

PHASE – 7 Integration & External Access

1.Named Credentials

Named Credentials store the authentication details for external systems in Salesforce securely. They simplify callouts by managing login credentials and endpoints, allowing Apex code to use a simple reference like `callout:My_Named_Credential`. This ensures secure, reusable, and easier integration setup.

SETUP Named Credentials					
Named Credentials External Credentials External Auth Identity Providers					
2 Items - Sorted by Label					
New					
Label	Type	URL	External Credential	Actions	
ODataDemo	Secured Endpoint	https://services.odata.org	TwilioOAuthCred		
SMS_Twilio	Secured Endpoint	https://api.twilio.com	TwilioOAuthCred		

SETUP Named Credentials		
Named Credentials External Credentials External Auth Identity Providers		
1 Items - Sorted by Label		
New		
Label	Authentication Protocol	Actions
TwilioOAuthCred	OAuth 2.0	

2. External Services

External Services allow Salesforce to connect to external APIs using an OpenAPI (Swagger) schema without writing code. Once imported, Salesforce automatically creates actions that can be used in Flow Builder to call external endpoints. It simplifies API integration for admin users.

The screenshot shows the 'External Services' setup page in Salesforce. At the top, there's a 'SETUP' tab and a title 'External Services'. A button 'Add an External Service' is in the top right. Below the header, there are five progress bars: 'Total Registrations' (1 used of 700), 'Active Operations' (1 used of 3,000), 'Total Operations' (1 used of 10,000), 'Active Objects' (2 used of 3,000), and 'Total Objects' (2 used of 10,000). A message says '1 Items - Sorted by External Service Name - Last refreshed a few seconds ago'. Below this is a table with columns: 'External Service Name', 'Description', 'Active Operations', 'Total Operations', 'Active Objects', 'Total Objects', 'Credentials', 'Configuration', and 'Actions'. The table contains one row for 'ClinicBookingAPI' with values: 1, 1, 2, 2, 'SMS_Twilio', 'Complete'. A dropdown arrow is in the 'Actions' column.

External Service Name	Description	Active Operations	Total Operations	Active Objects	Total Objects	Credentials	Configuration	Actions
ClinicBookingAPI		1	1	2	2	SMS_Twilio	Complete	

3. Web Services (REST/SOAP)

Salesforce can expose data and logic to external systems via Apex REST or SOAP web services. Using annotations like `@RestResource` or `webservice`, developers can build APIs for external apps to create or update records such as Appointments or Patients directly in Salesforce.

4. Callouts

Apex callouts enable Salesforce to send requests to external systems (like Twilio for SMS or hospital APIs). They can use HTTP methods (GET, POST, PUT, DELETE) to exchange data securely. Named Credentials handle authentication, and callouts can be triggered by Flows, Apex, or scheduled jobs.

5. Platform Events

Platform Events are used for real-time event-driven communication. They allow Salesforce and external systems to publish and subscribe to events (like "Appointment Booked") asynchronously. This helps integrate systems without constant API calls and ensures data synchronization across platforms.

The screenshot shows the 'Platform Events' setup page in Salesforce. At the top, there's a 'SETUP' tab and a title 'Platform Events'. Below the header, there's a description: 'Use platform events to define the data to be delivered in custom notifications. Monitor the publishing and delivery usage for platform events and change events.' Below this is a table titled 'Event Allocations' with columns: 'Item', 'Usage', and 'Allocation'. The table contains two rows: 'High-Volume Platform Event Hourly Publishing Allocation' with Usage 0 and Allocation 50,000, and 'High-Volume Platform Event and Change Event Daily Delivery Allocation' with Usage 0 and Allocation 10,000. Below this is a section titled 'Custom Events' with a button 'New Platform Event'. It contains a table with columns: 'Action', 'Label', 'Deployed', and 'Description'. The table contains one row for 'Appointment_Event' with 'Deployed' checked.

Item	Usage	Allocation
High-Volume Platform Event Hourly Publishing Allocation	0	50,000
High-Volume Platform Event and Change Event Daily Delivery Allocation	0	10,000

Action	Label	Deployed	Description
Edit Del	Appointment_Event	✓	

6. Change Data Capture (CDC)

Change Data Capture automatically notifies external systems when records are created, updated, deleted, or undeleted in Salesforce. It helps maintain real-time data synchronization and eliminates the need for polling APIs. External apps can subscribe to these events through the Streaming API.

7. Salesforce Connect

Salesforce Connect enables access to external data sources (like an external patient database) in real time without storing the data in Salesforce. It uses OData connections to display external tables as External Objects (___x), allowing users to view and relate data seamlessly within Salesforce.

SETUP

External Data Sources

External Data Sources

Access data in other Salesforce orgs as well as third-party databases and content systems.

View:

All

 Create New View

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Other All

		New External Data Source	Connect to Amazon DynamoDB		
Action	Name +	External Data Source	Type	URL	
Edit Del	Patient_External_DB	Patient_External_DB	Salesforce Connect: OData 4.0	https://services.odata.org/V4/Northwind/Northwind.svc	

8. API Limits

Salesforce enforces daily API usage limits based on edition and licenses. Monitoring and optimizing API calls helps prevent hitting these limits. Using Bulk API, Platform Events, or caching reduces API usage. You can view and set notifications under Setup → System Overview → API Usage Notifications.

SETUP

System Overview

System Overview

View key usage data for your org.

Configure Messages

Schema

YOUR CUSTOM OBJECTS + YOUR CUSTOM SETTINGS

4

1% (maximum 400)

TOTAL CUSTOM OBJECTS + TOTAL CUSTOM SETTINGS

5

0% (maximum 3,000)

YOUR CUSTOM METADATA TYPES

0

0% (maximum 200)

TOTAL CUSTOM METADATA TYPES

0

0% (maximum 350)

CUSTOM METADATA TYPE USAGE

0%

0% (0 of 10,000,000 characters)

DATA STORAGE

378 KB (Approx.)

7% (maximum 5.0 MB)

API Usage

API REQUESTS, LAST 24 HOURS

240

1% (maximum 15,000)

9. OAuth & Authentication

OAuth 2.0 is the modern authentication method for secure access between Salesforce and external apps. It uses tokens instead of passwords. Connected Apps manage these tokens, enabling integrations like patient portals, mobile apps, and external APIs to connect securely to Salesforce data.

SETUP

Auth. Providers

Auth. Providers

Help for this Page

Action	Name *	URL Suffix	Provider Type	Created Date
Edit Del	TwilioAuthProvider	TwilioAuthProvider	Open ID Connect	10/16/2025, 6:27 AM

10. Remote Site Settings

Remote Site Settings define trusted external URLs that Salesforce can communicate with. Before making an Apex callout to an external API, its base URL must be added here. This prevents unauthorized external access and ensures security compliance within Salesforce integrations.