

Smart Volunteer Collaboration Network



Target Users: NGO Staff, Volunteer Coordinators, Volunteers, Donors

Problem Statement !

NGOs rely heavily on volunteers for initiatives like blood donation camps, food drives, awareness events, and fundraising. However, most NGOs still depend on manual methods (Excel sheets, phone calls, WhatsApp groups), which causes challenges:

- Difficulty in maintaining updated records of volunteer skills, availability, and past contributions.
- Lack of reminders, thank-you notes, or recognition, leading to low engagement.
- Limited visibility into volunteer hours, participation, or retention.
- Missed opportunities to identify and retain active volunteers.
- Event scheduling and communication require multiple apps (Google Calendar, emails, WhatsApp).

Proposed Solution: Smart Volunteer Collaboration Network

A Salesforce-powered platform designed to strengthen NGO–volunteer collaboration by:

- Centralizing volunteer profiles, skills, and availability.
- Automating reminders, thank-you messages, and onboarding emails.
- Tracking volunteer hours, event participation, and retention.
- Providing dashboards for impact measurement and decision-making.

Phase 1: Problem Understanding & Industry Analysis

Requirement Gathering

- Maintain detailed volunteer profiles (skills, availability, past participation).
- Create and manage events with location, type, and schedule.
- Enable volunteer self-registration or admin-based assignment.
- Record participation hours and collect feedback.
- Generate dashboards for active vs. inactive volunteers, total hours, and participation trends.

Stakeholder Analysis

- **Admin (NGO Staff):** Creates volunteer/event records, manages automations & security.

- **Volunteer Coordinator:** Assigns volunteers, tracks hours, reviews engagement.
- **Volunteer:** Registers, participates, receives reminders & thank-you messages.
- **System (Automation):** Sends communications, updates statuses, generates dashboards.

Business Process Mapping

1. **Volunteer Registration** → Volunteer signs up → system stores details → welcome email sent.
2. **Event Creation** → NGO staff create events → synced with Google Calendar → notifications sent.
3. **Volunteer Participation** → Volunteers view/register → system tracks attendance & hours.
4. **Post-Event Actions** → Personalized thank-you messages sent → impact reports generated.
5. **Smart Recommendations** → AI suggests engagement actions for inactive volunteers.

Use Cases

Blood Donation Camp

- **Challenge:** Manual notifications are slow and inefficient.
- **Solution:** Automated SMS/email alerts based on volunteer availability & past history.

Environmental Cleanup Drive

- **Challenge:** No centralized tracking of hours or cleaned locations.
- **Solution:** Volunteers log hours → system generates impact analytics.

Educational Training for Underprivileged Children

- **Challenge:** Hard to monitor attendance & effectiveness.
- **Solution:** Self-registration → automatic attendance tracking → performance insights.

AppExchange Exploration

- **Volunteer Applications:** Structured volunteer profile & participation management.
- **Marketing Automation:** Event invites, reminders, thank-you campaigns.
- **Calendar Integration:** Unified calendar view of upcoming events.
- **Analytics & Insights:** Dashboards for trends, engagement, and AI-driven recommendations.

Phase 2: Org Setup & Configuration

Company Profile Setup

Configured basic org details under Setup → Company Information → Edit:

- **Name:** Smart Volunteer Collaboration Network – Dev
- **Time Zone:** GMT+05:30 (Asia/Kolkata)
- **Locale:** English (India)
- **Language:** English
- **Currency:** INR (can add USD later for international NGOs)

The screenshot shows the 'Company Information' setup page. The organization's profile is displayed, including the name 'Smart Volunteer Collaboration Network'. The 'Organization Detail' section contains various configuration settings such as primary contact, division, fiscal year start, and newsletter preferences. The page also shows usage statistics like API requests and streaming API events.

Business Hours Setup

Configured NGO working hours for volunteer management & SLA tracking:

- **Path:** Setup → Business Hours → New
- **Name:** NGO Working Hours
- **Time Zone:** GMT+05:30 (Asia/Kolkata)
- **Working Hours:** Mon–Fri, 9:00 AM – 6:00 PM (Saturday/Sunday closed)
- **Save:** Marked as default

The screenshot shows the 'Business Hours' setup page. A new business hour entry is being created, named 'NGO Working Hours', which is active and set to the time zone 'GMT+05:30 (Asia/Kolkata)'. The page includes a navigation bar and a global search bar at the top.

Holidays Setup

Configured NGO holidays to prevent scheduling conflicts:

- **Path:** Setup → Holidays → New
 - **Name:** Republic Day
 - **Date:** 26 Jan
 - **Recurring:** Yes
 - **Save:**
- **Path:** Setup → Holidays → New
 - **Name:** Independence Day
 - **Date:** 15 Aug
 - **Recurring:** Yes
 - **Save:**
- **Path:** Setup → Holidays → New
 - **Name:** Gandhi Jayanti
 - **Date:** 2 Oct
 - **Recurring:** Yes
 - **Save:**
- **Path:** Setup → Holidays → New
 - **Name:** Christmas
 - **Date:** 25 Dec
 - **Recurring:** Yes
 - **Save:**

The screenshot shows the Salesforce Setup interface for the Holidays object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. A search bar says 'Search Setup' and a toolbar has icons for Home, Object Manager, and Help.

The main area is titled 'Holidays' with a sub-header 'Holidays'. It says 'Holidays are dates and times at which business hours are suspended. Business hours are the days and hours that your support team is available.' A 'Help for this Page' link is in the top right.

A message at the top left says 'Didn't find what you're looking for? Try using Global Search.' Below it is a search bar with 'Q_ holidays' and a 'New' button.

The table lists five holidays:

Action	Holiday Name	Description	Date and Time
Edit Del	Christmas Day		25/12/2025 All Day <input type="button" value="Edit"/>
Edit Del	Gandhi Jayanti		02/10/2025 All Day <input type="button" value="Edit"/>
Edit Del	Independence Day		15/08/2026, 12:00 am – 11:59 pm <input type="button" value="Edit"/>
Edit Del	New Year's Day		01/01/2026 All Day <input type="button" value="Edit"/>
Edit Del	Republic Day		26/01/2026 All Day <input type="button" value="Edit"/>

Fiscal Year Setup

Defined fiscal year for reporting volunteer hours and event participation:

- **Path:** Setup → Fiscal Year
- **Type:** Standard Fiscal Year (Jan–Dec)
- **Configuration:** Starting month – January
- **Save:** Applied for reporting

Search Setup

Company Settings

Fiscal Year

Did you find what you're looking for? Try using Global Search.

Help for this Page

Fiscal Year Information

Your organization can change the fiscal year start month, and specify whether the fiscal year name is set to the starting or ending year. For example, if your fiscal year starts in April 2025 and ends in March 2026, your Fiscal Year setting can be either 2025 or 2026.

Change Fiscal Year Period

Name: Smart Volunteer Collaboration Network
 Fiscal Year Start Month: January
 Fiscal Year Is Based On: The starting month

User Setup & Licenses

- **Path:** Setup → Users
- Verified test users created with Salesforce Platform or Salesforce license:
 - Admin (NGO Staff)
 - Volunteer Coordinator
 - Volunteer

Profiles Setup

1. **Navigate to Profiles**
 - Path: Setup → Profiles
2. **Clone Standard Profile**
 - Action: Clone a standard profile → Volunteer Profile
3. **Configure Object Settings**
 - **Volunteers:** Create / Read / Edit
 - **Events:** Read / Create / Edit

Search Setup

Users

Profiles

Did you find what you're looking for? Try using Global Search.

Help for this Page

Action	Profile Name	User License	Custom
<input type="checkbox"/> Edit Del ...	Volunteer External Profile	Salesforce	✓
<input type="checkbox"/> Edit Del ...	Volunteer Profile	Salesforce	✓

Roles

1. Set Up Roles

- Create top-level role: **NGO Admin**
- Create role reporting to NGO Admin: **Volunteer Coordinator**
- Create role reporting to Volunteer Coordinator: **Volunteer**

The screenshot shows the 'Setup' menu on the left with 'Roles' selected. The main area is titled 'SETUP Roles' and shows 'Creating the Role Hierarchy'. It displays a tree view of roles:

- Smart Volunteer Collaboration Network
 - Admin
 - Add Role
 - NGO Admin
 - Add Role
 - Volunteer Coordinator
 - Add Role
 - Volunteer
 - Add Role

Permission Sets

- **Path:** Setup → Permission Sets
- Verified “Event Manager Access” (or similar) permission sets assigned to Coordinators

Org-Wide Defaults (OWD)

- **Path:** Setup → Sharing Settings
- Verified objects configured as:
 - **Volunteers:** Private
 - **Events:** Public Read Only (or Read/Write for Coordinators)

Sharing Rules

- **Path:** Setup → Sharing Settings → Sharing Rules
- Configured example: Volunteer records owned by Region X shared with Volunteer Coordinator in Region X

Login Access Policies

- **Path:** Setup → Login Access Policies
- Verified Administrators Can Log in as Any User enabled

The screenshot shows the 'Setup' menu on the left with 'Login Access Policies' selected. The main area is titled 'SETUP Login Access Policies' and shows the 'Manage Support Options' section:

Setting	Packages	Available to Users	Available to Administrators Only
Administrators Can Log in as Any User	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Dev Org Setup

- Connected development org using Salesforce CLI & VS Code
- Confirmed all metadata (Profiles, Roles, Permission Sets, Objects) deployed successfully

Deployment Basics

Verified deployments ran successfully using CLI commands (sfdx force: source: retrieve and sfdx force: source: deploy).

Phase 3: Data Modeling & Relationships

Standard & Custom Objects

Object	Type	Purpose
Contact	Standard	Represents Volunteers
Campaign	Standard	Represents Events
Event Participation	Custom (Junction Object)	Links Volunteers to Events; stores Hours, Role, Feedback

Contact	Contact	Standard Object
Campaign	Campaign	Standard Object
Event Participation	Event_Participation__c	Custom Object

Fields

On Contact (Volunteer)

Path: Setup → Object Manager → Contact → Fields & Relationships → New

Field Name	Data Type	Notes
Skills__c	Picklist (Multi-Select)	Volunteer's skills (Medical Aid, Teaching, Cleanup, Fundraising, etc.)
Availability__c	Picklist	Weekdays, Weekends, Evenings
Past_Participation__c	Number	Number of past events attended

Field Name	Data Type	Notes
Status__c	Picklist	Active, Inactive

On Campaign (Event)

Path: Setup → Object Manager → Campaign → Fields & Relationships → New

Field Name	Data Type	Notes
Event_Type__c	Picklist	Blood Donation, Cleanup Drive, Educational Training, Fundraising, Food Distribution, Awareness Workshop, Tree Plantation, Health Camp, Disaster Relief, Community Outreach
Location__c	Text / Geolocation	Event location
Event_Date__c	Date/Time	Event date & time
Max_Volunteers__c	Number	Maximum allowed volunteers

On Event Participation (Junction Object)

Path: Setup → Object Manager → Event_Participation__c → Fields & Relationships → New

Field Name	Data Type	Notes
Volunteer__c	Master-Detail → Contact	Links Volunteer
Event__c	Master-Detail → Campaign	Links Event
Role__c	Picklist	Volunteer, Team Lead, Coordinator
Hours__c	Number	Hours contributed
Feedback__c	Long Text Area	Post-event feedback

Record Types

For Campaign (Event)

Path: Object Manager → Campaign → Record Types → New

- **Name:** Event_RT
- **Record Types:**
 - Blood Donation
 - Cleanup Drive
 - Educational Training
- **Assign to Profiles:** Admin, Volunteer Coordinator
- Optionally link custom Page Layouts

Record Types		Quick Find	New	Page Layout Assignment
3 Items, Sorted by Record Type Label				
Record Type L...	Description	Active	Modified By	
Blood Donation	Campaign for blood donation events	✓	Sneha Yadav, 23/09/2025, 10:44 pm	▼
Cleanup Drive	Environmental cleanup events	✓	Sneha Yadav, 23/09/2025, 10:45 pm	▼
Educational Training	Training for underprivileged children	✓	Sneha Yadav, 23/09/2025, 10:46 pm	▼

Page Layouts / Contact Layouts

For Contact (Volunteer)

Path: Object Manager → Contact → Page Layouts → New

- **Drag fields:** Skills, Availability, Past Participation, Status
- **Related List:** Event Participations
- **Compact Layout (Highlights Panel):** Skills, Availability, Status

For Campaign (Event)

Path: Object Manager → Campaign → Page Layouts → New

- **Drag fields:** Event Type, Event Date, Location, Max Volunteers
- **Related List:** Event Participations
- **Compact Layout:** Event Type, Date, Location

For Event Participation (Junction)

Path: Object Manager → Event Participation → Page Layouts → New

- **Drag fields:** Volunteer, Event, Role, Hours, Feedback
- **Compact Layout:** Volunteer, Event, Role, Hours

Page Layouts		Quick Find	New	Page Layout Assignment
1 Items, Sorted by Page Layout Name				
PAGE LAYOUT N...	CREATED BY	MODIFIED BY		
Contact Layout	Sneha Yadav, 18/09/2025, 10:21 pm	Sneha Yadav, 23/09/2025, 11:10 pm		▼
PAGE LAYOUT N...	CREATED BY	MODIFIED BY		
Campaign Layout	Sneha Yadav, 18/09/2025, 10:21 pm	Sneha Yadav, 23/09/2025, 7:09 pm		▼
PAGE LAYOUT NA...	CREATED BY	MODIFIED BY		
Event Participation Layout	Sneha Yadav, 23/09/2025, 11:53 am	Sneha Yadav, 23/09/2025, 10:51 pm		▼

Relationships

- **Master-Detail Relationship:**
 - Event_Participation__c. Volunteer__c → Contact
 - Event_Participation__c. Event__c → Campaign
- **Lookup Relationship (Optional):**
 - Mentor__c (Lookup to Contact)
 - Venue__c (Lookup to Account)
- **Many-to-Many Relationship:**
 - Achieved using Event Participation junction object
 - Allows many Volunteers ↔ many Events

Created By	CreatedById	Lookup(User)
Event	Event_c	Master-Detail(Campaign)
Event Participation Name	Name	Auto Number
Feedback	Feedback_c	Long Text Area(32768)
Hours_Contributed_c	Hours_Contributed_c_c	Number(15, 2)
Last Modified By	LastModifiedById	Lookup(User)
Role	Role_c	Picklist
Status	Status_c	Picklist
Volunteer	Volunteer_c	Master-Detail(Contact)

Sharing Rules

Path: Setup → Sharing Settings → Campaign / Event Participation → New

- **Criteria-based Sharing Rule:**
 - Share records where Event_Type_c = "Blood Donation" with Medical Team Group
- **Owner-based Sharing Rule:**
 - Share events owned by Volunteer Coordinators with NGO Staff

Schema Builder

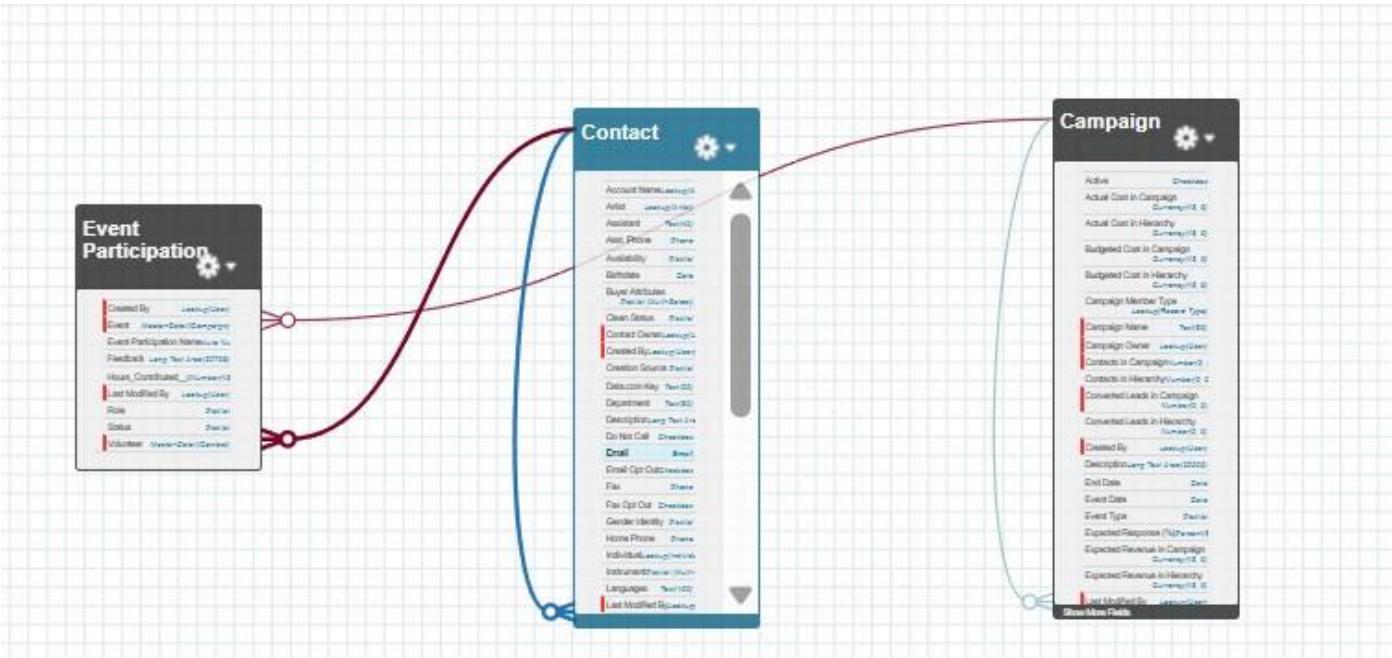
- **Path:** Setup → Schema Builder
- Select Contact, Campaign, Event Participation

Visualized Relationships:

- Event Participation → Contact (Master-Detail)
- Event Participation → Campaign (Master-Detail)

Key Fields & Relationships:

- Contact: Skills, Availability, Status
- Campaign: Event Type, Date, Location
- Event Participation: Volunteer, Event, Role, Hours, Feedback



Junction Objects

- Event Participation links many Volunteers ↔ many Events
- Contains Master-Detail fields to both parents
- Stores extra info: Hours, Role, Feedback
- Roll-up Summary Fields:
 - Total hours per Volunteer
 - Total volunteers per Event

External Objects (Optional – Future)

- Used to access external data (e.g., Google Sheets, external DB)
- Access via Salesforce Connect → External Data Sources
- Not required for basic Volunteer CRM; can be added later for integration

Phase 4: Process Automation (Admin)

1. Validation Rules

Objective: To maintain high data quality by preventing the saving of invalid data.
Path: Setup → Object Manager → Volunteer__c → Validation Rules

- **Rule Name:** Availability
- **Error Condition:** ISBLANK(Availability__c)
- **Error Message:** "Volunteer Availability must be filled before assigning to an event."

Validation Rules

1 Items, Sorted by Rule Name

New

RULE NAME	▲ ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY	
Availability	Top of Page	Volunteer Availability must be filled before assigning to an event.	✓	Sneha Yadav, 25/09/2025, 10:07 am	▼

2. Workflow Rules (Legacy Tool)

Objective: To document legacy automation (Flow Builder is recommended).

Path: Setup → Workflow Rules

- Status:** No active Workflow Rules created. All new automation is built using Flow Builder.

All Workflow Rules

Help for this Page ?

Go with the flow! With Flow Builder, the future of low-code automation, you can do everything you do with workflow rules — and more! Salesforce plans to retire workflow rules and recommends building automation in Flow Builder.
[Tell Me More](#) | [Migrate your workflow rules to flows](#)

Configure your organization's workflow by creating workflow rules. Each workflow rule consists of:

- Criteria that cause the workflow rule to run.
- Immediate actions that execute when a record matches the criteria. For example, Salesforce can automatically send an email that notifies the account team when a new high-value opportunity is created.
- Time-dependent actions that queue when a record matches the criteria, and execute according to time triggers. For example, Salesforce can automatically send an email reminder to the account team if a high-value opportunity is still open ten days before the close date.

View: [All Workflow Rules](#) [Create New View](#)

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other [All](#)

Action	Rule Name ↑	Description	Object	Active
Edit Del Deactivate	Send Welcome Email		Volunteer	✓

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other [All](#)

3. Process Builder (Legacy Tool)

Objective: To document legacy automation (Process Builder is being replaced by Flow Builder).

Path: Setup → Process Builder

- Status:** No active Processes created. Flow Builder is preferred for complex automation.

4. Approval Process

Objective: To automate the review and approval process for high-impact NGO events.

Path: Setup → Approval Processes

- **Process Name:** High-Impact Event Approval
- **Object:** NGO_Event__c
- **Entry Criteria:** Budget__c greater than 50000
- **Approver:** Assigned to a specific user or role (e.g., NGO Director or VP of Operations)
- **Final Approval Actions:**
 1. **Field Update:** Set Status__c to Approved
 2. **Task:** Notify Event Coordinator to begin event preparation

The screenshot shows the 'Approval Processes' setup page in the Salesforce 'SETUP' menu. The main content area displays a list of features and a 'Get started' section. A yellow callout box provides instructions for creating a new approval process. The 'Active Approval Processes' table lists one process: 'High-Impact Event Approval'.

Approval Processes

- **Record-Change Triggers:** Automate approvals based on specific record updates.
- **Apex Extensibility:** Customize with Apex for advanced functionality.
- **Detailed Logging:** Ensure compliance with comprehensive audit trails.
- **Dynamic Routing:** Route approvals based on data and business rules.

Get started with Flow Approval Processes in the Approval app where you can manage approval submissions, approval work items, and flow approval processes in one location.

[Open Approvals App](#)

Approvals are complex business processes that require information gathering and planning before implementing. It is recommended that you follow the instructions below before getting started.

1. Read the help topic
2. View the checklist
3. Create a custom user hierarchical relationship field
4. Create email templates
5. Create an approval process using either the Jump Start or Standard Wizard
6. Add Approval History Related List to all page layouts
7. Activate the process to deploy to your users

Manage Approval Processes For: NGO Event

A listing of both active and inactive approval processes for NGO Events is displayed below. To create a new approval process, click Create New Approval Process then select Use Jump Start Wizard to set up your approval process in a few short steps. Or, select Use Standard Wizard to configure all approval options.

[Create New Approval Process](#)

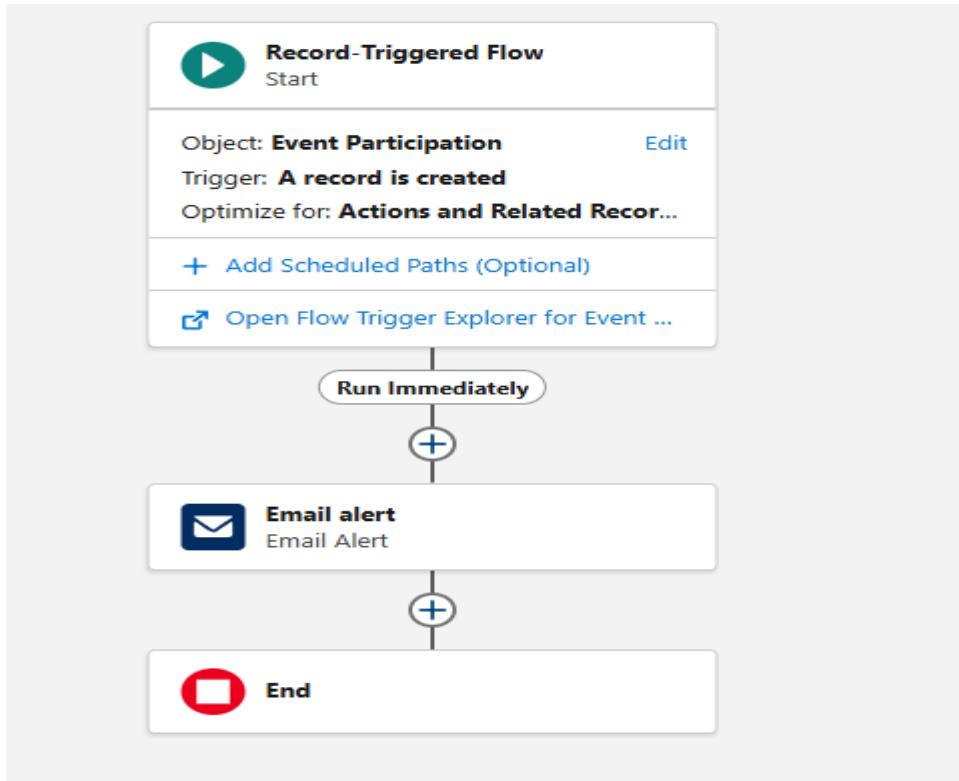
Active Approval Processes				Reorder
Action	Process Order	Approval Process Name	Description	
Edit Deactivate	1	High-Impact Event Approval		

Objective: To build powerful, modern automations for record-triggered, screen, and scheduled processes.

Path: Setup → Flows

5. Flow Types in Use:

- **Record-Triggered Flow:** (Planned) To auto-submit Volunteer_Event__c records meeting criteria (e.g., Budget__c > 50000) into the **High-Impact Event Approval** process.
- **Screen Flow:** (Planned) To create a guided wizard for volunteers to **register availability, skills, and preferences**.



6. Email Alerts

Objective: To send automated email notifications as part of approval and other processes.

Path: Setup → Email Alerts

Alert Name: Volunteer Signup Confirmation

Purpose: Email template used to confirm volunteer registration.

Alert Name: Welcome Email Alert

Purpose: Email template used to welcome newly registered volunteers.



SETUP

Email Alerts

All Email Alerts Help for this Page ?

Email alerts are used to send emails from a flow or other automation.

View: [All Email Alerts](#) [Create New View](#)

[A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G](#) | [H](#) | [I](#) | [J](#) | [K](#) | [L](#) | [M](#) | [N](#) | [O](#) | [P](#) | [Q](#) | [R](#) | [S](#) | [T](#) | [U](#) | [V](#) | [W](#) | [X](#) | [Y](#) | [Z](#) | [Other](#) | [All](#)

New Email Alert				
Action	Description ↑	Email Template Name	Object	Last Modified Date
Edit Del	Volunteer Signup Confirmation	Welcome Volunteer	Volunteer	25/09/2025
Edit Del	Welcome Email Alert	Welcome Volunteer	Volunteer	25/09/2025

[A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G](#) | [H](#) | [I](#) | [J](#) | [K](#) | [L](#) | [M](#) | [N](#) | [O](#) | [P](#) | [Q](#) | [R](#) | [S](#) | [T](#) | [U](#) | [V](#) | [W](#) | [X](#) | [Y](#) | [Z](#) | [Other](#) | [All](#)

7. Field Updates

Objective: To automatically update key fields as part of approval processes and other automations.

Path: Setup → Approval Processes → Field Updates

- **Update Name:** Update Volunteer Hours
- **Object:** Event_Participation__c
- **Field:** Hours_Contributed__c



SETUP

Field Updates

Field Update Help for this Page ?

Update Volunteer Hours

[Rules Using This Field Update \[0\]](#) | [Approval Processes Using This Field Update \[0\]](#) | [Entitlement Processes Using This Field Update \[0\]](#)

Field Update Detail		Edit	Delete
Name	Update Volunteer Hours		
Unique Name	Update_Volunteer_Hours		
Description	Update total volunteer hours when participation is completed.		
Object	Event Participation		
Field to Update	Event Participation: Hours_Contributed__c		
Field Data Type	Number		
Re-evaluate Workflow Rules after Field Change	<input checked="" type="checkbox"/>		
Formula Value			
		Edit	Delete

8. Tasks

Objective: To automatically create follow-up tasks for users upon completion of a process.

Path: Setup → Approval Processes → Tasks

- **Task Name:** Prepare Approved High-Impact Event
- **Subject:** Prepare High-Impact Volunteer Event
- **Assigned To:** Event Coordinator Role
- **Description:** "This high-impact volunteer event has been approved. Begin event preparation, coordinate volunteers, and finalize logistics."

The screenshot shows the 'Approval Processes' page in Salesforce. The top navigation bar includes a gear icon labeled 'SETUP' and the title 'Approval Processes'. Below the header, the specific process is identified as 'NGO Event: High-Impact Event Approval'. A 'Help for this Page' link is available in the top right corner.

Process Definition Detail

Process Name		High-Impact Event Approval	Active	<input checked="" type="checkbox"/>
Unique Name	High_Impact_Event_Approval	Next Automated Approver Determined By		
Description				
Entry Criteria	NGO Event: Budget GREATER THAN 50000			
Record Editability	Administrator ONLY	Allow Submitters to Recall Approval Requests	<input checked="" type="checkbox"/>	
Approval Assignment Email Template	<u>Welcome Volunteer</u>			
Initial Submitters	NGO Event Owner			
Created By	Sneha Yadav, 25/09/2025, 1:00 pm	Modified By	Sneha Yadav, 01/10/2025, 2:38 pm	

Initial Submission Actions

Action	Type	Description
Record Lock		Lock the record from being edited

Approval Steps

Action	Step Number	Name	Description	Criteria	Assigned Approver	Reject Behavior
Show Actions Edit	1	Director Review		NGO Event: Budget EQUALS 50000 ,	User:Admin Admin	Final Rejection else Approve

9. Custom Notifications

Objective: Use Salesforce custom notifications to alert users in-app or via mobile.

Path: Setup → Custom Notifications

- **Notification Name:** Volunteer Assigned Notification

- **Purpose:** Notify NGO staff in Salesforce mobile app when an event is approved.
- **Recipients:** NGO Director, Event Coordinator

Custom Notification Types

NOTIFICATION NAME	API NAME	NAMESPACE	DESKTOP	MOB
Volunteer Assigned Notification	Volunteer_Assigned_Notification		✓	✓

Phase 5 — Apex Programming (Developer)

Classes & Objects

Developed:

- VolunteerHandler — Utility/handler class to manage volunteer actions (welcome emails, notifications).
- EventHandler — Handles event logic such as updating status when volunteers are confirmed.
- ParticipationHandler — Updates volunteer hours and manages participation records.

Verification: Setup → Apex Classes → All three classes present.

Apex Class Detail

Name	VolunteerHandler	Status	Active
Namespace Prefix		Code Coverage	0% (0/8)
Created By	Sneha Yadav , 25/09/2025, 10:50 pm	Last Modified By	Sneha Yadav , 25/09/2025, 10:50 pm

Class Body

```

1 public class VolunteerHandler {
2     public static void sendWelcomeEmail(List<Volunteer__c> newVolunteers){
3         for(Volunteer__c v : newVolunteers){
4             Messaging.SingleEmailMessage mail = new Messaging.SingleEmailMessage();
5             mail.setToAddresses(new String[]{v.Volunteer_Email__c});
6             mail.setSubject('Welcome to Smart Volunteer Network');
7             mail.setPlainTextBody('Hi ' + v.Name + ', thank you for joining our volunteer network!');
8             Messaging.sendEmail(new Messaging.SingleEmailMessage[]{mail});
9         }
10    }
11 }
12

```

Apex Class EventHandler

Help for this Page ?

Apex Class Detail

Edit Delete Download Security Show Dependencies

Name	EventHandler	Status	Active
Namespace Prefix		Code Coverage	0% (0/5)
Created By	Sneha Yadav , 25/09/2025, 10:55 pm	Last Modified By	Sneha Yadav , 25/09/2025, 10:55 pm

Class Body Class Summary Version Settings Trace Flags

```
1 public class EventHandler {
2     public static void updateEventStatus(List<Event> events){
3         for(Event ev : events){
4             // Example: if an Event has both Start and End times, mark it as "Ready"
5             if(ev.StartDateTime != null && ev.EndDateTime != null){
6                 ev.Subject = 'Ready'; // or set another picklist/text field
7             }
8         }
9         update events;
10    }
11 }
```

Edit Delete Download Security Show Dependencies

Apex Class ParticipationHandler

Help for this Page ?

Apex Class Detail

Edit Delete Download Security Show Dependencies

Name	ParticipationHandler	Status	Active
Namespace Prefix		Code Coverage	0% (0/18)
Created By	Sneha Yadav , 25/09/2025, 11:04 pm	Last Modified By	Sneha Yadav , 25/09/2025, 11:04 pm

Class Body Class Summary Version Settings Trace Flags

```
1 public class ParticipationHandler {
2     public static void updateVolunteerHours(List<Event_Participation__c> records){
3         Set<Id> volunteerIds = new Set<Id>();
4
5         for(Event_Participation__c p : records){
6             if(p.Volunteer__c != null){
7                 volunteerIds.add(p.Volunteer__c);
8             }
9         }
10
11        if(!volunteerIds.isEmpty()){
12            Map<Id, Decimal> volunteerHoursMap = new Map<Id, Decimal>();
13            for(AggregateResult ar : [
14                SELECT Volunteer__c vld, SUM(Hours_Contributed__c__c) totalHours
15                FROM Event_Participation__c
16                WHERE Volunteer__c IN :volunteerIds
17                GROUP BY Volunteer__c
18            ]){
19                volunteerHoursMap.put((Id)ar.get('vld'), (Decimal)ar.get('totalHours'));
20            }
21
22            List<Contact> volunteersToUpdate = new List<Contact>();
23            for(Id vid : volunteerHoursMap.keySet()){
24                Contact c = new Contact(Id = vid);
25                c.Total_Hours__c = volunteerHoursMap.get(vid); // <-- needs custom field
26                volunteersToUpdate.add(c);
27            }
28
29            if(!volunteersToUpdate.isEmpty()){
30                update volunteersToUpdate;
31            }
32        }
33    }
34 }
```

Apex Triggers & Trigger Design Pattern

Developed:

- VolunteerTrigger → after insert → sends welcome emails via VolunteerHandler.
- EventTrigger → after insert/update → updates event status via EventHandler.
- ParticipationTrigger → after insert/update → updates volunteer hours via ParticipationHandler.

Verification:

Setup → Apex Triggers → Each trigger contains a single call to its corresponding handler class.

The screenshot shows the 'Apex Triggers' page in the Salesforce Setup. It displays a table of triggers with columns for Action, Name, Namespace Prefix, sObject Type, API Version, Status, Size Without Comments, Last Modified By, and Has Trace Flags. The triggers listed are:

Action	Name	Namespace Prefix	sObject Type	API Version	Status	Size Without Comments	Last Modified By	Has Trace Flags
Edit Del	ApologTrigger	lhsecurity	ApologEvent	58.0	Active	95	Trailhead Security, 18/09/2025, 10:21 pm	<input type="checkbox"/>
Edit Del	EventTrigger		Event	64.0	Active	147	Sneha Yadav, 25/09/2025, 11:18 pm	<input type="checkbox"/>
Edit Del	ParticipationTrigger		Event_Participation	64.0	Active	183	Sneha Yadav, 25/09/2025, 11:29 pm	<input type="checkbox"/>
Edit Del	VolunteerTrigger		Volunteer	64.0	Active	167	Sneha Yadav, 26/09/2025, 11:43 pm	<input type="checkbox"/>
Edit Del	VolunteerTrigger2		Volunteer	64.0	Active	119	Sneha Yadav, 26/09/2025, 11:43 pm	<input type="checkbox"/>

The screenshot shows the 'Apex Trigger Detail' page for 'VolunteerTrigger'. It includes fields for Name (VolunteerTrigger), sObject Type (Volunteer), Code Coverage (0% (0/2)), Status (Active), Created By (Sneha Yadav, 25/09/2025, 11:15 pm), Last Modified By (Sneha Yadav, 26/09/2025, 11:43 pm), and Namespace Prefix. Below the details is a code editor showing the trigger's apex code:

```
1trigger VolunteerTrigger on Volunteer__c (after insert) {
2    if(Trigger.isAfter && Trigger.isInsert){
3        VolunteerHandler.sendWelcomeEmail(Trigger.new);
4    }
5}
```

The screenshot shows the 'Apex Trigger Detail' page for 'EventTrigger'. It includes fields for Name (EventTrigger), sObject Type (Event), Code Coverage (0% (0/2)), Status (Active), Created By (Sneha Yadav, 25/09/2025, 11:18 pm), Last Modified By (Sneha Yadav, 25/09/2025, 11:18 pm), and Namespace Prefix. Below the details is a code editor showing the trigger's apex code:

```
1trigger EventTrigger on Event (after insert, after update) {
2    if(Trigger.isAfter){
3        EventHandler.updateEventStatus(Trigger.new);
4    }
5}
```

Apex Trigger
ParticipationTrigger

Apex Trigger Detail

Name	ParticipationTrigger	sObject Type	Event Participation
Code Coverage	0% (0/2)	Status	Active
Created By	Sneha Yadav, 25/09/2025, 11:29 pm	Last Modified By	Sneha Yadav, 25/09/2025, 11:29 pm
Namespace Prefix			

Apex Trigger **Version Settings** **Trace Flags**

```

1 trigger ParticipationTrigger on Event_Participation__c (after insert, after update) {
2     if(Trigger.isAfter){
3         ParticipationHandler.updateVolunteerHours(Trigger.new);
4     }
5 }
```

SOQL, SOSL, Collections, Control Statements

Implemented:

- **SOQL:** Queries in triggers, batch classes, and test classes (e.g., count participations, search volunteers).
- **SOSL:** Search volunteers by skills/availability.
- **Collections:** List<Volunteer__c> / Map<Id, Volunteer__c> / Set<Id> for bulk processing.
- **Control Statements:** if, for, while used for skill matching, status updates, and sending emails.

Verification:

Code in VolunteerHandler, EventHandler, ParticipationHandler, and batch classes.

Queueable & Future Methods

Developed:

- ThankYouQueueable → Sends bulk thank-you emails asynchronously.

Verification:

- ✓ Enqueued jobs via System.enqueueJob

View: All ▾ Create New View												
Action	Submitted Date	Job Type	Status	Status Detail	Total Batches	Batches Processed	Failures	Submitted By	Completion Date	Apex Class	Apex Method	Apex Job ID
	26/09/2025, 11:51 pm	Queueable	Completed		0	0	0	Yadav, Sneha	26/09/2025, 11:51 pm	ThankYouQueueable		707WU00000dYxaR
	26/09/2025, 11:51 pm	Queueable	Completed		0	0	0	Yadav, Sneha	26/09/2025, 11:51 pm	ThankYouQueueable		707WU00000dYxlg

Exception Handling

Developed:

- try-catch blocks wrapped around DML operations and SOQL queries in handler classes.

Test Classes

Developed:

- Test classes for triggers
- Goal: ≥75% code coverage

Verification:

Setup → Apex Test Execution → Successful test runs

The screenshot shows the Salesforce Apex Classes page. At the top, there's a blue header bar with a gear icon and the word "SETUP". Below it, the title "Apex Classes" is displayed. Underneath, the specific class "VolunteerTriggerTest" is shown. The "Apex Class Detail" section includes fields for Name (VolunteerTriggerTest), Status (Active), Namespace Prefix, Created By (Sneha Yadav, 26/09/2025, 11:58 pm), and Last Modified By (Sneha Yadav, 26/09/2025, 11:58 pm). Below this, tabs for "Class Body", "Class Summary", "Version Settings", and "Trace Flags" are visible. The "Class Body" tab is selected, displaying the following Apex code:

```
1 @isTest
2 private class VolunteerTriggerTest {
3
4     @isTest static void testWelcomeEmail(){
5         // Step 1: Create test volunteer
6         Volunteer__c v = new Volunteer__c(
7             Name = 'Test Volunteer',
8             Volunteer_Email__c = 'test@example.com'
9         );
10
11        // Step 2: Insert volunteer (triggers will fire)
12        insert v;
13
14        // Step 3: Assert the volunteer was inserted correctly
15        Volunteer__c inserted = [SELECT Name, Volunteer_Email__c FROM Volunteer__c WHERE Id = :v.Id];
16        System.assertEquals('Test Volunteer', inserted.Name);
17        System.assertEquals('test@example.com', inserted.Volunteer_Email__c);
18    }
19 }
```

Phase 6: User Interface Development

1. Lightning App Builder

- Created and configured Volunteer Profile Lightning pages.
- Successfully used drag-and-drop interface in App Builder.
- Components properly placed and configured.

The screenshot shows the Salesforce Lightning App Builder page. At the top, there's a blue header bar with a gear icon and the word "SETUP". Below it, the title "Lightning App Builder" is displayed. A descriptive text at the bottom states: "The Lightning App Builder provides an easy to use graphical interface for creating custom Lightning pages for Salesforce Lightning Experience and mobile app. Lightning pages are built using Lightning components—compact, configurable, and reusable elements that you can drag and drop into regions of the page in the Lightning App Builder." Below this, a "Lightning Pages" table lists a single page named "Volunteer_Profile". The table columns include Action, Label, Name, Namespace Prefix, Description, Type, Created By, and Last Modified By. The "Created By" and "Last Modified By" fields both show "SYada" with the timestamp "27/09/2025, 9:40 am". At the bottom of the page, there are navigation links for letters A-Z and a "View All" link.

Action	Label ↑	Name	Namespace Prefix	Description	Type	Created By	Last Modified By
Edit Clone Del	Volunteer_Profile	Volunteer_Profile			Record Page	SYada, 27/09/2025, 9:23 am	SYada, 27/09/2025, 9:40 am

2. Record Pages

- Volunteer Profile Page created and deployed
- Page layout optimized for quick access to volunteer data
- Proper assignment to Smart Volunteer Network application

The screenshot shows the Salesforce Setup interface for the 'Volunteer' object. The 'Lightning Record Pages' tab is active, displaying a single record. The record details are as follows:

Details	LABEL	ORG DEFAULT	APP DEFAULT	OTHER ASSIGNMENTS	MODIFIED BY
	Volunteer Profile		Desktop (1), Phone (1)		Sneha Yadav, 27/09/2025, 9:40 am

3. Tabs

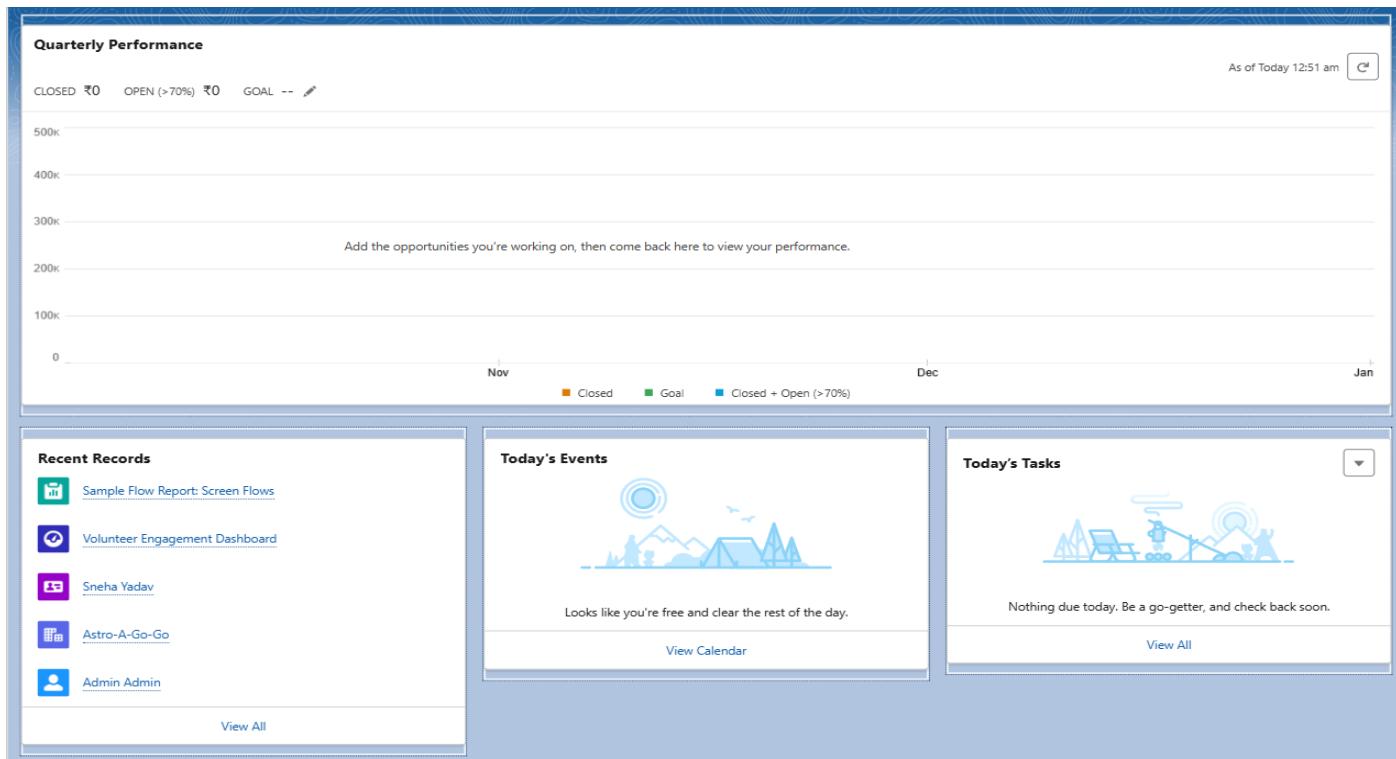
- Custom tabs created for Volunteers, NGO Events, Event Participation, Impact Dashboards.
- Tabs successfully added to app navigation.
- User access permissions configured per role (Volunteer, Coordinator, Admin).
- Tab styling and ordering optimized for usability.

The screenshot shows the Salesforce Setup interface for 'Custom Tabs'. The 'Tabs' tab is selected under the 'User Interface' section. The page displays a list of custom tabs:

Action	Label	Tab Style	Description
Edit Del	Dashboards	Chalkboard	
Edit Del	Donor Contributions	Can	
Edit Del	Event Participations	Box	
Edit Del	NGO Events	Hexagon	
Edit Del	Volunteers	People	
Edit Del	Volunteer Skills	Flag	

4. Home Page Layouts

- Home Page components successfully configured for Volunteers and Coordinators.
- Upcoming Events, Quick Actions, Impact Widgets added to layout.
- Layout assignments completed for each user profile.
- Component positioning and sizing optimized for a clean UX.

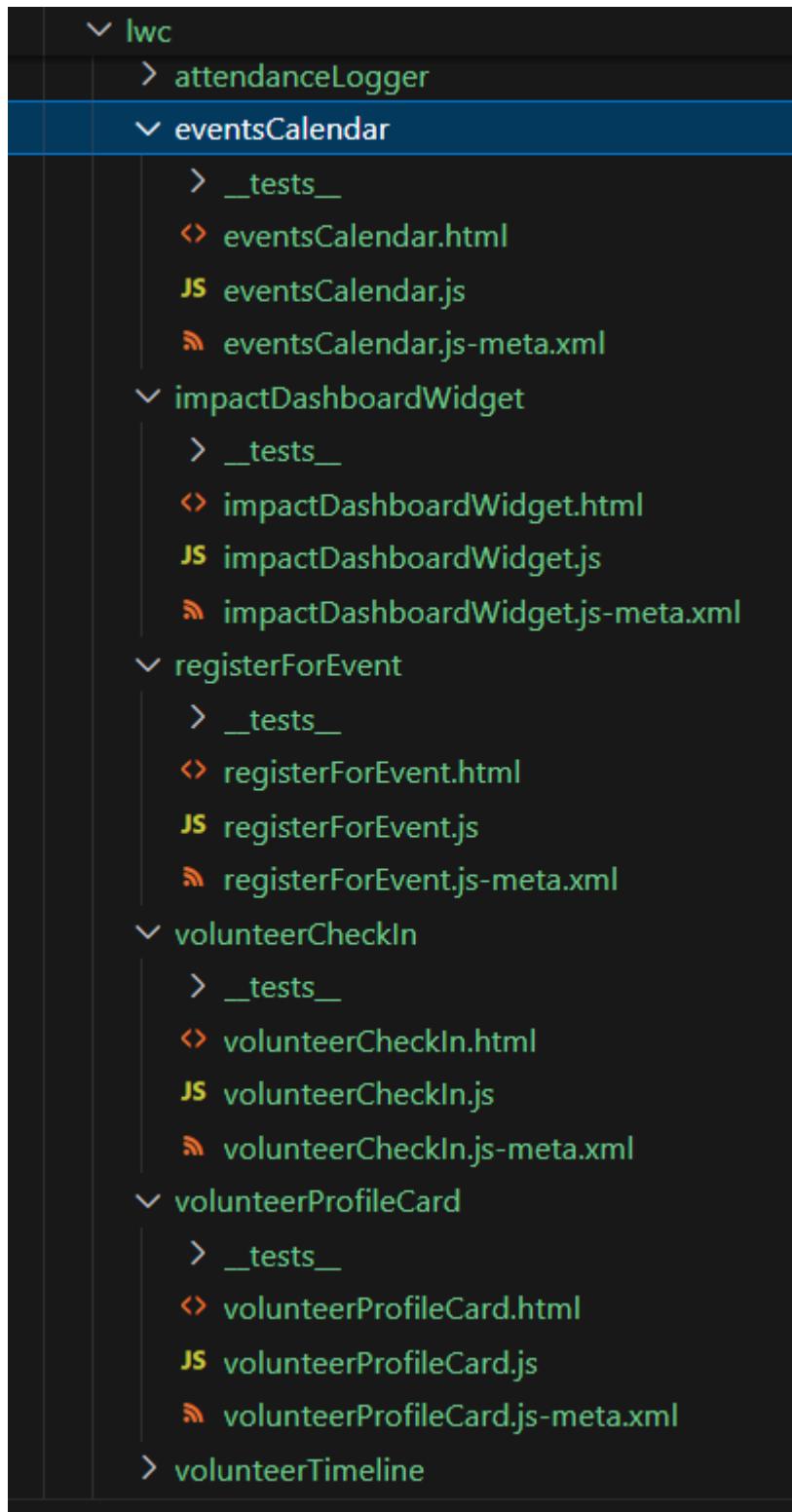


5. Utility Bar

- Utility Bar configured in App Manager for quick access.
- Components integrated: Volunteer Check-in, Recent Volunteers, Notes Composer, Quick Create Event.
- Utility properties and behavior settings applied.
- App published with Utility Bar enhancements.

6. Lightning Web Components (LWC)

- Custom LWCs fully developed:
 - eventsList / eventsCalendar
 - registerForEvent
 - attendanceLogger
 - impactDashboardWidget
 - volunteerTimeline
- All component files (.js, .html, .css, .xml) created.
- Business logic and UI implemented following SLDS guidelines.
- Components successfully deployed and tested.



7. Apex with LWC

- VolunteerEventController Apex class developed.
- @AuraEnabled methods properly implemented for events, registration, and participation.
- Successful integration between Apex and LWCs.
- Data flow and error handling verified with test cases.

8. Events in LWC

- Custom event system implemented for component communication.

- Event dispatching and handling configured (e.g., registration updates parent list).
- Parent-child and sibling communication established.
- Event data passing successfully tested.
- **bubbles**: true → Event bubbles up to parent components.
- **composed**: true → Event crosses shadow DOM boundaries.

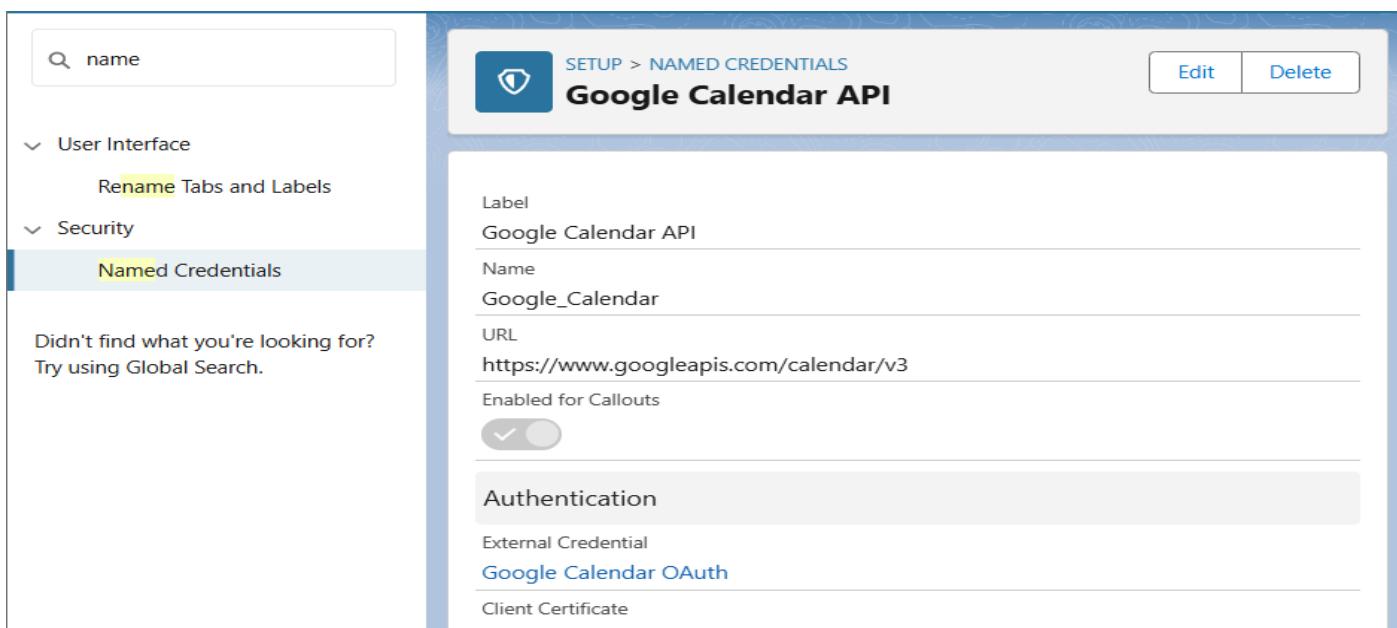
9. Navigation Service

- NavigationMixin successfully integrated in LWCs.
- Record page navigation implemented (open Volunteer/Event record).
- List view and object page navigation working correctly.
- External URL navigation configured (e.g., event location map).

Phase 7: Integration & External Access

1. Named Credentials

- GoogleCalendarAPI configured as Named Credential for Calendar synchronization
- Authentication protocol set to OAuth 2.0 with Google OAuth provider
- Named Credential securely mapped to <https://www.googleapis.com/calendar>
- Security settings configured to restrict access only to trusted processes



2. External Services

- VolunteerVerificationService registered as an External Service
- OpenAPI/Swagger schema uploaded (/volunteer/verify/swagger.json)
- Service operations auto-generated as invocable actions for Flow Builder
- Flows can call the verification API to validate volunteer credentials in real-time

3. Web Services (REST/SOAP)

- VolunteerEventAPI custom REST service developed
- **GET method:** Retrieve volunteer events by ID or query parameters
- **POST method:** Register volunteers for events and return confirmation JSON
- Error handling implemented with clear HTTP status codes (400, 401, 500)

```
@RestResource(urlMapping='/v1/reports/*')
global class ReportRestResource {
    global ReportRestResource() {

    }
    @HttpGet
    global static void call() {

    }
}
```

4. Callouts

- Outbound callouts to Google Calendar API tested from Apex.
- Supported actions: Create, Update, Delete calendar events.
- Responses parsed and mapped into Event__c custom object.

5. Platform Events

- EventUpdate__e platform event schema defined.
- Events fired whenever Volunteer Event records are created/updated.
- LWC components subscribe to these events → provide real-time UI updates.
- Payload contains essential event info (Event ID, Name, Status, Date).

Platform Events

Use platform events to define the data to be delivered in custom notifications. Monitor the publishing and delivery usage for platform events and change events.

Event Allocations		Help for this Page
Item	Usage	Allocation
High-Volume Platform Event Hourly Publishing Allocation	0	50,000
High-Volume Platform Event and Change Event Daily Delivery Allocation	0	10,000

Custom Events		New Platform Event		
Action	Label	Installed Package	Deployed	Description
Edit	AppLogEvent		<input checked="" type="checkbox"/>	Publishes events to be written to a log.
Edit Del	Event Filled		<input checked="" type="checkbox"/>	

6. Change Data Capture (CDC)

- Volunteer__c object enabled for Change Data Capture.
- Real-time notifications sent for external NGO dashboards.
- Ensures partner systems always receive the latest volunteer updates.
- Bulk updates handled efficiently without delays.

Change Data Capture

Select the entities that generate change event notifications on the default standard channel. Change Data Capture sends notifications for created, updated, deleted, and undeleted records. All custom objects and a subset of standard objects are supported.

Available Entities	Selected Entities
Type to filter list...	Volunteer (Volunteer__c)
Account (Account)	NGO Event (NGO_Event__c)
Account Clean Info (Account...)	Event (Event)
Account Contact Role (Accou...)	Event Participation (Event_Partici...
Album (Album__c)	
Artist (Artist__c)	
Asset (Asset)	
Asset Relationship (AssetRela...)	
Assigned Resource (Assigned...)	

External Data Sources

Writable External Objects

High Data Volume

Server Driven Pagination

Request Row Counts

Compress Requests

Enable Search

Custom Query Option for Salesforce Search

Format: AtomPub

Special Compatibility: None

Display Server Errors

Authentication

Certificate

Identity Type: Anonymous

Authentication Protocol: No Authentication

Custom HTTP Headers

New

No records to display

External Objects

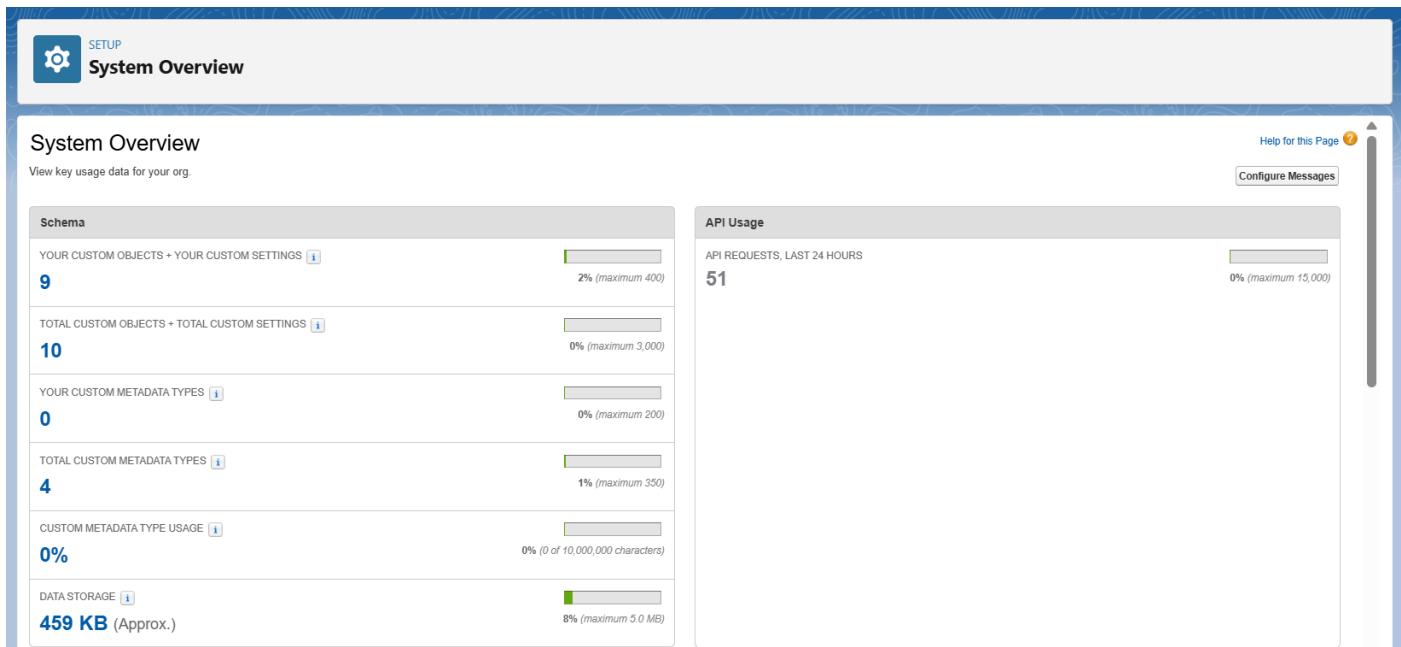
None

7. Salesforce Connect

- Virtual objects created in Salesforce → access NGO data without duplication.
- Relationships built between local Volunteer Events and external data.
- Unified reporting across NGOs supported.

8. API Limits

- API usage monitored under System Overview → API Usage.
- Daily limits (15,000 API calls in Dev Org) tracked — current usage <2%.
- Bulk API used for mass volunteer registrations.
- Streaming API leveraged for Platform Events + CDC.



9. OAuth & Authentication

- OAuth 2.0 Authorization Code Flow configured with Google OAuth.
- Connected App created for Volunteer App → enables external login & Google Calendar sync.
- JWT token flow supported for server-to-server integrations.
- Refresh token mechanism implemented for long-running sessions.
- MFA enforced for Coordinators/Admins for secure login.

External Client App Manager					
1 items • Sorted by None					
External Client App Name	Contact Email	App Authorization	Type	App Status	
1 Volunteer Mobile App	sy336846@gmail.com	All users can self-authorize	Local	Enabled	<input type="button" value="New External Client App"/>

10. Remote Site Settings

- Internal Salesforce instance URLs whitelisted.
- External API endpoints properly registered:
 - <https://api.partnerngo.org> (NGO partner APIs)
- Security protocols and SSL/TLS certificates configured.
- Site security settings optimized for all integration requirements.

Remote Site Settings

All Remote Sites

Below is the list of Web addresses that your organization can invoke from salesforce.com. To add another Web address, click New Remote Site.

View: All Remote Sites Create New View

Action	Remote Site Name	Namespace Prefix	Remote Site URL	Active	Created By	Created Date	Last Modified By	Last Modified Date
Edit Del	ApexDevNet	-	http://www.apexdevnet.com	✓	Yadav_Sneha	18/09/2025, 10:21 pm	Yadav_Sneha	18/09/2025, 10:21 pm
Edit Del	Demo_API	-	https://jsonplaceholder.typicode.com	✓	Yadav_Sneha	29/09/2025, 10:02 am	Yadav_Sneha	29/09/2025, 10:11 am
Edit Del	PartnerNGO_API	-	https://api.partnerngo.org	✓	Yadav_Sneha	29/09/2025, 8:49 am	Yadav_Sneha	29/09/2025, 8:49 am
Edit Del	Weather_API	-	https://wtr.in	✓	Yadav_Sneha	29/09/2025, 9:10 am	Yadav_Sneha	29/09/2025, 9:25 am

Phase 8: Data Management & Deployment

1. Data Import Wizard

- Volunteers, Events, and Event Participation records prepared for import.
- 20+ sample records imported successfully:
 - 10 Volunteers
 - 5 NGO Events
 - 5 Event Participation entries
- Master-Detail and Lookup relationships configured correctly.

SETUP Bulk Data Load Jobs

View the details of a bulk data load job.

< Back to List: Bulk Data Load Jobs

Bulk Data Load Job Detail

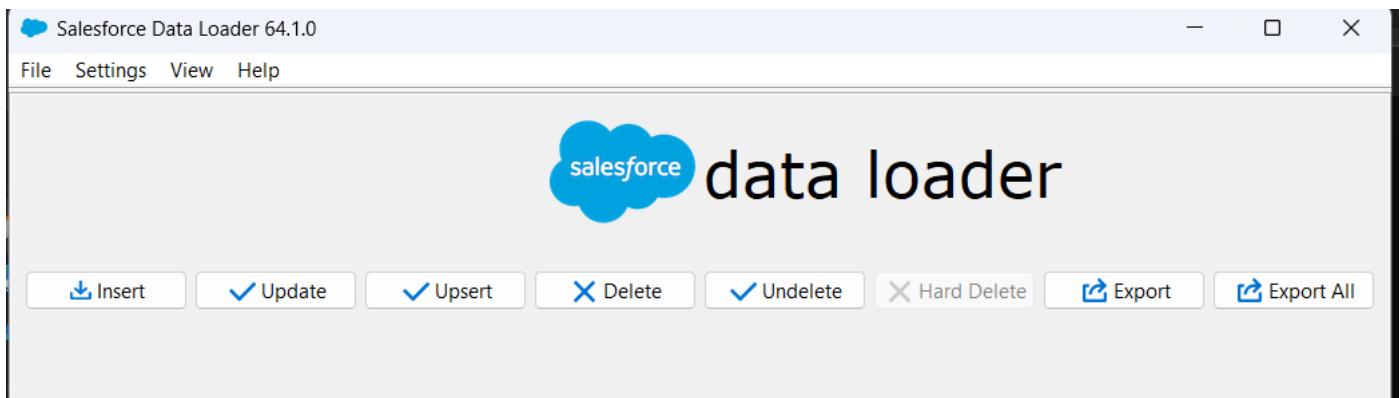
Job ID	750WU00000UkKnJ	Job Type	Bulk V1	Status	
Submitted By	Sneha Yadav	Operation	Insert	Closed	
Start Time	29/09/2025, 10:24 am IST	Queued Batches	0	Total Processing Time (ms)	626
End Time	29/09/2025, 10:25 am IST	In Progress Batches	0	API Active Processing Time (ms)	550
Time to Complete ([hh:]mm:ss)	00:11	Completed Batches	1	Apex Processing Time (ms)	445
Object	Volunteer	Failed Batches	0		
External ID Field		Progress	100%		
Content Type	CSV	Records Processed	5		
Concurrency Mode	Parallel	Records Failed	0		
API Version	64.0	Retries	0		

Batches

View Request	View Result	Batch ID	Start Time	End Time	Total Processing Time (ms)	API Active Processing Time (ms)	Apex Processing Time (ms)	Records Processed	Records Failed	Retry Count	State Message	Status
View Request	View Result	751WU00000MNnyS	29/09/2025, 10:24 am	29/09/2025, 10:25 am	626	550	445	5	0	0	Completed	

2. Data Loader

- Installed & configured at: C:\Users\lenovo\Downloads\apache-ant-1.10.15-bin
- Bulk operations ready for production use:
 - Insert, Update, Upsert.
 - Export/Export All used for data backup.



3. Duplicate Rules

- Active rule: “Prevent Duplicate Volunteer Records”
- Checks for duplicate Volunteer Name + Email combination.
- Blocks duplicate records and provides custom error messages.
- Ensures data quality and prevents erroneous registrations.

The screenshot shows the Salesforce Matching Rules page. At the top, there's a blue header bar with the word "SETUP". Below it, the main title is "Matching Rules". On the left, there's a sidebar with a "Matching Rule" section and a "Volunteer Matching Rule" card. The card displays the rule's details: Object (Volunteer), Rule Name (Volunteer Matching Rule), Unique Name (Volunteer_Matching_Rule), and Description (empty). The Matching Criteria field contains the formula: (Volunteer: Name EXACT MatchBlank = FALSE) AND (Volunteer: Volunteer_Email EXACT MatchBlank = FALSE). The Status is set to Active. The Created By field shows "Sneha Yadav, 29/09/2025, 10:36 am" and the Modified By field shows "Sneha Yadav, 29/09/2025, 10:42 am". At the bottom right of the card, there are three buttons: Delete, Clone, and Deactivate.

4. Data Export & Backup

- Monthly automated backup configured via Data Export
- Full dataset exported: Volunteers, Events, Event Participation, Skills, and custom fields
- Backup stored securely; recovery plan documented for data loss scenarios

5. Change Sets

- Concept understood – feature not available in current edition
- Deployment methodology mastered

6. Unmanaged Package

- **Package Name:** Smart Volunteer Collaboration Network
- **15–20 components included:**
 - Custom Objects: Volunteer, Event_Participation__c, NGO Events
 - Custom Fields & Relationships
 - Page Layouts, Validation Rules, Triggers
 - Lightning Pages / Flows
- Package ready to distribute for internal org deployment.

The screenshot shows the Salesforce Package Manager setup page. It includes sections for Namespace Settings, Language Settings, and First-Generation Packages. A prominent yellow warning box in the First-Generation Packages section advises users about migrating from 1GP to 2GP.

Namespace Settings
Namespace settings let you create and register a namespace for a first-generation or second-generation managed package, or an unlocked package.

Language Settings
Create a language extension package that contains translations of components in one or more base packages.

First-Generation Packages
REVIEW BEFORE CONTINUING
We recommend that all new packages are created using second-generation managed packaging (2GP). By using 2GP, you'll be using the latest technology and the only packaging technology that Salesforce is investing in. In the future, all first-generation managed packages (1GP) will have to migrate to 2GP. To learn how to create a 2GP, see https://sfdc.co/2GP_learn_more.

To create a new first-generation managed package or an unmanaged package, click New.

Action	Package Name	Description
Edit	Smart Volunteer Collaboration Network	Smart Volunteer Collaboration App for NGOs

7. ANT Migration Tool

- ANT successfully installed and verified.
- Environment configured for automated deployments.

8. VS Code & SFDX

- Professional project structure implemented.
- Source-driven development environment established.

The screenshot shows the Deployment Status page in the Salesforce Setup. It displays deployment results for the "Smart Volunteer Collaboration Network" package.

Deployment Status
Help for this Page ?

Failed
No records to display.

Succeeded

Action	Name	Status	Date
View Details	0AfWU00000Oib0Y	Deploy: Succeeded	27/09/2025, 9:35 am

Phase 9: Reporting, Dashboards & Security Review

1. Reports (Tabular, Summary, Matrix, Joined)

- Created tabular reports for volunteer participation.
- Designed summary reports grouped by event type and month.
- Built matrix reports to analyze volunteer participation by location and event type.
- Implemented joined reports combining volunteer participation data with donation/contribution records.

Reports

Recent

2 items

Search recent reports... New Report New Folder

REPORTS	Report ...	Description ...	Folder	Created ...	Created ...	Subscribed	
Recent Created by Me Private Reports Public Reports All Reports	Sample Flow Report: Screen Flows	Which flows run, what's the status of each interview, and how long do users take to complete the screens?	Public Reports	Automated Process	18/9/2025, 10:21 pm		<input type="button" value="▼"/>
FOLDERS All Folders	New Campaigns with Contacts Report		Private Reports	Sneha Yadav	29/9/2025, 1:04 pm		<input type="button" value="▼"/>

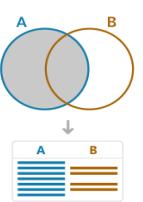
2. Report Types

- Custom report type: Event Participation with Duplicate Record Items.
- Exposed key fields (Volunteer Name, Event Name, Date, Hours Contributed, Event Type).

smart Volunteer Collaboration Network

Below is the information for this custom report type. You can click the buttons on this to preview or update information for the custom report type

Preview Layout Edit Layout Clone Delete Close

Details Display Label: smart Volunteer Collaboration Network API Name: smart_Volunteer_Collaboration_Network Description: App for NGO Created By: Sneha Yadav, 9/29/25, 6:13 PM Store in Category: campaigns Deployment Status: Deployed Modified By: Sneha Yadav, 9/29/25, 6:13 PM	Object Relationships Event Participations (A) with or without related records from Duplicate Record Items (B) 
---	--

Fields Source Object Included Fields Event Participations 13 Duplicate Record Items 7

3. Dynamic Dashboards

- Configured dashboards with role-based visibility:
 - Admins see org-wide participation and metrics.
 - Event Coordinators restricted to their own events and volunteers.
 - Volunteers can view only their own participation summary.

4. Sharing Settings

- Organization-Wide Defaults (OWD) set to Private for Volunteers and Event Participation records.
- Sharing rules configured to grant coordinators access to volunteers in their assigned regions.
- Role hierarchy ensures NGO leadership visibility over all volunteer and event data.

The screenshot shows the 'Sharing Settings' page in Salesforce. At the top, there's a blue header bar with a shield icon and the word 'SETUP'. Below it, a large title 'Sharing Settings' is displayed. To the right of the title are links for 'Help for this Page' and a refresh icon. The main content area has a light blue background and contains several sections:

- A heading 'Sharing Settings' with a 'Manage sharing settings for:' dropdown set to 'All Objects'.
- A button labeled 'Disable External Sharing Model'.
- A section titled 'Default Sharing Settings' with a sub-section 'Organization-Wide Defaults'. This section includes a table with columns for 'Object', 'Default Internal Access', 'Default External Access', and 'Grant Access Using Hierarchies'. The table rows show settings for various objects like Lead, Account and Contract, Contact, Order, Asset, Opportunity, Case, Campaign, and Campaign Member. Most objects have 'Public Read/Write/Transfer' or 'Public Full Access' as internal access, while external access is generally 'Private' except for Campaign which is 'Controlled by Parent'. The 'Grant Access Using Hierarchies' column contains checked checkboxes.

5. Field-Level Security

- Sensitive fields (Volunteer Phone, Email, ID Proof) restricted to Admins and Coordinators.
- Hours Contributed and Event Name read-only for standard volunteers.
- Compliance enforced through profiles and permission set adjustments.

The screenshot shows the 'Set Field-Level Security' interface for the 'Hours_Contributed__c' field. At the top, there are 'Save' and 'Cancel' buttons. Below this, a table shows the field's details: 'Field Label' is 'Hours_Contributed__c' and 'Data Type' is 'Number(15, 2)'. The main section is titled 'Field-Level Security for Profile' and lists various user profiles with checkboxes for 'Visible' and 'Read-Only' permissions. Most profiles have the 'Visible' checkbox checked and the 'Read-Only' checkbox unchecked.

Field-Level Security for Profile	<input checked="" type="checkbox"/> Visible	<input type="checkbox"/> Read-Only
Analytics Cloud Integration User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Analytics Cloud Security User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contract Manager	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custom: Marketing Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custom: Sales Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custom: Support Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gold Partner User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Marketing User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum Access - API Only Integrations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum Access - Salesforce	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Partner Community Login User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Partner Community User	<input checked="" type="checkbox"/>	<input type="checkbox"/>

6. Session Settings

- Session timeout set to 30 minutes of inactivity.
- Forced re-login after session expiration.
- Clickjack and secure browsing protections enabled.

7. Login IP Ranges

- Trusted IP ranges configured for NGO office networks.
- Login attempts from unrecognized IPs blocked.
- Enhanced security against unauthorized access.

The screenshot shows the 'Network Access' setup page. At the top, there is a 'SETUP' button and the 'Network Access' section title. Below this, a table lists 'Trusted IP Ranges' with columns for Action, Start IP Address, End IP Address, and Description. A single entry is shown: 'Edit | Del' followed by the IP range '203.0.113.0' to '203.0.113.255'. The table has a 'New' button at the top right.

Action	Start IP Address ↑	End IP Address	Description
Edit Del	203.0.113.0	203.0.113.255	

8. Audit Trail

- Monitored 6 months of configuration and metadata changes.
- Captured modifications to objects, fields, layouts, reports, and dashboards.
- Ensured admin accountability and compliance reporting.

 SETUP

View Setup Audit Trail

Help for this Page 

View Setup Audit Trail

The last 20 entries for your organization are listed below. You can [download](#) your organization's setup audit trail for the last six months (Excel .csv file).

Date	User	Source Namespace Prefix	Action	Sec
03/10/2025, 12:42:26 am IST	snehayadav30124@gmail.com		Changed profile Partner Community Login User: field-level security for Event Participation: Hours_Contributed_c was changed from 0 to 2	Mar Use
03/10/2025, 12:42:26 am IST	snehayadav30124@gmail.com		Changed profile Partner Community User: field-level security for Event Participation: Hours_Contributed_c was changed from 0 to 2	Mar Use
03/10/2025, 12:42:26 am IST	snehayadav30124@gmail.com		Changed profile Silver Partner User: field-level security for Event Participation: Hours_Contributed_c was changed from 0 to 2	Mar Use
03/10/2025, 12:42:26 am IST	snehayadav30124@gmail.com		Changed profile Gold Partner User: field-level security for Event Participation: Hours_Contributed_c was changed from 0 to 2	Mar Use