Phase 7: Integration & External Access

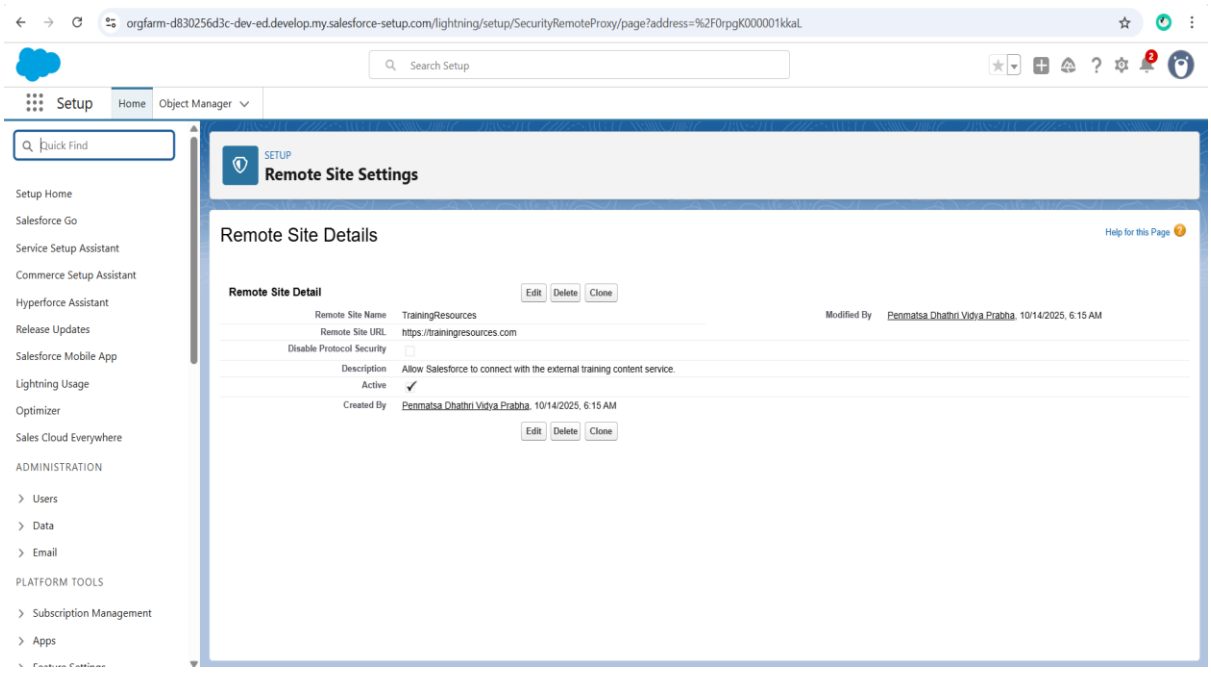
1. Remote Site Settings

Use Case:

Our Corporate Training CRM app needs to fetch training resources or course materials from an external learning website (e.g., *https://trainingresources.com*).
To allow Salesforce to communicate with that external site securely, we must add it to Remote Site Settings.

Implementation Steps:

1. Go to Setup → Security → Remote Site Settings.
2. Click New Remote Site.
3. Fill:
    - Remote Site Name: TrainingResources
    - Remote Site URL: https://trainingresources.com
    - Description: Allow Salesforce to connect with the external training content service.
4. Click Save.



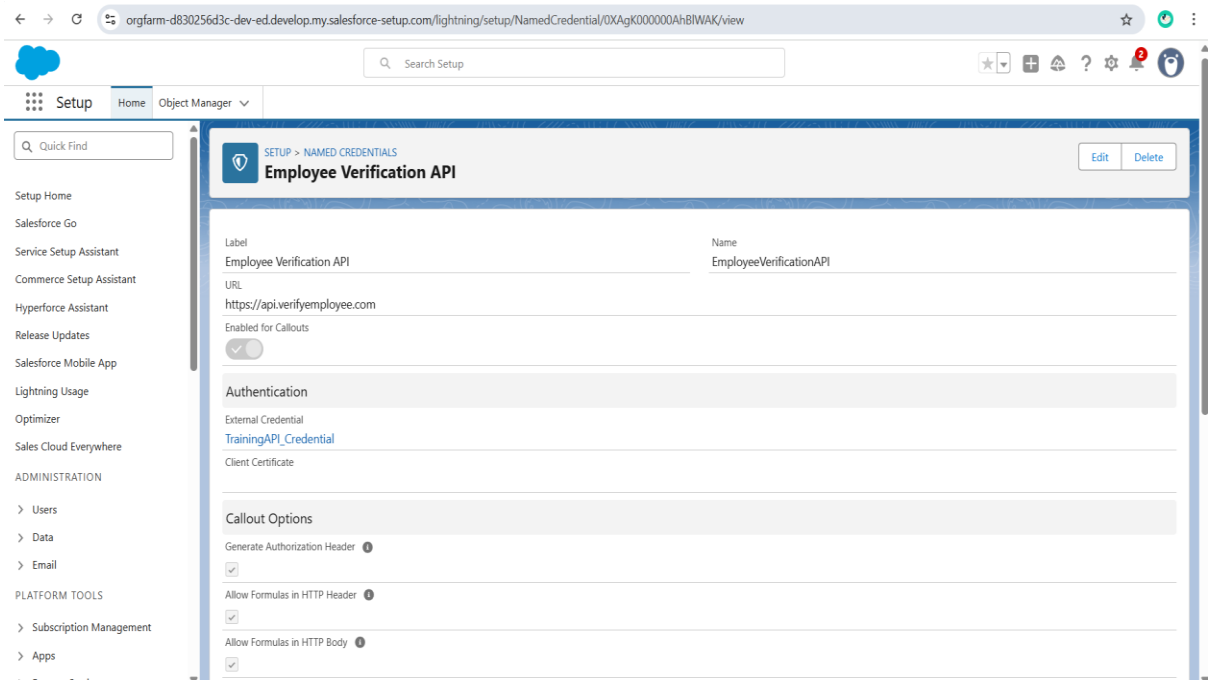
2. Named Credentials

Use Case:

Instead of hardcoding credentials in Apex, we securely store API details for an external system (like a REST API for employee data verification).
Named Credentials simplify authentication and API callouts.

Implementation Steps:

1. Go to Setup → Named Credentials → New Named Credential.
2. Fill:
    - Label: Employee Verification API
    - Name: EmployeeVerificationAPI
    - URL: https://api.verifyemployee.com
    - External Credential: TrainingAPI_Credential
    - Identity Type: Named Principal
    - Authentication Protocol: Password Authentication or OAuth (if available).
3. Save.



3. Apex REST Callout

Use Case:
When a registration record is created, the system calls an external service to check whether the employee's email is valid (example API endpoint).

Implementation:

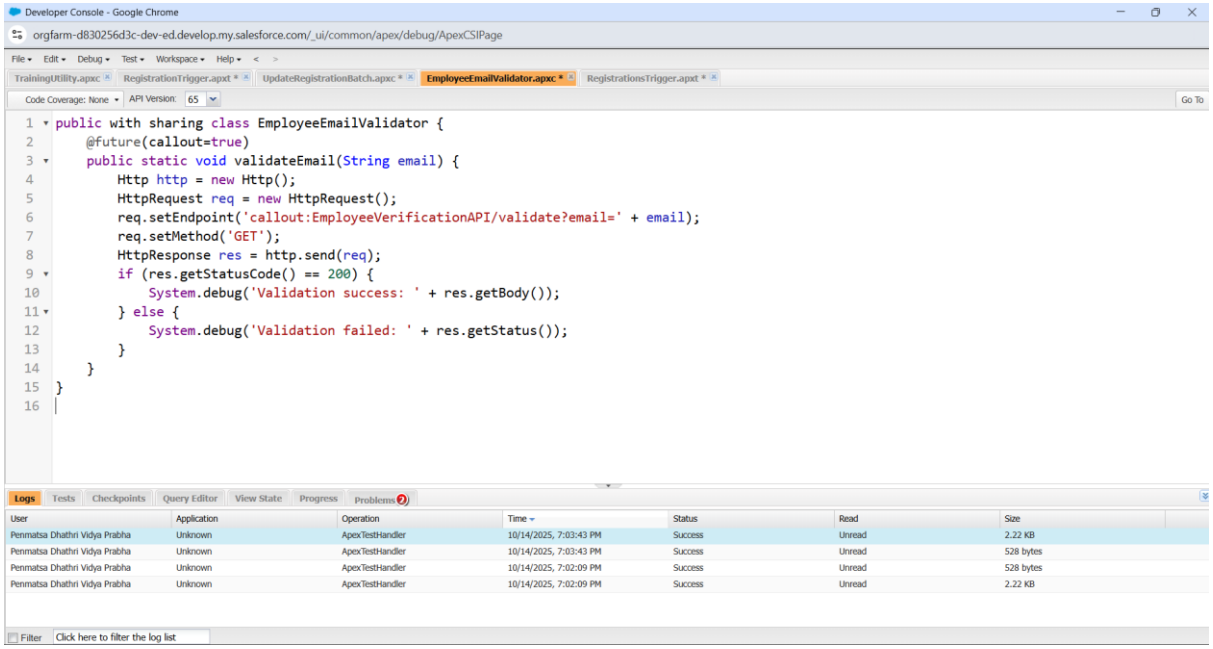
Apex Class

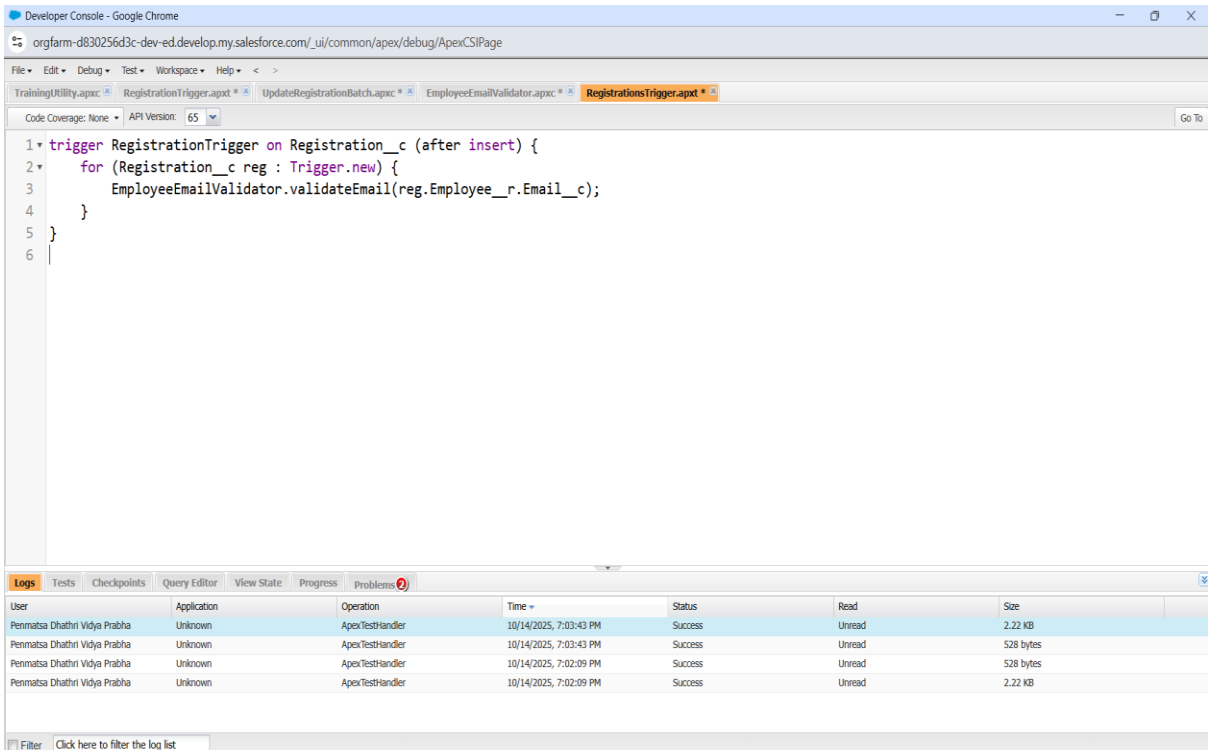
```
public with sharing class EmployeeEmailValidator {
    @future(callout=true)
    public static void validateEmail(String email) {
        Http http = new Http();
        HttpRequest req = new HttpRequest();

req.setEndpoint('callout:EmployeeVerificationAPI/validate?email=' +
email);
        req.setMethod('GET');
        HttpResponse res = http.send(req);
        if (res.getStatusCode() == 200) {
            System.debug('Validation success: ' + res.getBody());
        } else {
            System.debug('Validation failed: ' + res.getStatus());
        }
    }
}
```

Apex Trigger:

```
trigger RegistrationTrigger on Registration__c (after insert) {
```

```
    for (Registration__c reg : Trigger.new) {

EmployeeEmailValidator.validateEmail(reg.Employee__r.Email__c);
    }
}
```





4. Platform Events

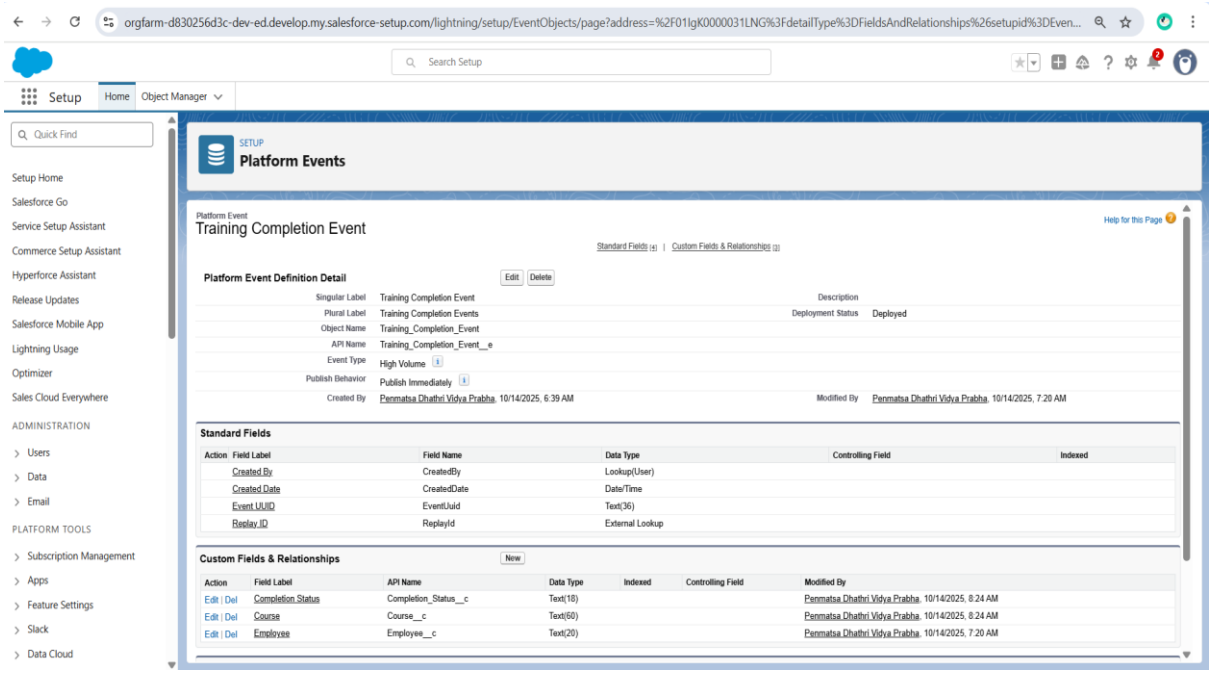
Use Case:
When a new registration is completed, send a **Platform Event** notification to external systems or apps (like Slack or an internal dashboard).

Implementation Steps:

1. Go to **Setup → Platform Events → New Platform Event**.
2. Name it Training_Completion_Event.
3. Add fields:
    - **Employee__c** (Text)
    - **Course__c** (Text)
    - **CompletionStatus__c** (Text)
4. Publish the event from Apex:

```
trigger RegistrationTrigger on Registration__c (after update) {
    for (Registration__c reg : Trigger.new) {
        // Check if completion is 100% and status is completed
        if (reg.Completion__c == 100 && reg.Status__c != 'Completed') {
            Training_Completion_Event__e eventMsg = new
Training_Completion_Event__e(
                Employee__c = reg.Employee__r.Name,
                Course__c = reg.Course__r.Course_Name__c,
                CompletionStatus__c = 'Completed'
            );
            Database.SaveResult sr = EventBus.publish(eventMsg);
            System.debug('Event published: ' + sr.isSuccess());
        }
```

```
    }
}
```



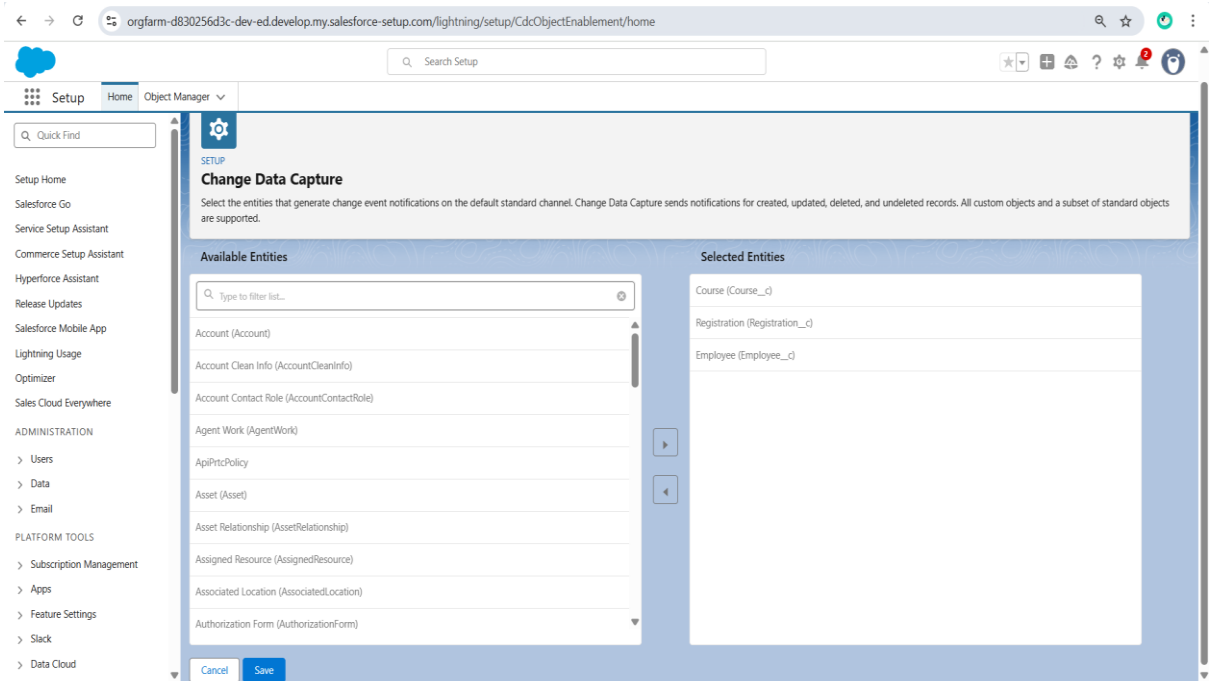
5. Change Data Capture

Use Case:

You want external apps to automatically get notified when a **Registration** record is updated or completed (for example, to sync with an external reporting system).

Implementation Steps:

1. Go to **Setup → Change Data Capture**.
2. Enable **Registration__c**, **Course__c**, and **Employee__c** objects.
3. Now Salesforce automatically streams events whenever these records change.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Quick Find
Setup Home
Salesforce Go
Service Setup Assistant
Commerce Setup Assistant
Hyperforce Assistant
Release Updates
Salesforce Mobile App
Lightning Usage
Optimizer
Sales Cloud Everywhere
ADMINISTRATION
Users
Data
Email
PLATFORM TOOLS
Subscription Management
Apps
Feature Settings
Slack
Data Cloud
SETUP
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
Type to filter list...
Account (Account)
Account Clean Info (AccountCleanInfo)
Account Contact Role (AccountContactRole)
Agent Work (AgentWork)
ApiPrtcPolicy
Asset (Asset)
Asset Relationship (AssetRelationship)
Assigned Resource (AssignedResource)
Associated Location (AssociatedLocation)
Authorization Form (AuthorizationForm)
Selected Entities
Course (Course__c)
Registration (Registration__c)
Employee (Employee__c)
Cancel
Save