# **Title: Integrated Sales and Service Management System**

# **Phase 3: Data Modeling & Relationships**

#### **Objective:**

To create and configure standard and custom objects, fields, record types, page layouts, and relationships in Salesforce. This phase ensures proper data structure, visibility, and access control.

## 1. Standard & Custom Objects

Objects in Salesforce are like tables in a database. They store records (rows) and fields (columns).

In Phase 3, we use both Standard Objects (already available in Salesforce) and Custom Objects (created to meet project-specific requirements).

## Object Name Type Description

Account Standard Represents a company or organization.

Contact Standard Represents individuals associated with accounts.

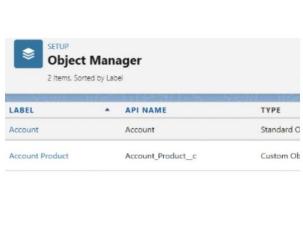
Opportunity Standard Tracks sales deals.

Case Standard Used to track customer issues or requests.

Product Standard Items or services sold to customers.

Account Product Custom Junction object linking Account ↔ Product.

Feedback Custom Tracks customer feedback linked to Cases.



Details

Description

API Name

Custom

Product\_c

Singular Label

Product

Plural Label

Products

SETUP > OBJECT MANAGER

Product

Fields & Relationships

Lightning Record Pages

Buttons, Links, and Actions

Page Layouts

Compact Layouts

Field Sets

Object Limits

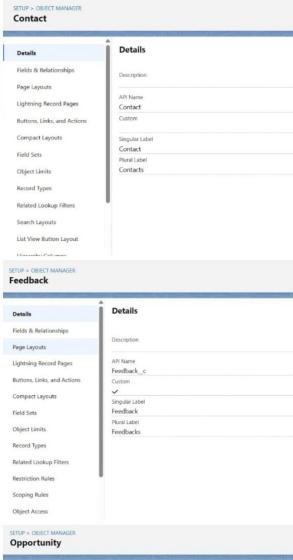
Record Types

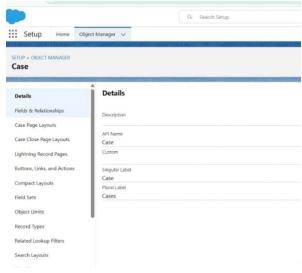
Restriction Rules

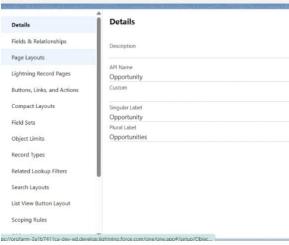
Scoping Rules

Related Lookup Filters

Details







#### 2. Custom Fields

## **Example Custom Fields Created:**

Object Field Name Type Description

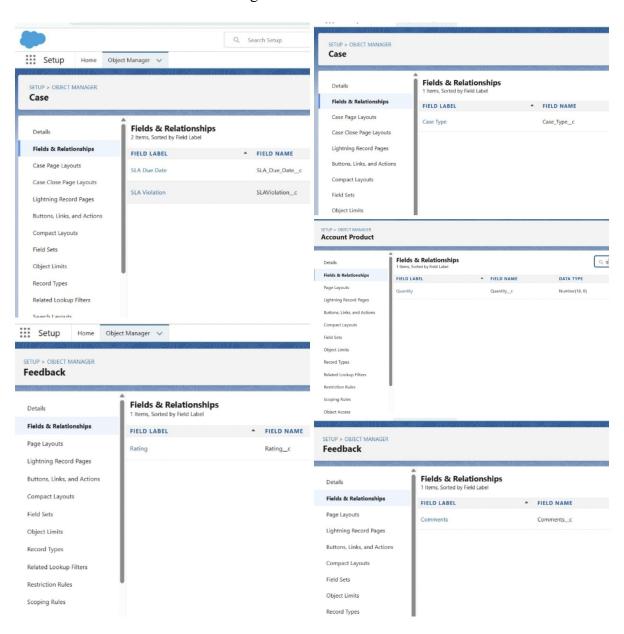
Case SLA Due Date Date/Time Expected resolution time.

Case Type Picklist Category of case (Web, Email, etc.)

Account Product Quantity Number Number of products linked to Account

Feedback Rating Number Customer rating (1–5).

Feedback Comments Long Text Customer comments.



#### **Profiles & Permissions (Object-Level Security)**

- Sales Team Profile → Read-only access to Cases.
- Support Team Profile → Read-only access to Opportunities.
- Full access to their own objects (Sales → Leads & Opportunities; Support → Cases & Feedback).

## 3. Record Types

Purpose: Allows Cases to have different layouts depending on type (Web vs Email).

#### **Steps:**

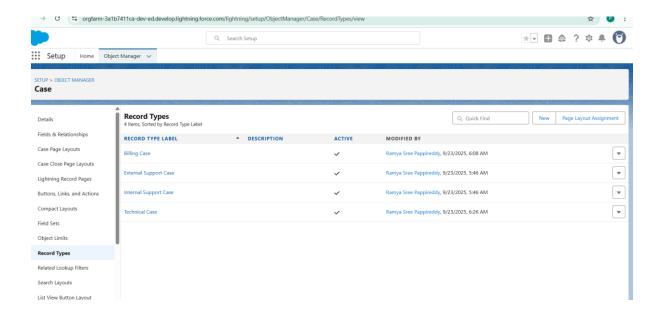
- 1. Setup  $\rightarrow$  Object Manager  $\rightarrow$  Case  $\rightarrow$  Record Types  $\rightarrow$  New.
- 2. Clone an existing Record Type or create from scratch.

#### 3. Enter Name:

- Web Case
- o Email Case

#### 4. Assign profiles:

- o Support User → can create/edit
- $\circ$  Sales User  $\rightarrow$  view-only
- 5. Configure picklist values as required for each record type.



## 4. Page Layouts & Compact Layouts

#### **Steps:**

#### A. Page Layouts for Case

1. Navigate to:

Setup  $\rightarrow$  Object Manager  $\rightarrow$  Case  $\rightarrow$  Page Layouts.

- 2. Create or edit two layouts to match the Case Record Types created earlier:
  - o Web Case Layout
  - Email Case Layout
- 3. Customize the layouts by dragging and dropping fields and related lists.
  - Web Case Layout: Includes fields required for cases created via the web (e.g., Contact Name, Account Name, Status, Priority, SLA Due Date).
  - Email Case Layout: Includes fields required for email-based cases (e.g., Subject, Description, Status, Priority, SLA Due Date).

#### **B.** Add Related Lists to Case Layout

On both layouts, ensure the following **related lists** are added:

- Contacts  $\rightarrow$  to link cases with the customer who reported it.
- Account Products → to show which products are linked to the account associated with the case.
- Feedback  $\rightarrow$  to capture customer feedback for the case.

This makes the Case record a **central hub**, connecting Accounts, Contacts, Products, and Feedback.

#### C. Compact Layout for Case

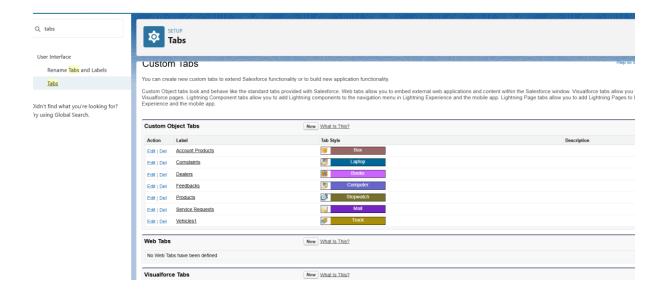
1. Navigate to:

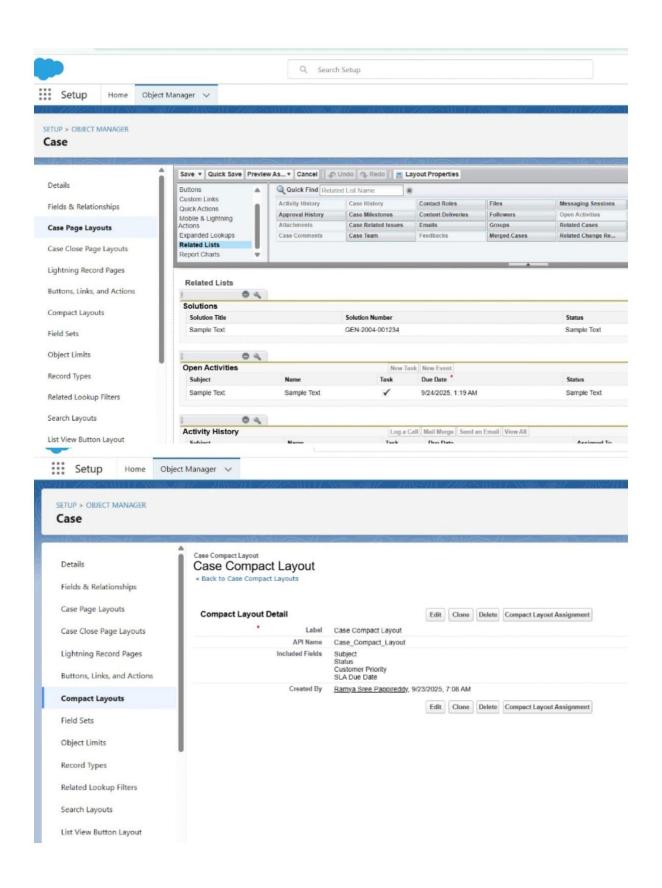
Setup  $\rightarrow$  Object Manager  $\rightarrow$  Case  $\rightarrow$  Compact Layouts.

- 2. Create a new Compact Layout (e.g., Case Compact Layout).
- 3. Select the most important fields to display in the highlights panel:
  - $\circ$  Case Number  $\rightarrow$  Unique ID for the case.
  - $\circ$  **Status**  $\to$  Current progress of the case (e.g., New, In Progress, Closed).
  - o **Priority** → Indicates urgency (e.g., High, Medium, Low).
  - $\circ$  SLA Due Date  $\rightarrow$  Deadline by which the case must be resolved.
- 4. Assign this compact layout as the **Primary Compact Layout** for the Case object.

## **D.** Tab Visibility

- Added Product (custom) and Feedback tabs to the Sales app navigation bar.
- Sales Team Profile  $\rightarrow$  Product tab set to *Default On*.
- Support Team Profile  $\rightarrow$  Feedback tab set to *Default On*.
- Ensures each team can easily access their main objects.



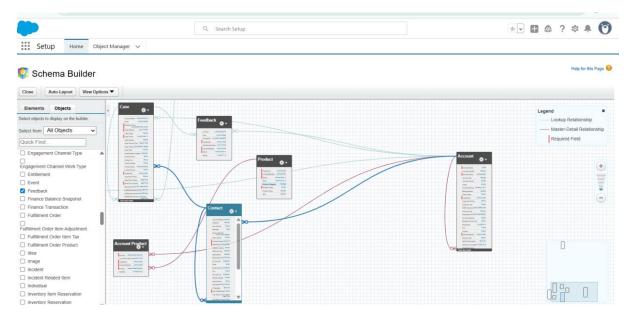


## 5. Schema Builder

Purpose: Visual representation of objects and relationships.

#### **Steps:**

- 1. Go to **Setup**  $\rightarrow$  **Schema Builder**.
- 2. Select objects: Account, Contact, Opportunity, Case, Product, Account Product, Feedback.
- 3. Arrange objects to show relationships:
  - o Account → Contacts (Lookup)
  - o Account → Opportunities (Lookup)
  - $\circ$  Account  $\rightarrow$  Cases (Lookup)
  - o Account ↔ Product via Account Product (Junction Object)
  - Case → Feedback (Lookup)



## 6. Relationships

Relationship Type	Example	Notes
Lookup	Case → Account	Optional relationship, allows linking without controlling ownership.
Master-Detail	Account Product → Account	Record ownership controlled by parent; cascade delete applies.
Junction Object	Account Product	Links many Accounts to many Products.
Hierarchical	User → Manager	Optional; used for reporting structure in User object.

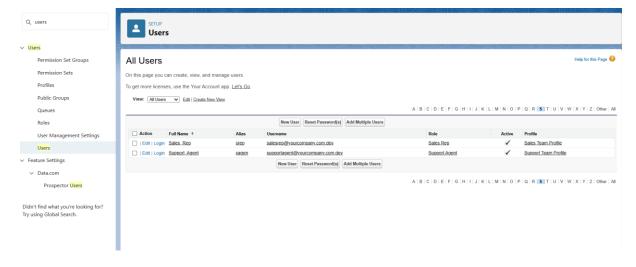
## 7. Role-Based Visibility Testing

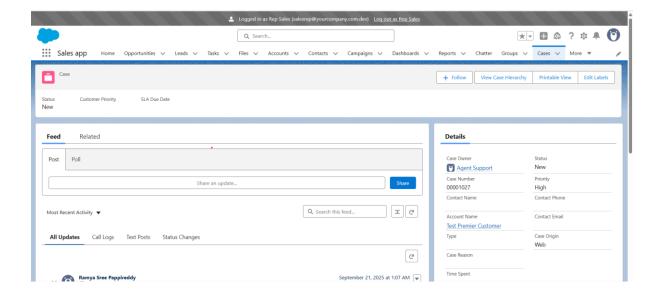
Purpose: Ensure users see records based on profiles, sharing rules, and FLS.

### **Steps:**

## • Sales User:

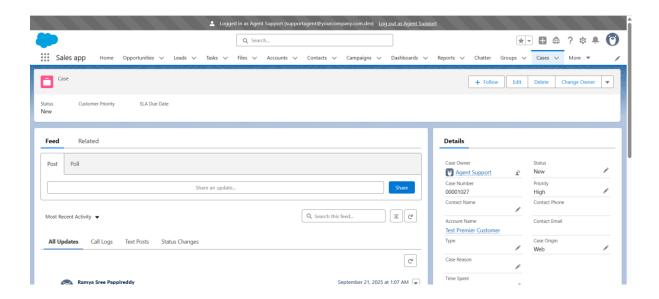
- $\circ$  Login → Go to Cases → should see **read-only** cases.
- $\circ$  Try editing  $\rightarrow$  should **not allow changes**.

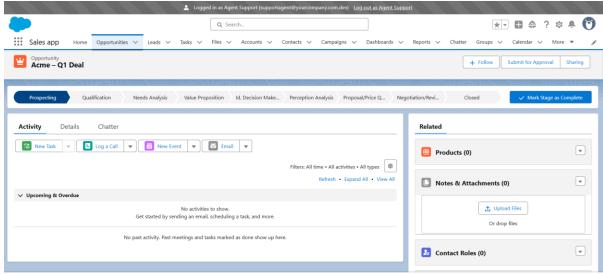




## • Support User:

- Login  $\rightarrow$  Go to Cases  $\rightarrow$  can create/edit.
- Opportunities  $\rightarrow$  view-only (if configured).





= To Do List