

# Phase 7: Integration & External Access

## 1. Named Credentials

**Purpose:** Simplifies and secures authentication for external callouts without the need to hardcode credentials in Apex code.

**Features:**

Stores endpoint URLs and authentication information in a central place.

Supports OAuth 2.0, password authentication, and custom authentication providers.

Allows callouts to external services using a simple reference in Apex (callout:MyNamedCredential).

**Benefits:** Reduces maintenance, improves security, and makes external integrations more declarative.

The screenshot shows the Salesforce configuration page for a Named Credential named 'MockHR API'. The breadcrumb trail at the top is 'SETUP > NAMED CREDENTIALS'. In the top right corner, there are 'Edit' and 'Delete' buttons. The main configuration area is divided into several sections: 'Label' (MockHR API), 'Name' (MockHR\_API), 'URL' (https://68d52eb3e29051d1c0ada35d.mockapi.io/api/json), and 'Enabled for Callouts' (checked). Below these are sections for 'Authentication' (with a link to 'MockHR External Credential'), 'Client Certificate', 'Callout Options' (with checkboxes for 'Generate Authorization Header', 'Allow Formulas in HTTP Header', and 'Allow Formulas in HTTP Body'), and a 'Help' icon.

## 2. External Services

**Purpose:** Allows Salesforce to declaratively consume external REST APIs.

**Features:**

Use OpenAPI (Swagger) specifications to import API definitions.

Automatically generate Apex actions that can be used in Flow Builder.

Supports REST services that can be integrated without writing code.

**Benefits:** Non-developers can integrate external APIs easily and safely, accelerating automation and process building.

Remote Site Details
Help for this Page

Remote Site Detail

Edit
Delete
Clone

Remote Site Name	ApexDevNet	Modified By	OrgFarm EPIC, 7/17/2025, 4:38 AM
Remote Site URL	http://www.apexdevnet.com		
Disable Protocol Security	<input type="checkbox"/>		
Description			
Active	<input checked="" type="checkbox"/>		
Created By	OrgFarm EPIC, 7/17/2025, 4:38 AM		

Edit
Delete
Clone

### 3. Web Services (REST/SOAP)

Purpose: Expose Salesforce business logic to external systems via web services.

Types:

REST Web Services: Lightweight, JSON-based, stateless APIs. Expose Apex methods using @RestResource and HTTP method annotations (@HttpGet, @HttpPost).

SOAP Web Services: XML-based APIs suitable for enterprise systems. Expose Apex classes with webservice keyword.

Benefits: Allows third-party systems to interact with Salesforce programmatically, supporting integrations and data exchange.

### 4. Callouts

Purpose: Enables Salesforce to send HTTP requests to external systems.

Types:

Synchronous Callouts: Wait for a response before continuing execution.

Asynchronous Callouts: Execute in the background (e.g., using @future methods or Queueable Apex).

Considerations:

Must configure Remote Site Settings or Named Credentials.

Handle timeouts, errors, and response parsing properly.

Benefits: Real-time access to external services for enriching Salesforce data or triggering external processes.

### 5. Platform Events

Purpose: Supports event-driven architecture for real-time notifications and integrations.

Features:

Define custom events with fields.

Publish events from Apex, Flows, or external systems.

Subscribe to events in Apex, Process Builder, or external apps via CometD protocol.

Benefits: Decouples systems, enabling scalable and asynchronous communication for real-time processes.

SETUPPlatform Events

Created ByNew Hire, 9/25/2025, 4:32 AM

Modified ByNew Hire, 9/25/2025, 4:32 AM

Standard Fields

Action	Field Label	Field Name	Data Type	Controlling Field	Indexed
	Created By	CreatedBy	Lookup(User)		
	Created Date	CreatedDate	Date/Time		
	Event UUID	EventUuid	Text(36)		
	Replay ID	ReplayId	External Lookup		

Custom Fields & Relationships

New

Action	Field Label	API Name	Data Type	Indexed	Controlling Field	Modified By
<a href="#">Edit</a>   <a href="#">Del</a>	EmployeeId	EmployeeId__c	Text(20)			New Hire, 9/25/2025, 4:43 AM
<a href="#">Edit</a>   <a href="#">Del</a>	Status	Status__c	Text(40)			New Hire, 9/25/2025, 4:41 AM

Triggers

New

Action	Name	Api Version	Status	Size Without Comments	Last Modified By
<a href="#">Edit</a>   <a href="#">Del</a>	EmployeeUpdateEventTrigger	64.0	Active	427	New Hire, 9/25/2025, 5:18 AM

Subscriptions

i

Action	Subscriber	Last Processed Id	Last Published Id	State	Batch Size	User
<a href="#">Manage</a>	EmployeeUpdateEventTrigger	195544	Not Available	Running	2,000	Automated Process

Replay ID

ReplayId

External Lookup

Custom Fields & Relationships

New

Action	Field Label	API Name	Data Type	Indexed	Controlling Field	Modified By
<a href="#">Edit</a>   <a href="#">Del</a>	EmployeeId	EmployeeId__c	Text(20)			New Hire, 9/25/2025, 4:43 AM
<a href="#">Edit</a>   <a href="#">Del</a>	Status	Status__c	Text(40)			New Hire, 9/25/2025, 4:41 AM

Triggers

New

Action	Name	Api Version	Status	Size Without Comments	Last Modified By
<a href="#">Edit</a>   <a href="#">Del</a>	EmployeeUpdateEventTrigger	64.0	Active	427	New Hire, 9/25/2025, 5:18 AM

Subscriptions

i

Action	Subscriber	Last Processed Id	Last Published Id	State	Batch Size	User
<a href="#">Manage</a>	EmployeeUpdateEventTrigger	195544	Not Available	Running	2,000	Automated Process

6. Change Data Capture (CDC)

Purpose: Tracks record changes in Salesforce and delivers events in real time.

Features:

Detect creation, updates, deletion, and undelete operations.

Subscribe via CometD, Apex triggers, or external systems.

Benefits: Keeps external systems synchronized with Salesforce without polling, reducing latency and improving performance.

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

Account (Account)

Account Clean Info (AccountCleanInfo)

Account Contact Role (AccountContactRole)

Agent Work (AgentWork)

Asset (Asset)

Asset Relationship (AssetRelationship)

Assigned Resource (AssignedResource)

Associated Location (AssociatedLocation)

Authorization Form (AuthorizationForm)

Authorization Form Consent (AuthorizationFormConsent)

Selected Entities

Employee (Employee\_\_c)

## 7. Salesforce Connect

**Purpose:** Access external data in real time without storing it in Salesforce.

**Features:**

Supports OData 2.0 and 4.0 protocols.

Creates external objects that behave like standard Salesforce objects.

Enables reporting and process automation on external data.

**Benefits:** Eliminates data duplication, reduces storage costs, and allows seamless integration with external databases.

SETUP

External Data Sources

External Data Source: HR External Data

[Help for this Page](#)

Connect to another Salesforce org or a third-party database or content system.

[Back to External Data Sources](#)

Edit

Validate and Sync

Delete

External Data Source	HR External Data
Name	HR_External_Data
Type	Salesforce Connect: OData 2.0

Parameters

URL

https://github.com/khyali-palamsetti/Employee\_Onboarding\_System/blob/master/employee\_onboarding\_api.json

Connection Timeout (Seconds)

120

Writable External Objects

☐

High Data Volume

☐

Server Driven Pagination

☐

Request Row Counts

☒

Compress Requests

☐

Enable Search

☒

Custom Query Option for Salesforce

☐