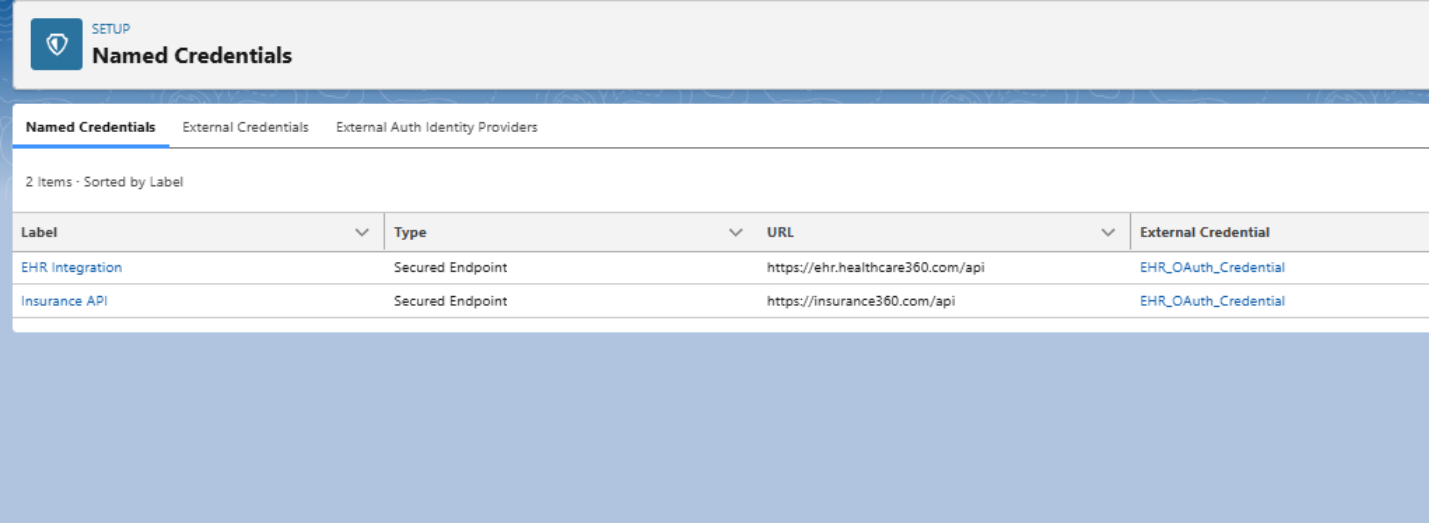# □ Phase 7: Integration & External Access

1. Named Credentials

- **Purpose**: Securely store authentication details for external endpoints.
- **Configuration**:
  - Type: Named Principal
  - Auth Protocol: OAuth 2.0 / API Key
  - URL: Base endpoint of external service (e.g., `https://api.insurance360.com`)
- **Usage**: Linked to External Services or Apex callouts.

Healthcare Mapping: Used to authenticate securely with insurance APIs, EHR systems, or lab platforms.
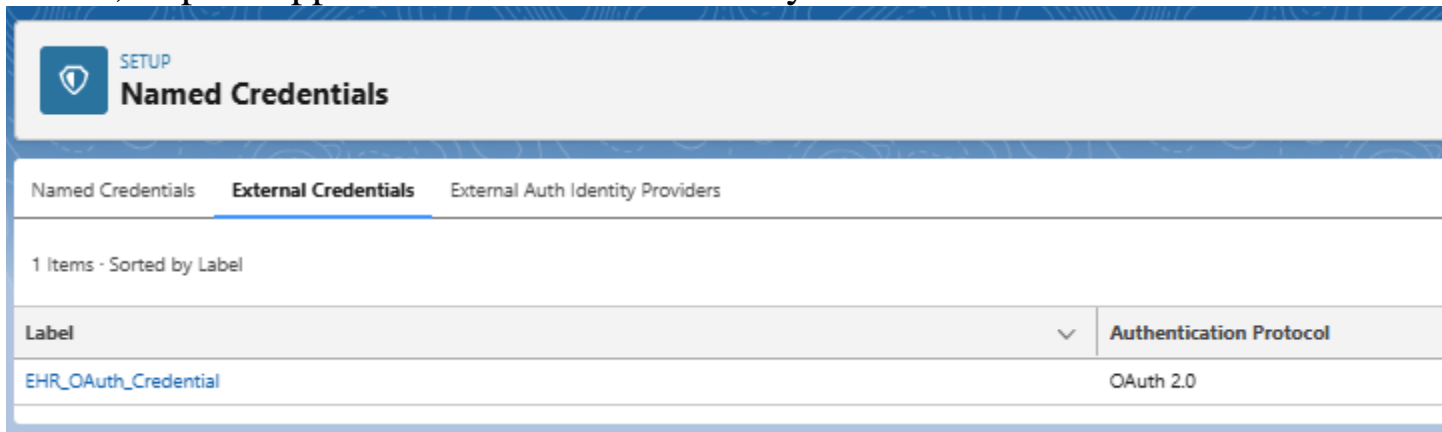
2. External Services

- **Purpose**: Declarative integration with REST APIs using OpenAPI schema.
- **Configuration**:
  - Schema Type: OpenAPI 3.0
  - Source: Uploaded JSON/YAML or URL
  - Linked Named Credential: Required
- **Usage**: Generates invocable actions for Flows.

Healthcare Mapping: Used to validate insurance policies, fetch patient details, or push appointment data to external systems.

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4. Callouts

- **Purpose**: Outbound HTTP requests from Apex or Flow.
- **Requirements**:
  - Remote Site Settings or Named Credentials
  - Must be asynchronous in triggers
- **Usage**: REST/SOAP callouts to external systems.

Healthcare Mapping: Used to send appointment data, verify coverage, or retrieve lab results.

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5. Platform Events

- **Purpose**: Publish-subscribe model for custom event delivery.
- **Configuration**:
    - API Name: `AppointmentBookedEvent__e`
    - Publish Behavior: After Commit
    - Publisher Type: Apex/Declarative
- **Usage**: Published via Flow or Apex, subscribed via Streaming API.

Healthcare Mapping: Used to notify EHR systems when appointments are booked.

SETUP
Platform Events

Platform Event
AppointmentBookedEvent

Standard Fields [4] | Custom Fields & Relationships [4]

Platform Event Definition Detail   Edit   Delete
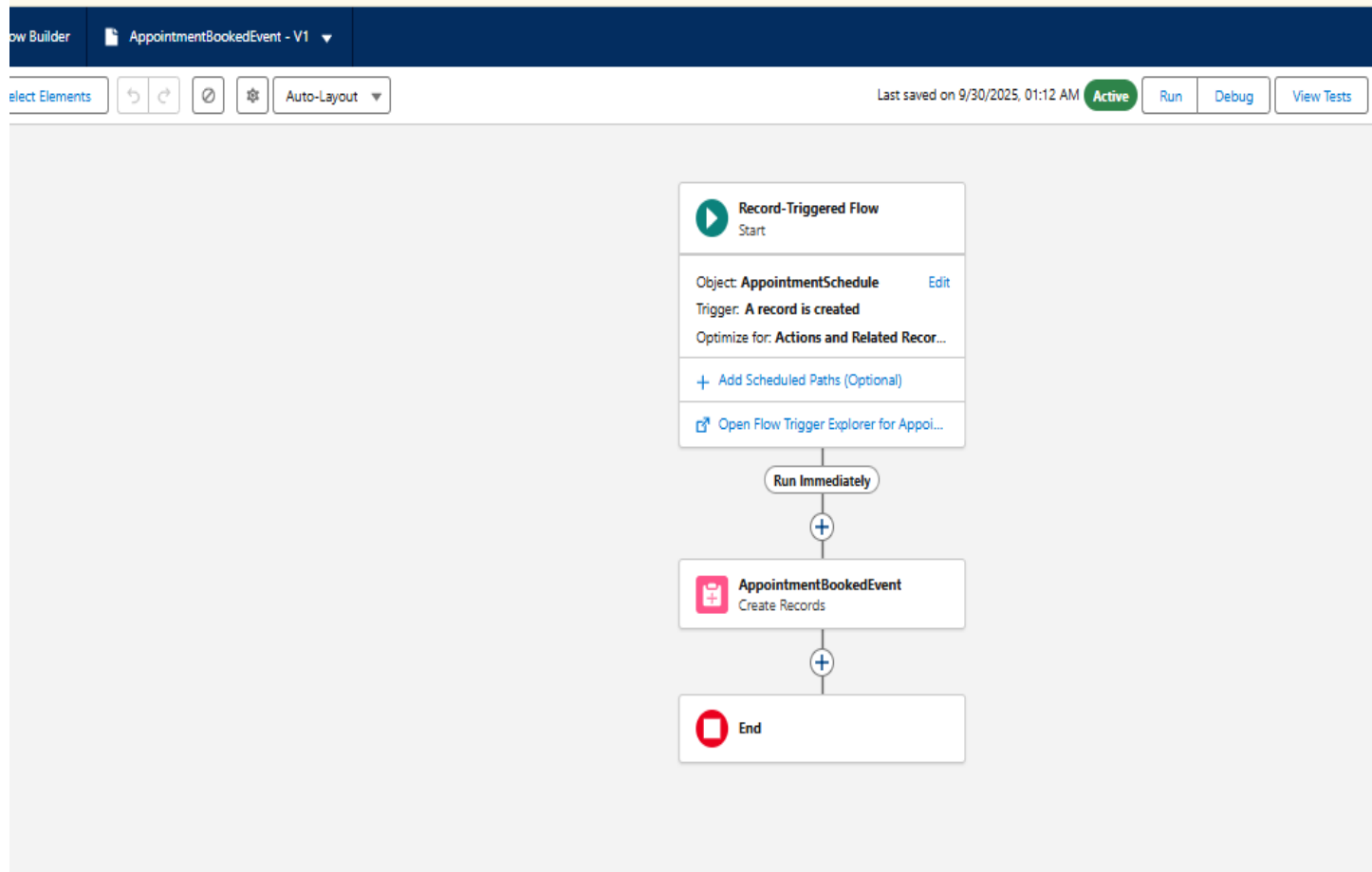
Singular Label	AppointmentBookedEvent
Plural Label	AppointmentBookedEvents
Object Name	AppointmentBookedEvent
API Name	AppointmentBookedEvent__e
Event Type	High Volume ⓘ
Publish Behavior	Publish After Commit ⓘ
Created By	Palak Yadav, 9/29/2025, 11:58 AM

Descrip
Deployment Sta

Modified

Standard Fields

Action	Field Label	Field Name	Data Type	Cont
	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
Edit	Del	Appointment Time	Appointment_Time__c	Date/Time		
Edit	Del	Doctor ID	Doctor_ID__c	Text(60)		
Edit	Del	Patient id	Patient_id__c	Text(60)		
Edit	Del	Status	Status__c	Text(60)		

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6. Change Data Capture (CDC)

- **Purpose**: Track changes to Salesforce records in real time.
- **Configuration**:
  - Enabled Object: `AppointmentSchedule__c`
  - Event Name:
    `AppointmentSchedule__cChangeEvent`
- **Usage**: Subscribed via Streaming API or middleware.

Healthcare Mapping: Used to stream appointment updates, cancellations, and reschedules to external systems.

7. Salesforce Connect

- **Purpose**: Access external data in real time via External Objects.
- **Configuration**:
  - Data Source Type: OData 4.0 / Apex Connector
  - External Object Suffix: __x
- **Usage**: Used in Flows, Reports, and Lightning Pages.

Healthcare Mapping: Used to display insurance coverage, patient history, or lab results without storing data in Salesforce.

8. API Limits

- **Purpose**: Monitor and manage API consumption.
- **Daily Limits**: Varies by edition (e.g., 100,000/day for Enterprise)
- **Monitoring Tools**:
  - Setup → System Overview
  - Event Monitoring
  - Developer Console
- **Alerts**: Triggered via Flow or Apex when usage exceeds threshold.

Healthcare Mapping: Ensures uptime during peak hours and prevents integration failures.

9. OAuth & Authentication

- **Purpose**: Secure access to external systems.
- **Configuration**:
  - Connected App with OAuth scopes
  - Token exchange via Named Credential or Apex

- **Usage**: Required for Streaming API, External Services, and middleware.

Healthcare Mapping: Used to authenticate securely with EHR, insurance, and lab APIs.

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10. Remote Site Settings

- **Purpose**: Whitelist external endpoints for Apex callouts.
- **Configuration**:
  - Add base URL of external service
  - Required if Named Credential is not used
- **Usage**: Enables REST/SOAP callouts from Apex.

Healthcare Mapping: Used for legacy integrations or quick testing of external endpoints.