Phase 7: Integration & External Access

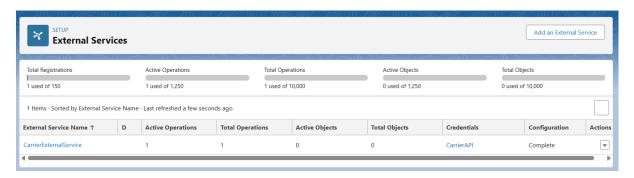
1. Named Credentials

- Named Credentials securely store endpoint URLs and authentication details, avoiding hard-coded credentials in Apex or Flows.
- They simplify external callouts by linking with **External Credentials** (e.g., ShipmentAPI_Credential) for secure and reusable integrations.



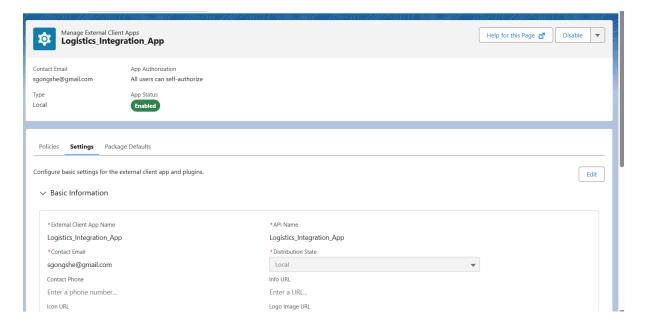
2 External Services

- External Services connect Salesforce to external APIs by registering a schema (Swagger/OpenAPI) and exposing API operations inside Flows and Apex without custom code.
- They use **Named Credentials** (e.g., CarrierAPI) for authentication, making integrations secure and reusable.



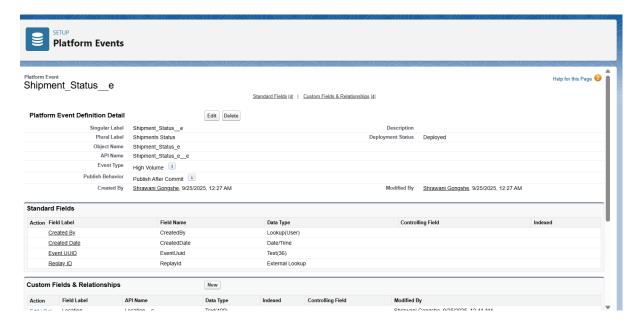
3 Web Services (REST/SOAP)

- External Client App Setup The *Logistics_Integration_App* is enabled in Salesforce to allow secure access for REST/SOAP web service integrations.
- **Authorization & Connectivity** The app authorization is configured so that users can self-authorize, enabling smooth connectivity for consuming Salesforce web services.



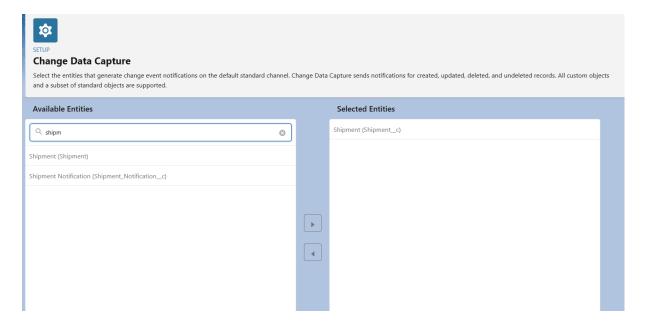
4 Platform Events

- **Platform Event Definition** Created *Shipment_Status__e* as a high-volume event for publishing shipment updates in real-time.
- **Custom Fields & Replay Support** Added custom fields (e.g., Location, Status) along with standard fields like ReplayId to support event tracking and reliable message delivery.



5 Change Data Capture

- **CDC Configuration** Enabled Change Data Capture for the *Shipment_c* object to track create, update, delete, and undelete events.
- **Real-time Notifications** Configured CDC to publish change events, allowing external systems to subscribe and stay updated with shipment record modifications.



6 Salesforce Connect

- External Data Integration Salesforce Connect enables real-time access to external system data (like ERP or logistics databases) without storing it in Salesforce.
- **OData/External Objects** External objects are used to represent external data sources via OData, allowing seamless use in reports, lookups, and relationships.

7 API Limits

• **Optimization** – Implement strategies like bulk API, composite requests, and event-driven architecture (Platform Events/CDC) to reduce API consumption and stay within limits.

8 Remote Site Settings

- Remote Site Creation Configured a remote site named *CarrierAPI* with the URL https://api.carrier.example to allow external API calls from Salesforce.
- **Secure Integration** Enabled remote site settings to whitelist external endpoints, ensuring secure communication with carrier systems for shipment tracking.

