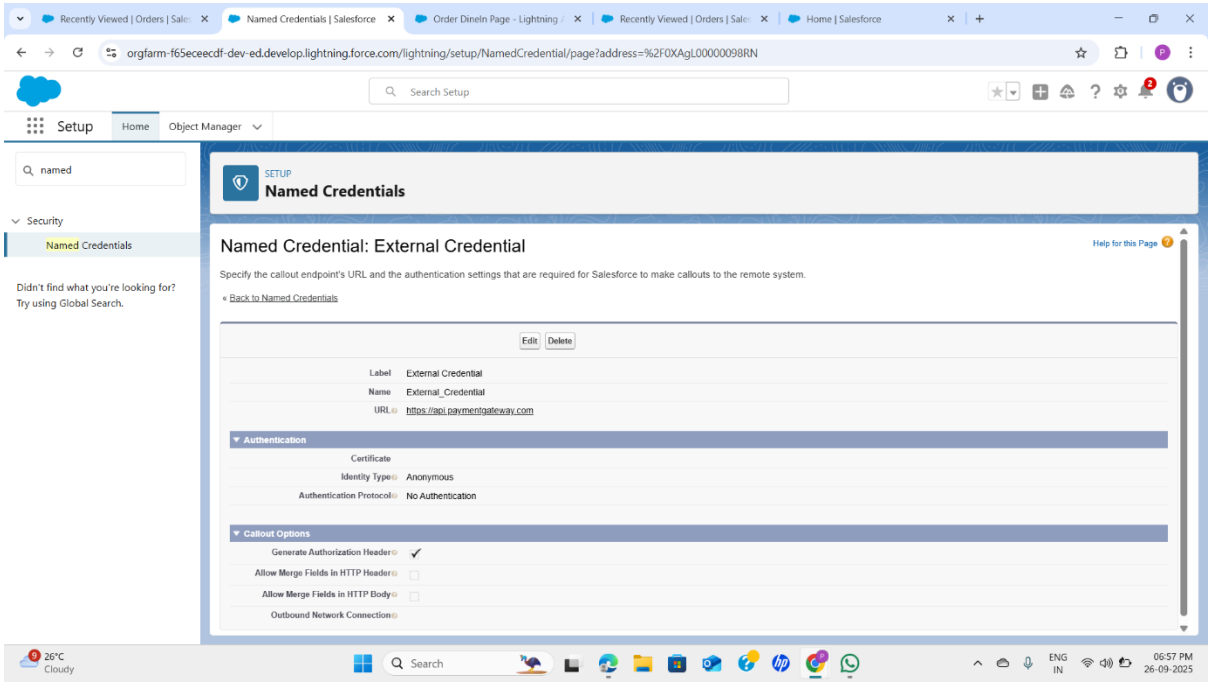
PHASE 7

Named Credentials

1. **Label & Name**
   - Label: PaymentGateway → Human-readable name
   - Name: PaymentGateway → API reference for Apex callouts
2. **URL**
   - External system endpoint URL, e.g., https://api.paymentgateway.com
   - This will be the base URL for all callouts using this Named Credential
3. **Identity Type**
   - Choose **Named Principal** → Single set of credentials used by all users
   - Optionally, you could choose **Per User** if each Salesforce user needs separate authentication
4. **Authentication**
   - If you have created an **External Credential** (OAuth, AWS SigV4), select it here
   - Otherwise, choose **Password Authentication** and enter username/password or token
5. **Generate Authorization Header** (optional)
   - For OAuth or token-based auth, Salesforce automatically adds the Authorization header to requests



Use Platform Events for Real-Time Notifications

Notify external systems when orders are updated

1. **Create a Platform Event**
    - Setup → Platform Events → New Platform Event
    - Name: OrderStatusEvent
    - Fields:
        - OrderId (Text)
        - Status (Picklist: Pending, Completed, Cancelled)
        - CustomerId (Text)
2. Platform Events are a **Salesforce event-driven messaging mechanism**.
3. They allow **Salesforce to notify external systems** (POS, delivery platforms, analytics tools) **in real-time** when something changes in Salesforce.
4. Think of it as **Salesforce "publishing" an event** that subscribers can react to immediately.

 Real-Time Communication

- External systems can subscribe via **CometD protocol** or **Streaming API**.
- Notifications are near-instant, no need for polling Salesforce.

 Custom Event Structure

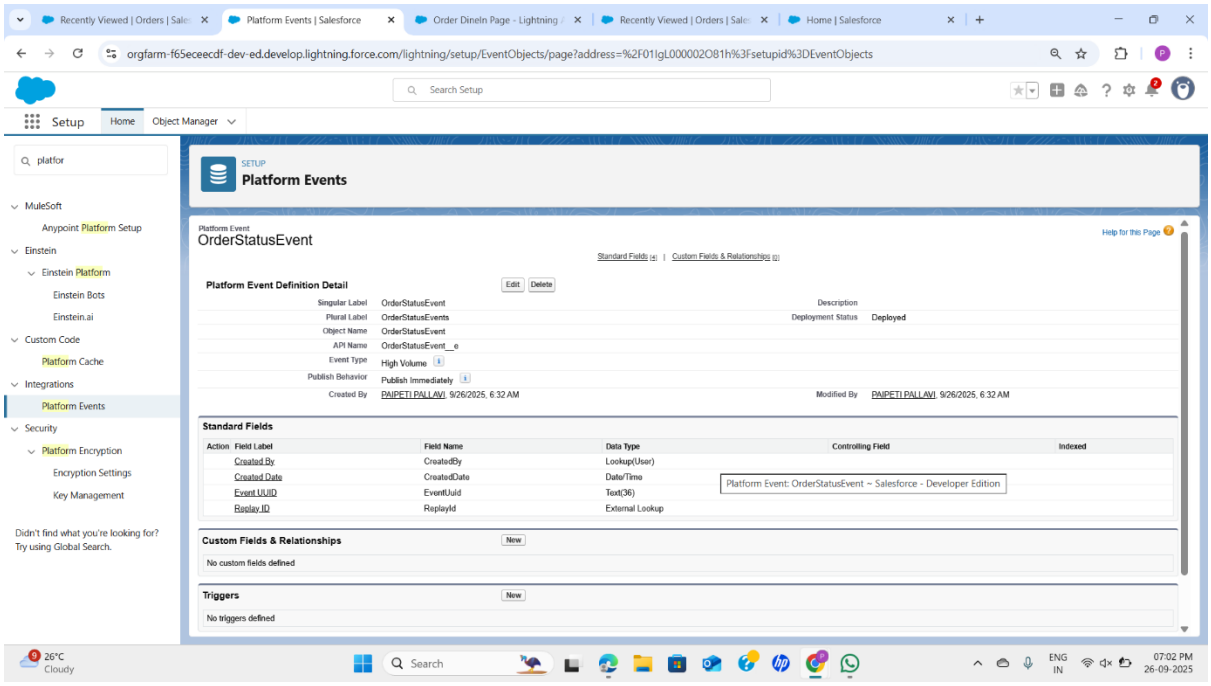
- You define which fields are sent in the event.
- Only necessary data is included, making it lightweight.

 Reliable Delivery

- Events can be replayed if an external system was temporarily disconnected.

 Supports Standard & Custom Subscribers

- Subscribers can be **Apex triggers**, **Lightning components**, **external middleware**, or other apps.



Change Data Capture

Automatically streams record changes for standard/custom objects

1. Setup → Change Data Capture → Select Object (e.g., Order__c)
2. Enable CDC → External system can subscribe for **insert, update, delete** events.

1. □ **Change Data Capture (CDC)** is a Salesforce **event-driven mechanism** that automatically **streams changes of Salesforce records** to external systems in real-time.
2. □ It is **especially useful for integrations**, so external systems (like POS, ERP, or analytics platforms) **stay in sync** with Salesforce without constant polling.

□ Real-Time Streaming

- Sends events immediately when a record is **created, updated, deleted, or undeleted**.
- Reduces the need for batch jobs or polling APIs.

□ Works with Standard & Custom Objects

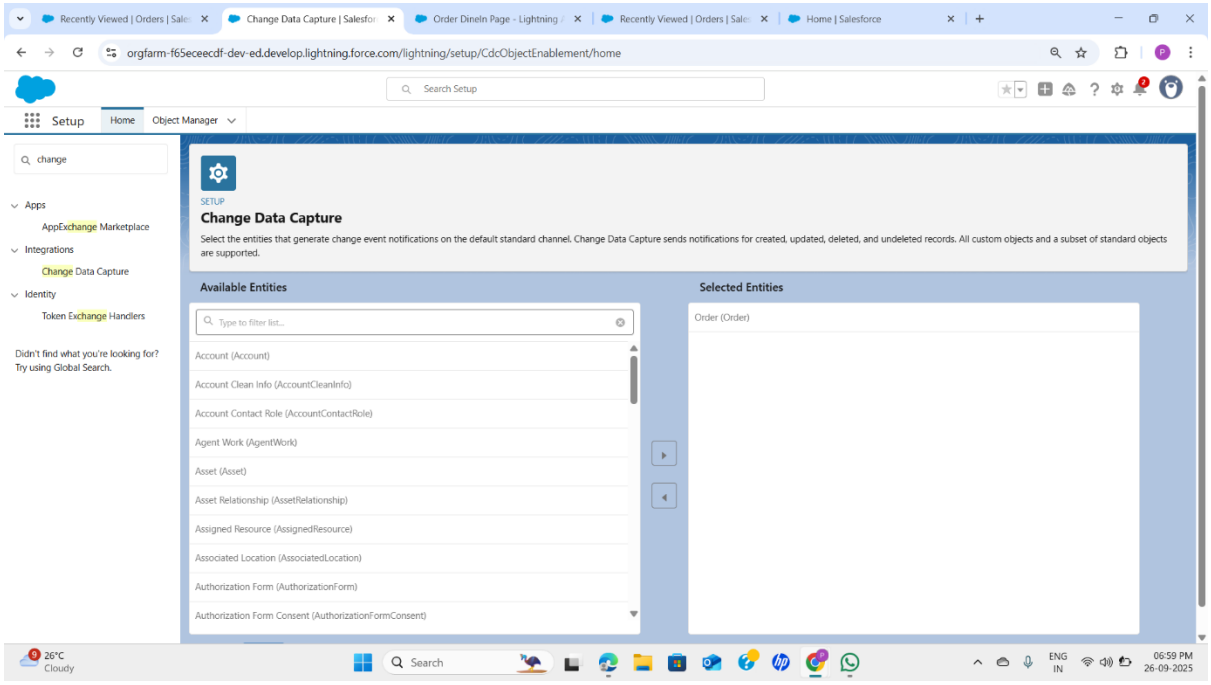
- Example objects:
  - Standard: Account, Contact, Order
  - Custom: Order__c, Booking__c

□ Reliable & Secure

- Events are delivered via **CometD protocol** or **Streaming API**.
- Can be **subscribed to by external systems** using secure authentication.

✅ Supports Bulk Changes

- Multiple changes can be sent in a single event batch, optimizing API usage.



Apex Callouts Using Named Credentials

- An **Apex callout** is when Salesforce (using Apex code) makes an **HTTP request** to an external system's API (e.g., Payment Gateway, Twilio, POS).
- Used for:
  - Sending data (POST) → e.g., payment requests
  - Fetching data (GET) → e.g., order status from POS
  - Updating data (PATCH/PUT)
  - Deleting data (DELETE)