

# Phase 7: Integration & External Access

## 1. Named Credentials

- **What it is:** The modern, secure way to store the URL of an external service and its required authentication details. It's a best practice for managing integration points declaratively.
- **Application in Tourism Management:** In a typical project, you would create a Named Credential for each external partner API, such as a hotel booking system or a payment gateway. This allows your code to connect to these systems securely without hardcoding URLs or passwords.
- **Note:** This feature is fundamentally designed to support connections to external systems, working alongside Callouts and Authentication protocols.

## 2. Remote Site Settings

- **What it is:** The older method for allowing Salesforce code (Apex) to make callouts to a specific external URL. You must register the domain of the external site before Salesforce will permit the connection.
- **Application in Tourism Management:** This would have been used to whitelist the domains of partner APIs, such as <https://api.hotelpartner.com> or <https://api.paymentprovider.com>, to allow your application to exchange data with them.
- **As all operations are managed internally, this feature is not required for this project.**

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

- **What they are:** A **Web Service** is an API provided by an external system. A **Callout** is the action of your Salesforce code "calling" that web service to send or retrieve data, typically using REST or SOAP protocols.
- **Application in Tourism Management:** This would be the core mechanism for integration. For example, making a callout to a Global Distribution System's REST API to check for flight availability in real-time.

- **As all operations are managed internally, this feature is not required for this project.**

#### 4. External Services

- **What it is:** A declarative (low-code) feature that allows you to connect to an external REST API that has an OpenAPI specification, automatically creating usable actions in Salesforce Flow.
- **Application in Tourism Management:** This could be used to connect to a weather API or a local activities provider to enrich a travel package, allowing non-developers to add integration points to business processes.
- **As all operations are managed internally, this feature is not required for this project.**

#### 5. Platform Events

- **What it is:** A secure and scalable way to send and receive custom notifications. It enables an event-driven architecture where your app can publish an event, and other external systems can subscribe and react to it.
- **Application in Tourism Management:** This would be used to notify external systems in real-time. For example, publishing a `Booking_Confirmed__e` event to trigger an SMS notification via a third-party messaging service.
- **As all operations are managed internally, this feature is not required for this project.**

#### 6. Change Data Capture (CDC)

- **What it is:** A feature that publishes events when data in a Salesforce record changes (is created, updated, or deleted). Its purpose is to broadcast Salesforce data changes to external systems to keep them in sync.
- **Application in Tourism Management:** This would be used to synchronize your Salesforce customer data with an external marketing database or a partner's system, ensuring they always have the latest contact information.
- **As all operations are managed internally and do not require live external updates, this feature is not required for this project.**

## 7. Salesforce Connect

- **What it is:** A data integration feature that allows you to view and modify data stored in an external system without copying it into Salesforce. It surfaces external data as "External Objects."
- **Application in Tourism Management:** This would allow your travel agents to see a partner hotel chain's live room inventory directly within Salesforce, without storing that volatile data in your org.
- **As all operations are managed internally, this feature is not required for this project.**

## 8. API Limits

- **What it is:** Governor limits on the number of API calls you can make to and from your org in a 24-hour period. These limits are crucial to manage in any integration-heavy project.
- **Application in Tourism Management:** A project making many calls to external booking engines or payment gateways would need to carefully design its processes to stay within these limits and avoid service disruptions.
- **As all operations are managed internally, this feature is not required for this project.**

## 9. OAuth & Authentication

- **What it is:** The security framework used to verify identity and grant secure access between systems. OAuth is a standard protocol that allows one application to access data in another on behalf of a user.
- **Application in Tourism Management:** This would be used to securely authenticate with partner APIs. For instance, using an OAuth 2.0 flow to get a secure access token before making a callout to book a hotel room.
- **As all operations are managed internally, this feature is not required for this project.**