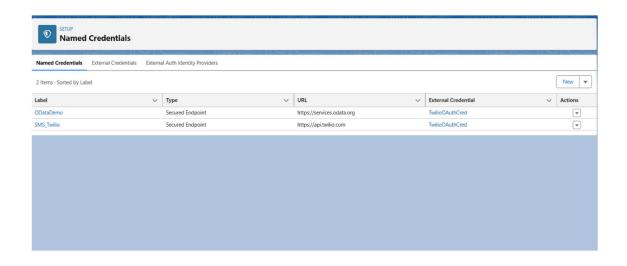
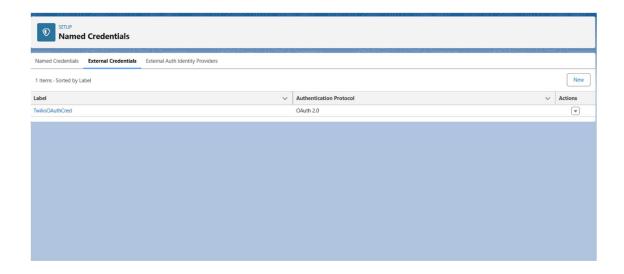
<u>PHASE - 7</u> Integration & External Access

1. Named Credentials

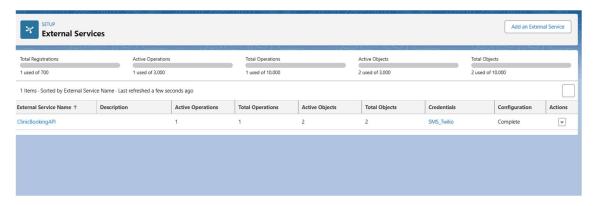
Named Credentials store the authentication details for external systems in Salesforce securely. They simplify callouts by managing login credentials and endpoints, allowing Apex code to use a simple reference like callout:My_Named_Credential. This ensures secure, reusable, and easier integration setup.





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.



3. Web Services (REST/SOAP)

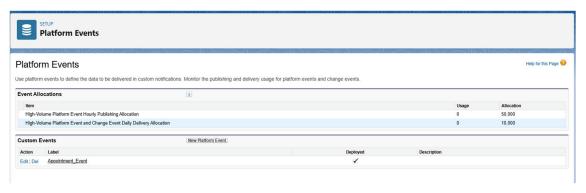
Salesforce can expose data and logic to external systems via Apex REST or SOAP web services. Using annotations like @RestResource or webService, developers can build APIs for external apps to create or update records such as Appointments or Patients directly in Salesforce.

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.

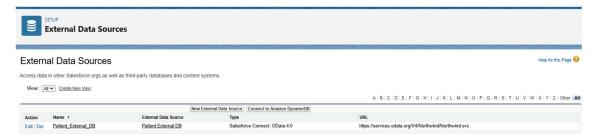


6. Change Data Capture (CDC)

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.

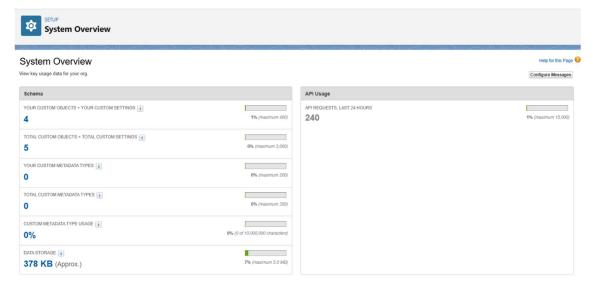
7. Salesforce Connect

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.



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 \rightarrow System Overview \rightarrow API Usage Notifications.



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.



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.