

## Phase 7: Integration & External Access

### 1. Named Credentials

- Configure **Named Credentials** for secure authentication with external APIs.
- Example: Connect to **property aggregator APIs** (like MagicBricks or 99acres) to fetch external property listings.
- Simplifies authentication (manages endpoint + credentials in one place).

### 2. External Services

- Use **Schema/Swagger definitions** to integrate REST/SOAP APIs.
- Example: Connect Salesforce with a **payment gateway API** for booking deposits.
- Example: Link with an **external SMS service** for sending visit confirmations.

### 3. Web Services (REST/SOAP)

Salesforce can both **expose** and **consume** web services:

- **Expose REST API (Outbound):**
  - Allow partner real estate firms to fetch **property availability** from Salesforce.
  - Example Endpoint: /services/apexrest/Property/{id}
- **Consume REST API (Inbound):**
  - Fetch property listings from aggregator sites.
  - Example: Import property details (Location, Price, Status).

### 4. Callouts

- Use **Apex Callouts** to connect with external APIs.
- Example: Call **Google Maps API** to validate property location or calculate distance from city center.
- Example: Call **Twilio SMS API** to send visit confirmation texts.

## 5. Platform Events

- Create **custom Platform Events** for real-time communication across systems.
- Example: When a deal is “Closed Won,” fire a platform event:
  - Update external accounting system with booking amount.
  - Notify customer service team automatically.

## 6. Change Data Capture (CDC)

- Enable CDC for key objects: **Lead, Property, Deal**.
- Example: If a property’s status changes to “Sold,” external partner portals are updated instantly.
- Example: If a Lead is converted → external marketing system removes customer from campaign list.

## 7. Salesforce Connect (External Objects)

- Connect to an **external SQL database** of properties without importing into Salesforce.
- Agents can view and filter **external property data** inside Salesforce as if it were native.

## 8. API Limits & Best Practices

- **Governor Limits:** Salesforce enforces daily API call limits → must design integrations efficiently.
- Use **Bulk APIs** for high-volume data (property imports).
- Use **Caching** for repeated external calls (like property listings).

## 9. OAuth & Authentication

- Secure integrations using **OAuth 2.0**.
- Example: Integrate Salesforce with **Google Drive/OneDrive** for property document storage.
- Example: Allow external partners to log in via **OAuth-enabled community portal**.

## 10. Remote Site Settings

- Before making callouts to an external system, whitelist its URL in **Remote Site Settings**.
- Example: Add URLs for Twilio, MagicBricks API, Google Maps API.