synchronized with Salesforce data changes.

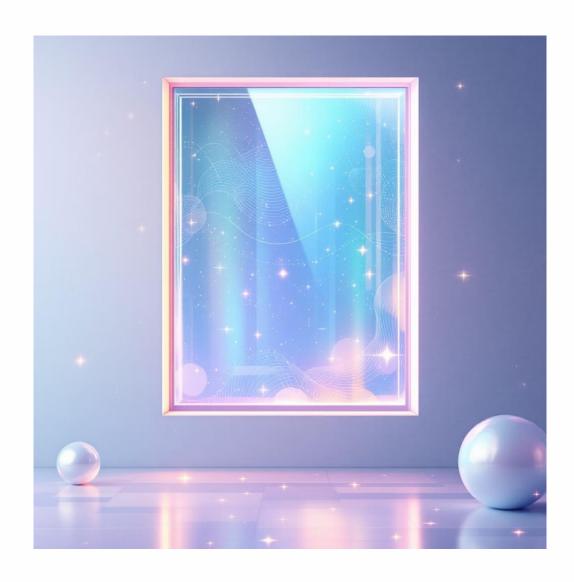
Data Access & Connectivity

Salesforce Connect

A feature that creates a live window to view and interact with data in an external system without copying it into Salesforce. This virtual integration approach maintains data integrity while providing seamless access to external information.

Benefits

- Real-time data access without duplication
- Reduced storage requirements
- Single source of truth maintained
- Seamless user experience



Security & Governance

API Limits

The daily data plan for your org, which limits how many API requests can be made in 24 hours to ensure platform stability. Understanding and monitoring these limits is crucial for maintaining system performance.

OAuth & Authentication

A secure process, similar to the "Log in with Google" button, that allows applications to access data on behalf of a user without sharing the user's actual password. This industry-standard protocol ensures secure, authorized access.

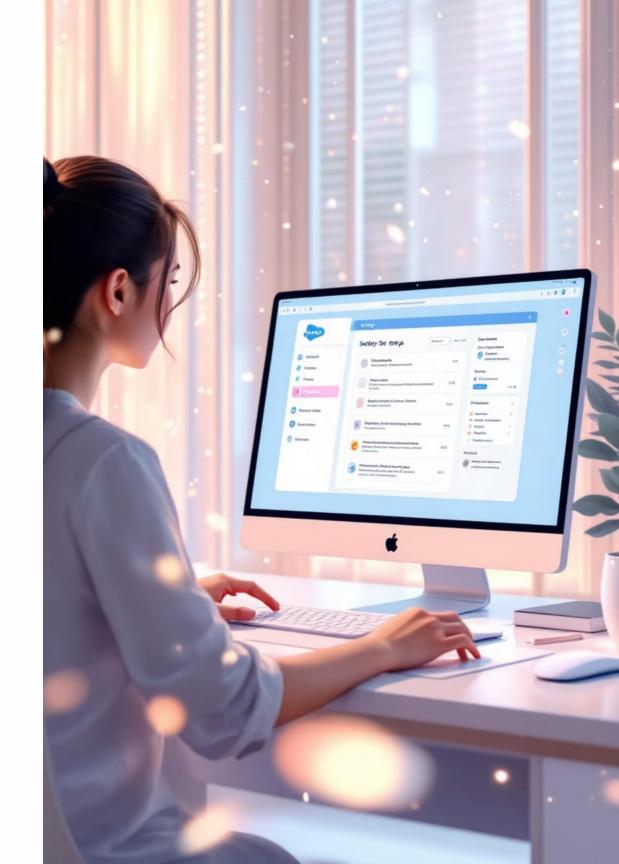
Remote Site Settings

A security feature that acts as a firewall's approved list, where you must add a website's URL before your Apex code is allowed to make a callout to it. This prevents unauthorized external communications.

Hands-On Implementation

To reinforce these integration concepts, practical tasks were completed in Salesforce Setup, demonstrating real-world application of the theoretical knowledge through hands-on configuration and implementation.

These exercises bridge the gap between conceptual understanding and practical execution, ensuring comprehensive mastery of Salesforce integration capabilities.



Task 1: Remote Site Settings Configuration

Navigate to Setup

Accessed Setup > Remote Site
Settings to begin the security
configuration process for external
system communication.

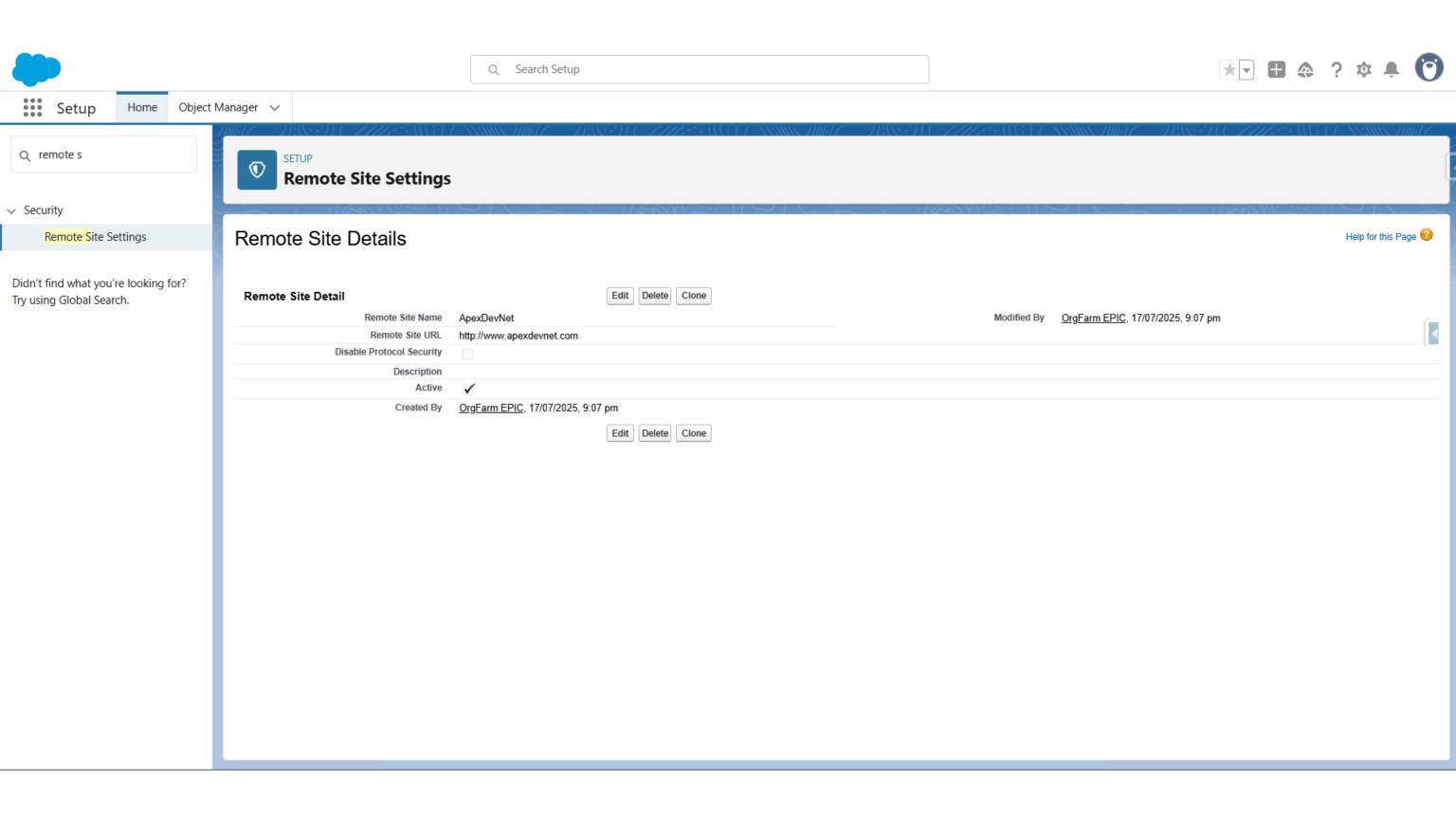
Create New Setting

Clicked "New Remote Site" and configured the following details:

- Remote Site Name: Maps
- Remote Site URL: https://maps.googleapis.com
- Active: Checked

Save Configuration

Successfully saved the record, enabling secure callouts to the Google Maps API for location-based functionality within Salesforce applications.



Task 2: Platform Event Creation

1 — Platform Event Setup

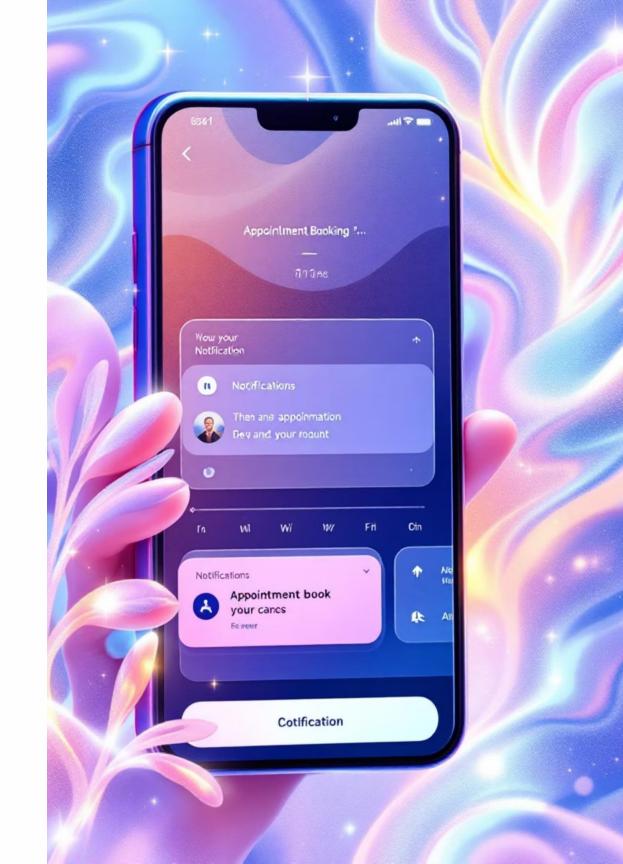
Navigated to Setup > Platform Events and clicked "New Platform Event" to create a custom event for appointment notifications.

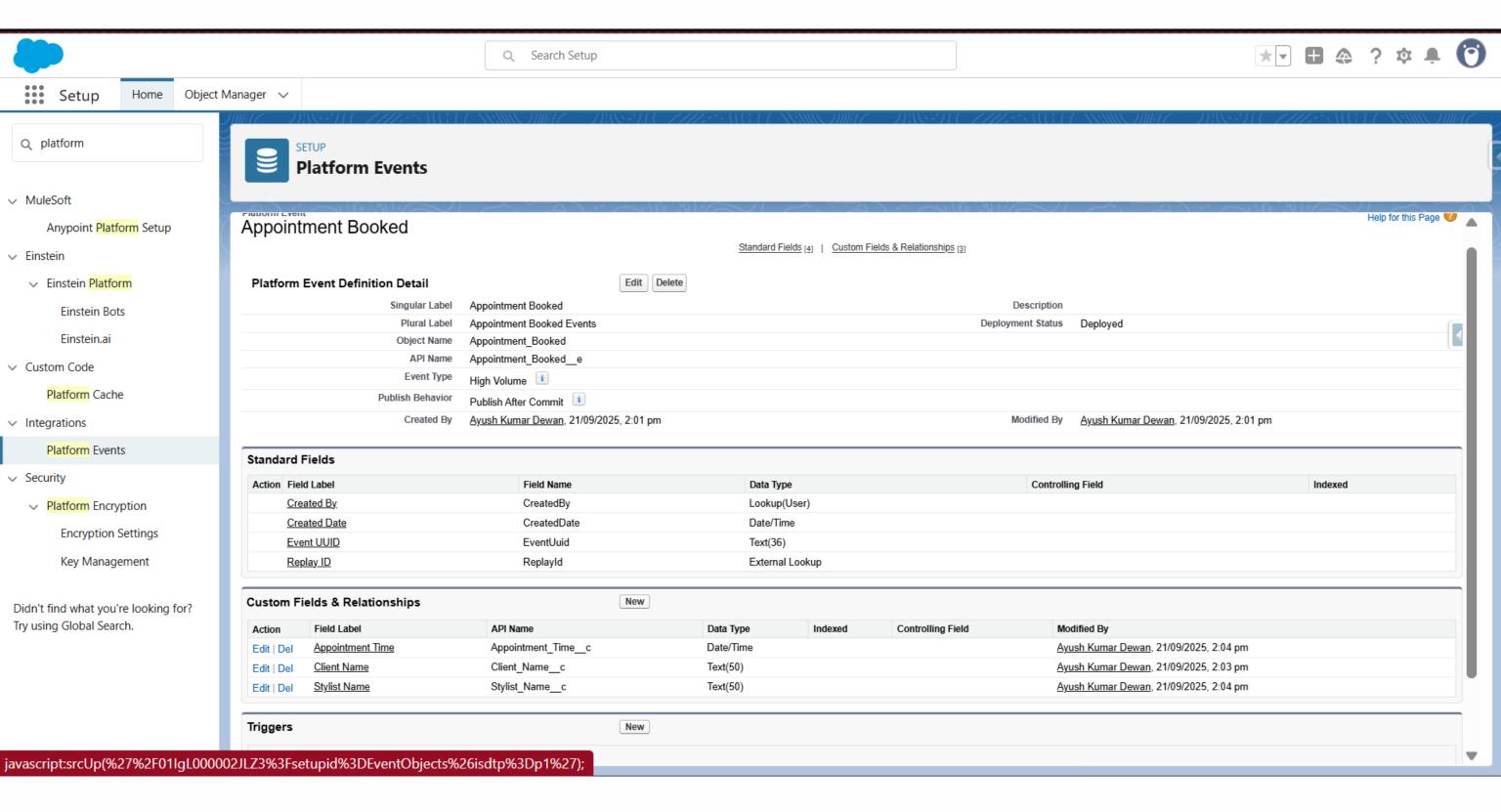
Event Configuration

Defined the event with Label: "Appointment Booked" and Publish Behavior: "Publish After Commit" to ensure reliable event delivery.

3 — Custom Fields Added

Enhanced the event with three custom fields: Client Name (Text), Appointment Time (Date/Time), and Stylist Name (Text) for comprehensive appointment data.







Integration Mastery Achieved

8

2

100%

Core Concepts

Practical Tasks

Phase 7

Mastered essential integration patterns

Completed hands-on implementations

Successfully completed

Phase 7 has equipped you with both theoretical knowledge and practical experience in Salesforce integration. You now understand how to securely connect Salesforce with external systems, manage authentication, handle real-time events, and maintain data synchronization across your technology ecosystem.