

Phase 9: Data Security & Access Management

Objective

Ensure that sensitive customer and business data is protected in Salesforce by defining **who can access what**. Security is applied at multiple layers: Organization Level, Object Level, Field Level, and Record Level.

1. Organization-Wide Security

- **Login Access Policies**
 - Restrict login by IP Ranges (e.g., allow only office network).
 - Restrict login by Login Hours (e.g., 9 AM – 7 PM).
- **Two-Factor Authentication (2FA)**
 - Require OTP or authenticator app during login.
- **Outcome:** Prevents unauthorized users from logging in outside approved times/locations.

2. Object-Level Security (Profiles & Permission Sets)

- **Profiles**
 - Control basic access to objects (e.g., Cases, Contacts, Accounts).
 - Example:
 - *Support Agent Profile* → Read/Write Cases, Read Contacts.
 - *Manager Profile* → Read/Write All Cases, Modify All Data.
- **Permission Sets**
 - Provide additional access without changing profile.
 - Example: Assign a “*Social Media Access*” permission set to agents who need to respond to Twitter cases.
- **Outcome:** Ensures users only see objects relevant to their role.

3. Field-Level Security

- Hide or restrict sensitive fields (e.g., Customer Phone, Account Balance).
- Example:
 - *Agent* → Can't see “Customer Credit Card Number.”
 - *Manager* → Full access.

- **Outcome:** Protects sensitive personal or financial data from unnecessary exposure.

The screenshot shows the Salesforce Setup interface with the 'Customer Phone' object selected. The 'Field Level Security for Profile' section is open, displaying a table where profiles like 'Contract Manager', 'Custom: Marketing Profile', and 'Custom: Sales Profile' have 'Visible' checked, while others like 'Customer Community User' have it unchecked. A 'Save' button is visible at the top right of the configuration pane.

4. Record-Level Security (Sharing Rules & Roles)

- **Role Hierarchy**
 - Managers can see subordinates' records.
 - Example: Team Lead can see all agents' cases.

The screenshot shows the 'Understanding Roles' page in the Salesforce Setup. It features a 'Sample Role Hierarchy' diagram with nodes: 'Executive Staff' (CEO, President, CFO, VP, Sales), 'Western Sales Director' (Dir. of W. Sales), 'Eastern Sales Director' (Dir. of E. Sales), and 'International Sales Director' (Dir. of Int'l Sales). Below these are 'Western Sales Rep' (CA Sales Rep, OR Sales Rep) and 'Eastern Sales Rep' (NY Sales Rep, MA Sales Rep). A 'Set Up Roles' button is located at the bottom right of the page.

- **Sharing Rules**

- Automatically share records based on conditions.

- Example: WhatsApp cases shared with *Social Media Support Queue*.
- **Manual Sharing**
 - Users can share individual records when required.
- **Outcome:** Ensures collaboration while keeping records private when needed.

5. Data Encryption

- **Platform Encryption** (Salesforce Shield if enabled).
 - Encrypt sensitive fields (SSN, Bank Account, Email).
- **Outcome:** Protects data at rest and in transit.

6. Monitoring & Auditing

- **Setup Audit Trail** – Track who changed what in Setup.
- **Field History Tracking** – Monitor changes on key fields (e.g., Case Status, SLA Deadline).
- **Login History** – Check user logins, failed attempts.

The screenshot shows the Salesforce Login History page. The URL is https://smartbridge-7bd-dev-ed.lightning.force.com/lightning/setup/Org.LoginHistory/home. The page has a header with tabs like Setup, Home, Object Manager, and a search bar. On the left, there's a sidebar with Identity (Login Flows, Login History selected), Security, and Login Access Policies. A message says "Didn't find what you're looking for? Try using Global Search." The main content area is titled "Login History" and displays a table of login events. The columns include Username, Login Time, Source IP, Location, Login Type, Status, Browser, Platform, Application, Client Version, API Type, API Version, Login URL, and HTTP Method. The table shows several entries, such as logins from 22691a0517@mts.ac.in at various times and locations, mostly successful, with some failing due to computer activation required. There are also entries for invalid passwords and remote access. At the bottom, there are navigation links for <Previous Page | Next Page>, a "Create New View" button, and a "Download Options" section with CSV and GZIP file type buttons, a "File Contents" dropdown set to "All Logins", and a "Download Now" button.

- **Outcome:** Provides accountability and helps detect security breaches.

The screenshot shows the 'View Setup Audit Trail' page in the Salesforce Setup interface. The left sidebar shows 'Sales' and 'Security' sections, with 'View Setup Audit Trail' selected. The main content area displays a table of audit logs with columns for Date, User, Source Namespace Prefix, Action, Section, and Delegate User. The table lists 20 entries from September 25, 2025, at 3:31:24 PM IST to 3:21:57 PM IST. Actions include changing profile security, updating case layouts, and creating custom fields. The 'Section' column indicates changes related to Manage Users, Customize Cases, and Data Export.

Date	User	Source Namespace Prefix	Action	Section	Delegate User
25/09/2025, 3:31:24 pm IST	22691a0517@mits.ac.in		Changed profile Analytics Cloud Security User: field-level security for Case: Customer Phone was changed from 2 to 0	Manage Users	
25/09/2025, 3:31:24 pm IST	22691a0517@mits.ac.in		Changed profile Analytics Cloud Integration User: field-level security for Case: Customer Phone was changed from 2 to 0	Manage Users	
25/09/2025, 3:30:35 pm IST	22691a0517@mits.ac.in		Changed Cases page layout Manager Layout	Customize Cases	
25/09/2025, 3:30:35 pm IST	22691a0517@mits.ac.in		Changed Cases page layout Close Case Layout	Customize Cases	
25/09/2025, 3:30:35 pm IST	22691a0517@mits.ac.in		Changed Cases page layout Case Layout	Customize Cases	
25/09/2025, 3:30:35 pm IST	22691a0517@mits.ac.in		Changed Cases page layout Case (Support) Layout	Customize Cases	
25/09/2025, 3:30:35 pm IST	22691a0517@mits.ac.in		Changed Cases page layout Case (Sales) Layout	Customize Cases	
25/09/2025, 3:30:35 pm IST	22691a0517@mits.ac.in		Changed Cases page layout Case (Marketing) Layout	Customize Cases	
25/09/2025, 3:30:35 pm IST	22691a0517@mits.ac.in		Changed Cases page layout Agent Layout	Customize Cases	
25/09/2025, 3:30:35 pm IST	22691a0517@mits.ac.in		Created custom field: Customer Phone (Phone)	Customize Cases	
25/09/2025, 3:21:57 pm IST	22691a0517@mits.ac.in		Requested an export	Data Export	

Deliverables for Phase 9

- Defined **Security Model** (Org, Object, Field, Record levels).
- Configured **Profiles, Permission Sets, and Role Hierarchy**.
- Enabled **IP restrictions, login hours, and 2FA**.
- Implemented **Field-Level Security for sensitive data**.
- Enabled **Audit Trail & History Tracking**.

✓ Outcome: A secure Salesforce environment where users only access the data they need, protecting customer information and ensuring compliance with data protection policies.