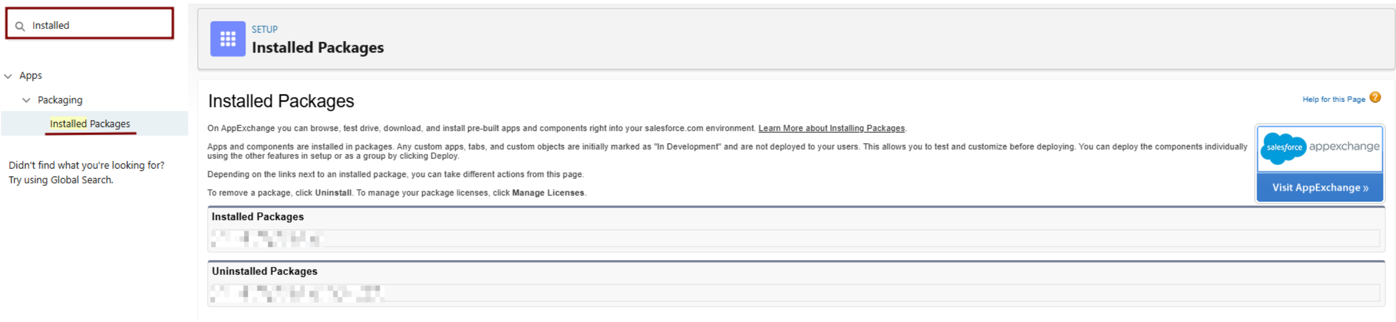
AQUILA - Salesforce Integration via JWT Authentication

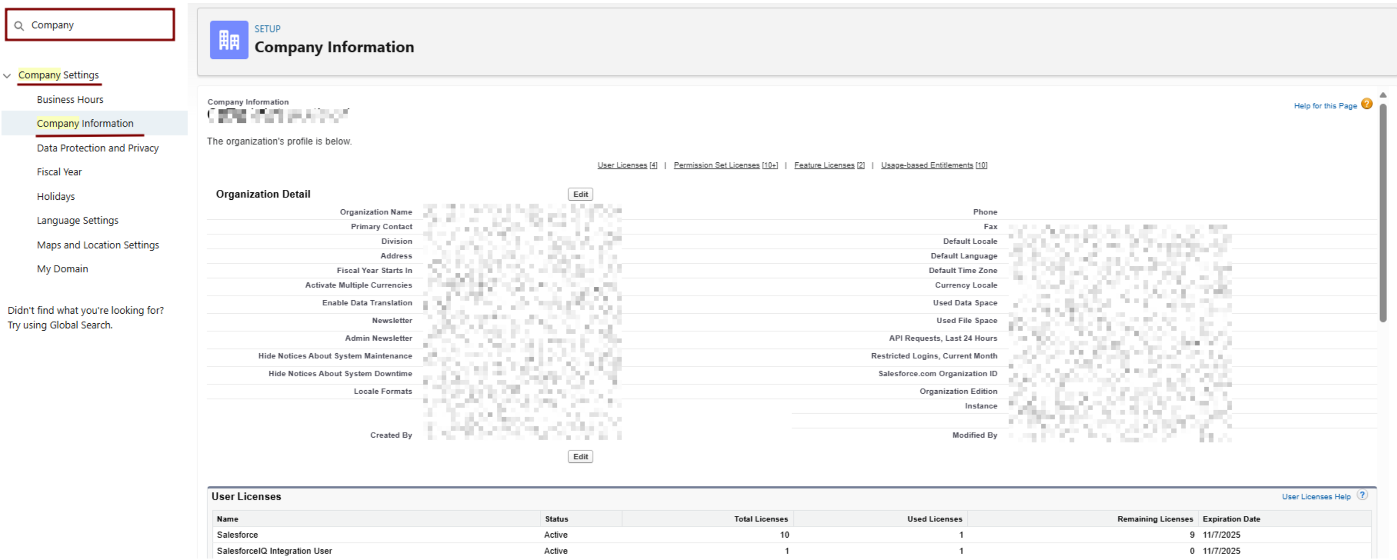
Overview

With the OAuth 2.0 JWT bearer token flow, the client posts a JWT to the Salesforce OAuth token endpoint. Salesforce processes the JWT, which includes a digital signature, and issues an access token based on prior approval of the app.

Check "View Event Log Files" Permission

1. Check Your Org's Event Monitoring License:
    - Go to **Setup** > **Quick Find** > **Installed Packages** or **Company Information** (under **Quick Find** > **Company Settings**).

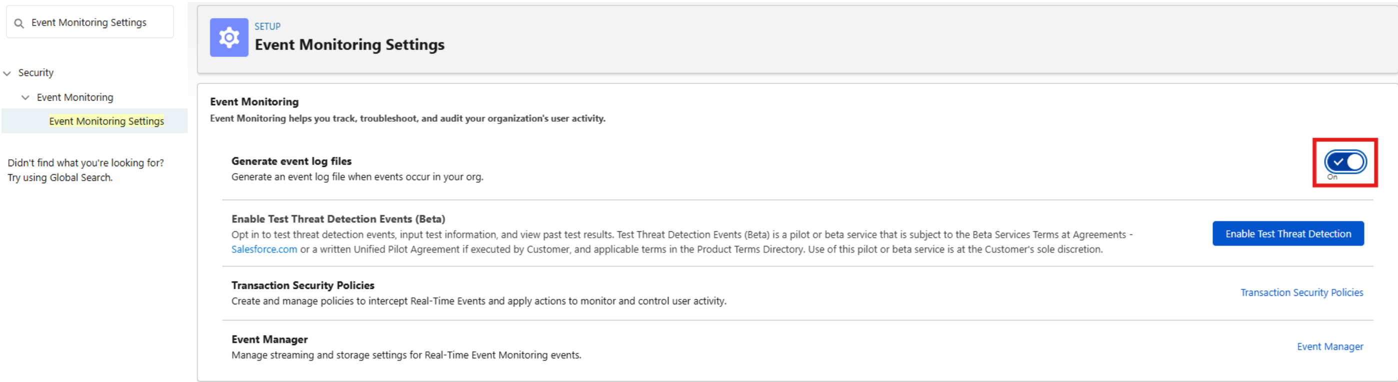




- Look for **Event Log File Browser** or **Event Monitoring** and enable it if it shows an option to do so.

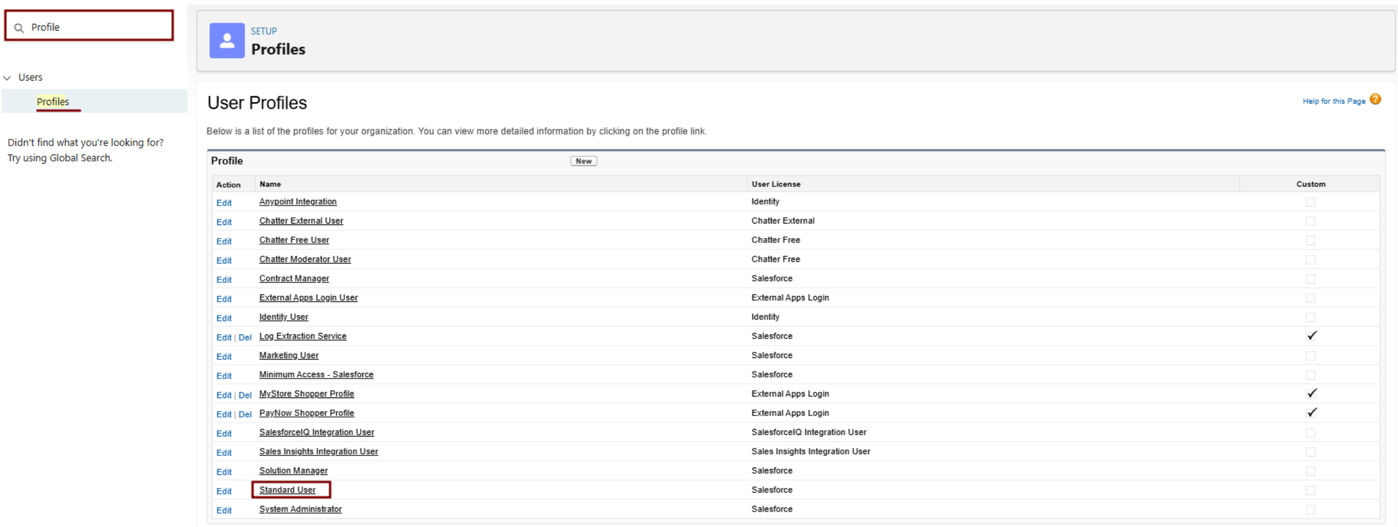
2. Enable **Event Monitoring** Features:

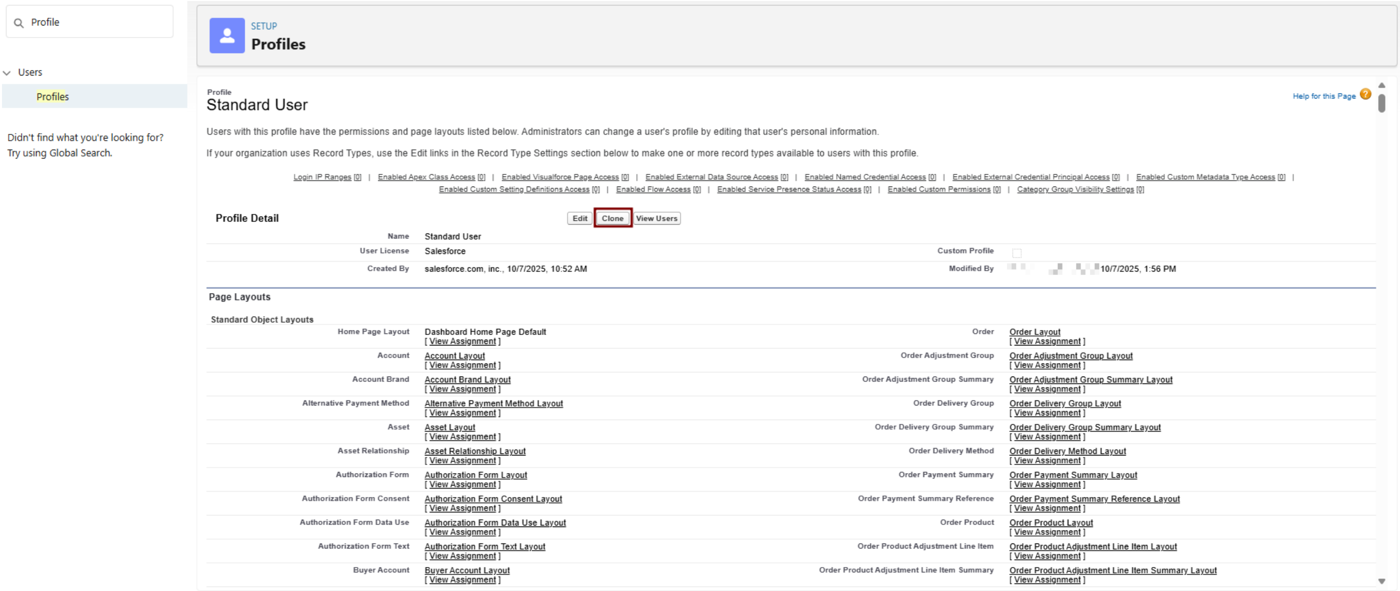
- **Setup** > **Quick Find** > **Event Monitoring Settings** (or search "**Event Log File Browser**").
- If the page loads: Check Enable **Event Log File Browser** > **Save**.



Clone and Modify the Profile

1. **Log in to Salesforce Setup:**
   - Go to **Setup** (gear icon > Setup) as an admin.
2. **Clone the Standard User Profile:**
   - Navigate to **Setup** > **Quick Find** > **Profiles**.
   - Find **Standard User** > Click **Clone** next to it.
   - **Profile Information**:
     - **Profile Name**: e.g., "Standard User - Log Integration".
     - **Description**: "Cloned for Elastic log integration with API and ELF access."
     - **User License:** Salesforce Integration
   - **Save.** This creates a new custom profile based on Standard User.



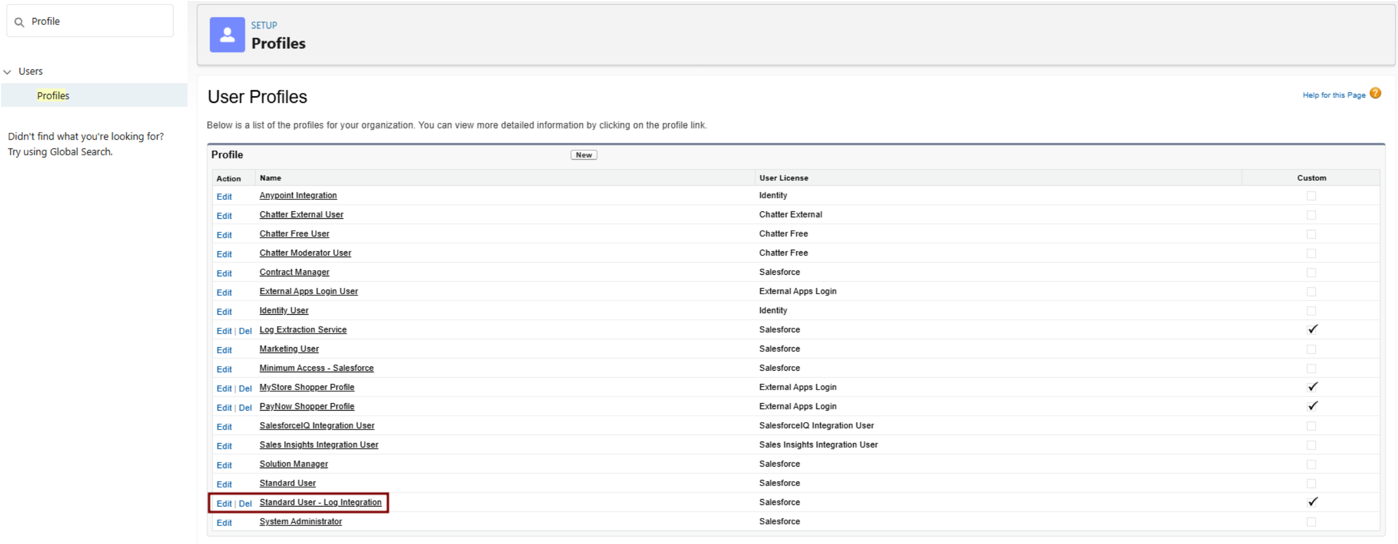


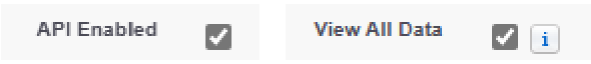
3. **Edit System Permissions in the Cloned Profile:**

- In **Profiles**, find your new cloned profile > Click **Edit** > Go to the **System Permissions** section (or use Quick Find for "System Permissions").
- Enable the following checkboxes (these are the key changes from Standard User, which starts with them **disabled** for security):

Permission	Change from Standard User	Why Enable It?	How to Enable
API Enabled	Disabled → **Enabled**	Allows REST/SOAP API calls for fetching logs (e.g., EventLogFile queries). Essential for Elastic integration.	Check the box under **System Permissions**.
View Event Log Files	Disabled → **Enabled**	Grants read access to historical Event Log Files (ELF) like logins and Apex events. Core for log ingestion.	Check the box under **System Permissions**.
View All Data	Disabled → **Enabled**	Provides broader object read access if ELF queries fail due to restrictions.	Check the box under **System Permissions.**

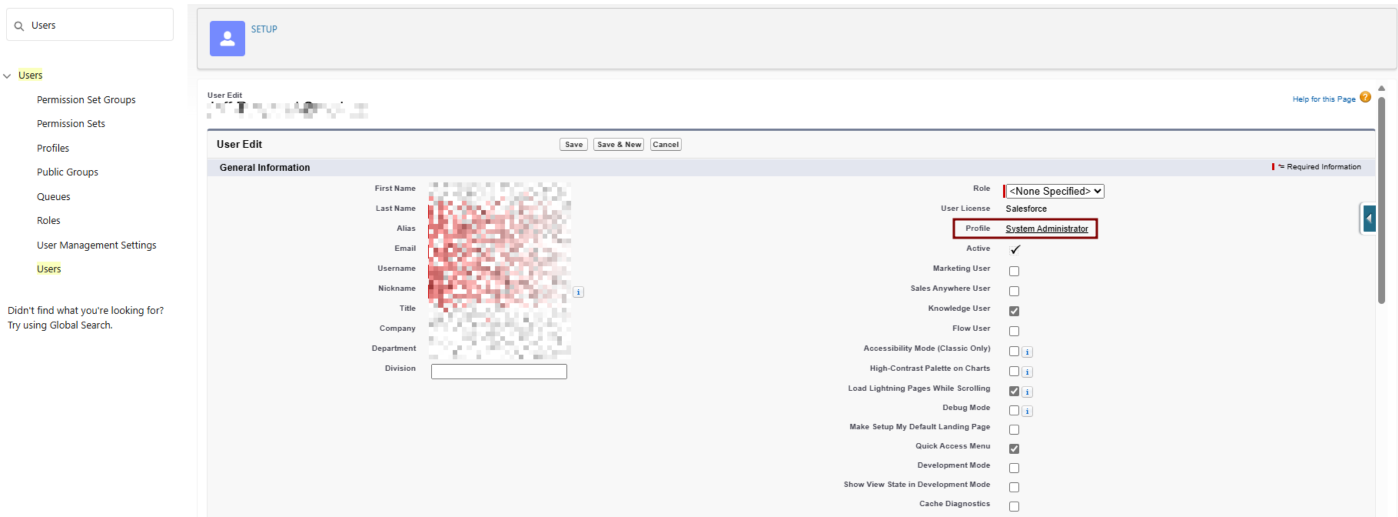
- **Do NOT enable** unrelated permissions like "Modify All Data" or "Delete All Data" to maintain least-privilege.
- **Save** the profile.





4. **Assign the Cloned Profile to Your Integration User:**

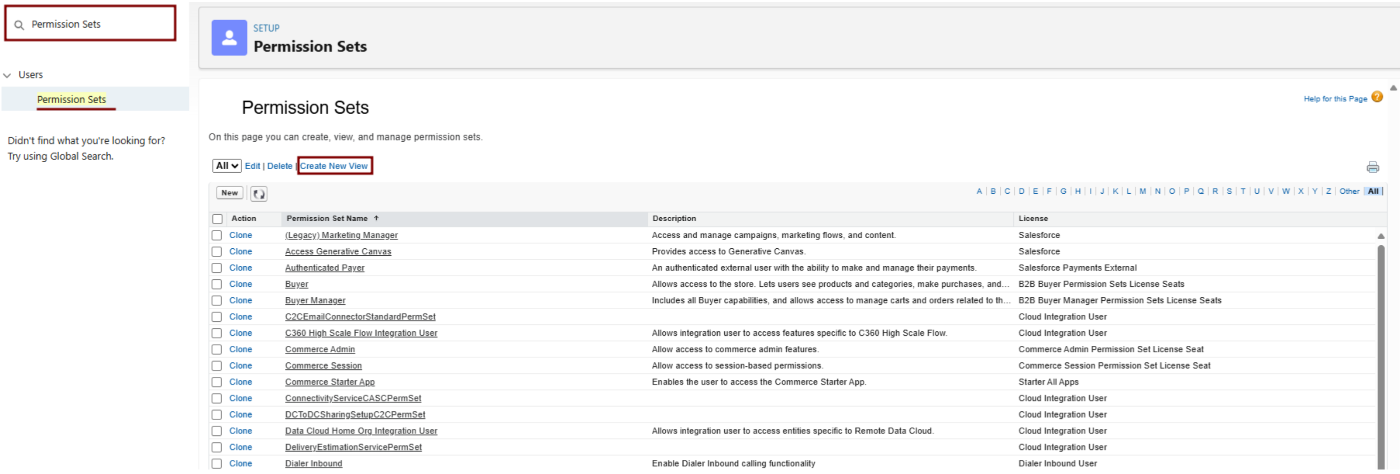
- **Setup** > **Quick Find** > **Users** > Select your integration user > **Edit**.
- **Profile**: Select "Standard User - Log Integration".
- **Save**.

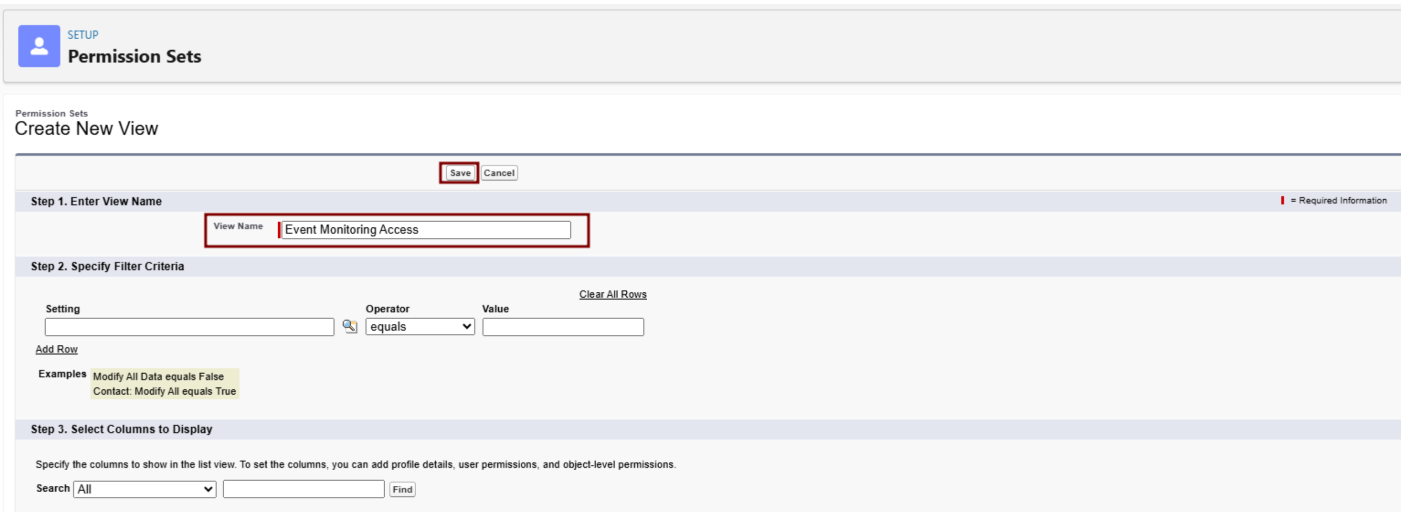


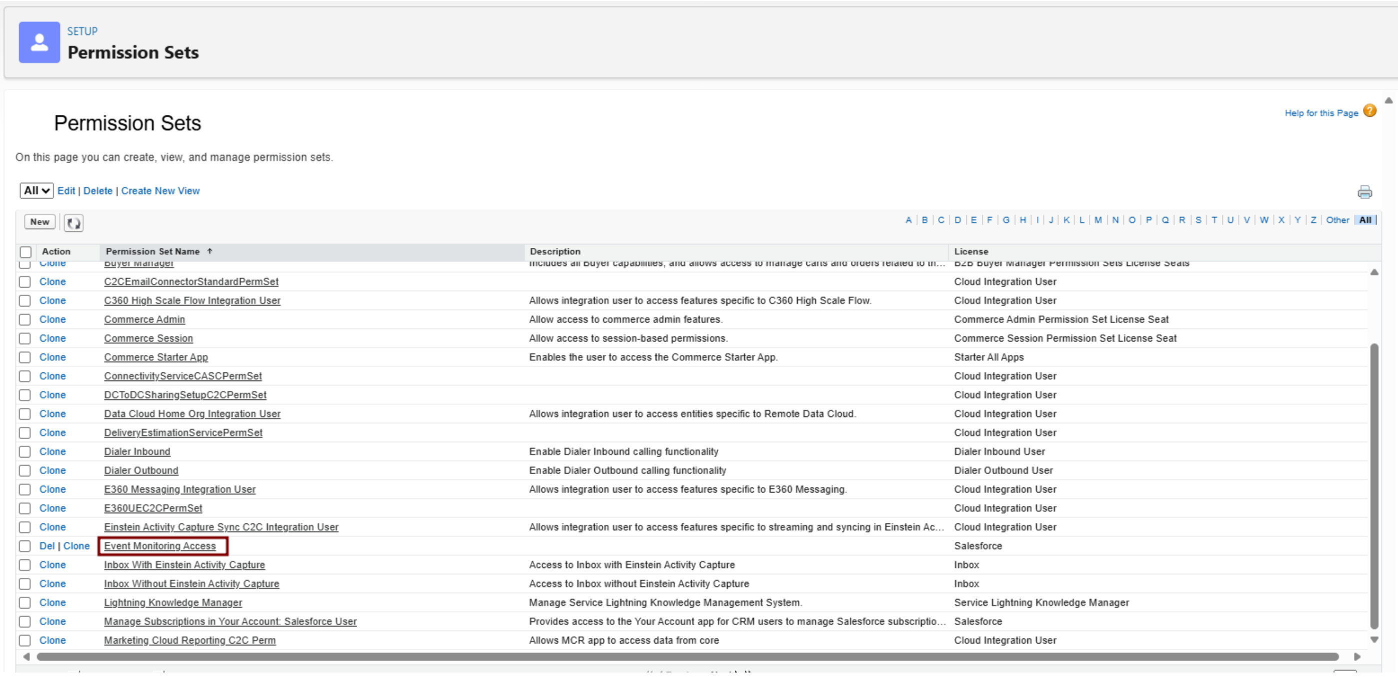
5. **Handle Event Monitoring Permissions (Not in Profile—Use Permission Set)**:

- The "View Real-Time Event Monitoring Data" isn't a direct profile permission; it's tied to Event Manager.
- **Create a Permission Set**:
  - Go to **Setup** > **Quick Find** > **Permission Sets** > **New**.
  - **Label/Name**: e.g., "Event Monitoring Access".
  - **License**: "Salesforce Integration" (matches Standard User).
  - **Save** > **System Permissions** tab > **Enable View All Data, API Enabled** and **View Event Log Files**.
  - **Event Log File Browser** tab: Enable access to specific events.

- **Assign the Permission Set**:
  - **Permission Set Assignments** > **New** > Select your integration user > **Assign**.
- **Enable Events in Event Manager**:
  - **Setup** > **Quick Find** > **Event Manager**.
  - For desired events (e.g., Login Event), click dropdown > **Enable Storage**. This requires the Event Log File Browser add-on license.
  - This starts log retention (up to 1 year for ELF; real-time requires add-on license).







SETUP
Permission Sets

Permission Sets

Help for this Page

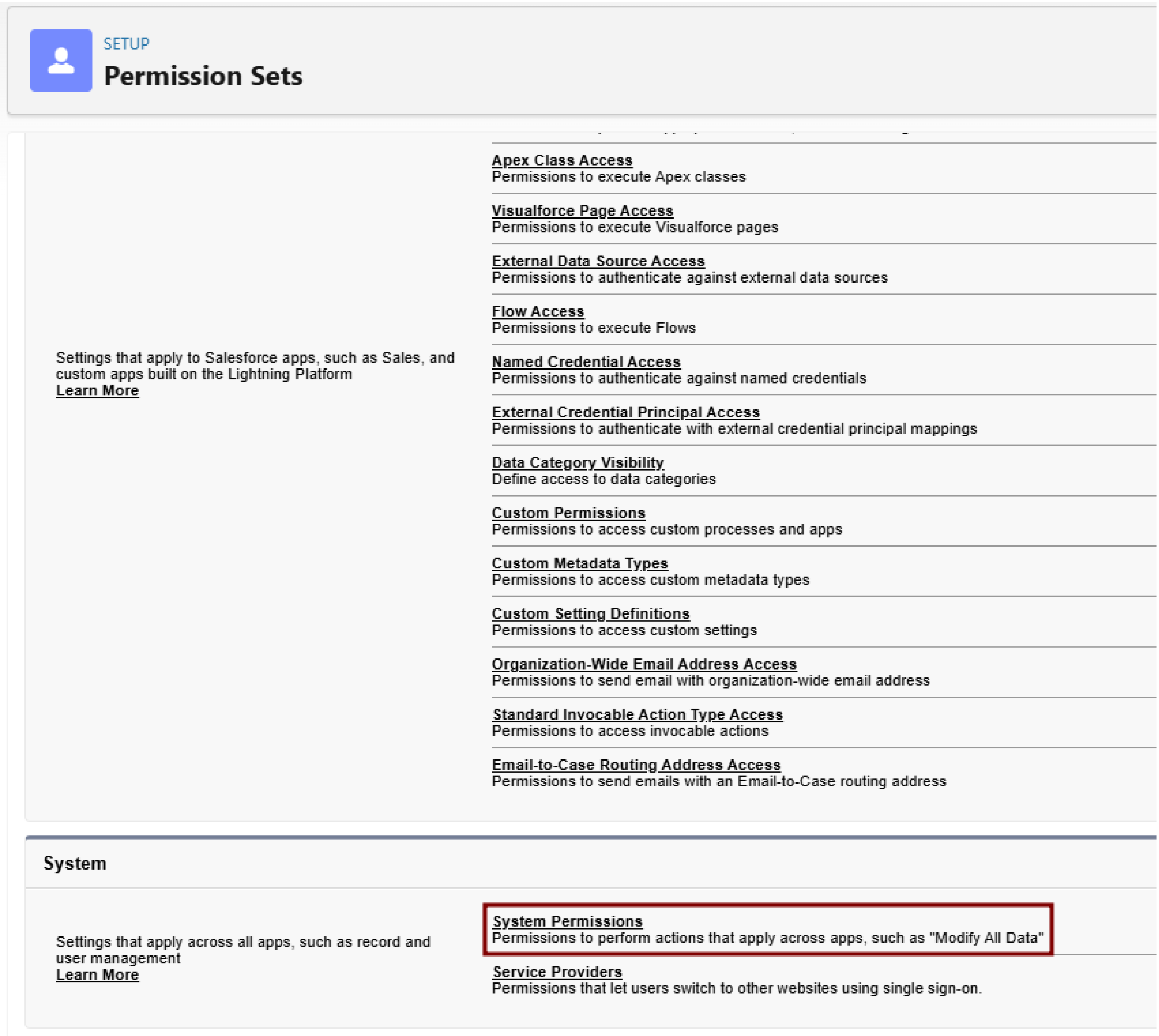
On this page you can create, view, and manage permission sets.

All | Edit | Delete | Create New View

New

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	Permission Set Name ↑	Description	License
Clone	Buyer Manager	Includes all Buyer capabilities, and allows access to manage carts and orders related to th…	B2B Buyer Manager Permission Sets License Seats
Clone	C2CEmailConnectorStandardPermSet		Cloud Integration User
Clone	C360 High Scale Flow Integration User	Allows integration user to access features specific to C360 High Scale Flow.	Cloud Integration User
Clone	Commerce Admin	Allow access to commerce admin features.	Commerce Admin Permission Set License Seat
Clone	Commerce Session	Allow access to session-based permissions.	Commerce Session Permission Set License Seat
Clone	Commerce Starter App	Enables the user to access the Commerce Starter App.	Starter All Apps
Clone	ConnectivityServiceCASCPermSet		Cloud Integration User
Clone	DCToDCSharingSetupC2CPermSet		Cloud Integration User
Clone	Data Cloud Home Org Integration User	Allows integration user to access entities specific to Remote Data Cloud.	Cloud Integration User
Clone	DeliveryEstimationServicePermSet		Cloud Integration User
Clone	Dialer Inbound	Enable Dialer Inbound calling functionality	Dialer Inbound User
Clone	Dialer Outbound	Enable Dialer Outbound calling functionality	Dialer Outbound User
Clone	E360 Messaging Integration User	Allows integration user to access features specific to E360 Messaging.	Cloud Integration User
Clone	E360UEC2CPermSet		Cloud Integration User
Clone	Einstein Activity Capture Sync C2C Integration User	Allows integration user to access features specific to streaming and syncing in Einstein Ac…	Cloud Integration User
Del | Clone	Event Monitoring Access		Salesforce
Clone	Inbox With Einstein Activity Capture	Access to Inbox with Einstein Activity Capture	Inbox
Clone	Inbox Without Einstein Activity Capture	Access to Inbox without Einstein Activity Capture	Inbox
Clone	Lightning Knowledge Manager	Manage Service Lightning Knowledge Management System.	Service Lightning Knowledge Manager
Clone	Manage Subscriptions in Your Account: Salesforce User	Provides access to the Your Account app for CRM users to manage Salesforce subscriptio…	Salesforce
Clone	Marketing Cloud Reporting C2C Perm	Allows MCR app to access data from core	Cloud Integration User



SETUP
Permission Sets

Settings that apply to Salesforce apps, such as Sales, and custom apps built on the Lightning Platform
Learn More

Apex Class Access
Permissions to execute Apex classes

Visualforce Page Access
Permissions to execute Visualforce pages

External Data Source Access
Permissions to authenticate against external data sources

Flow Access
Permissions to execute Flows

Named Credential Access
Permissions to authenticate against named credentials

External Credential Principal Access
Permissions to authenticate with external credential principal mappings

Data Category Visibility
Define access to data categories

Custom Permissions
Permissions to access custom processes and apps

Custom Metadata Types
Permissions to access custom metadata types

Custom Setting Definitions
Permissions to access custom settings

Organization-Wide Email Address Access
Permissions to send email with organization-wide email address

Standard Invocable Action Type Access
Permissions to access invocable actions

Email-to-Case Routing Address Access
Permissions to send emails with an Email-to-Case routing address

System

Settings that apply across all apps, such as record and user management
Learn More

System Permissions
Permissions to perform actions that apply across apps, such as "Modify All Data"

Service Providers
Permissions that let users switch to other websites using single sign-on.

SETUP

Permission Sets

Permission Set

Event Monitoring Access

Find Settings... | Clone | Edit Properties | Manage Assignments | View Summary

Permission Set Overview > System Permissions

System Permissions

Edit

▼ System

Permission Name	Enabled	Description
Access Activities	☐	Access tasks, events, calendar, and email.
Access Data Cloud Data Explorer	☐	Allows user access Data Cloud Data Explorer.
Access Data Cloud Profile Explorer	☐	Allows user access Data Cloud Profile Explorer.
Access Experience Management	☐	Access pages and dashboards available in Experience Management.
Access Libraries	☐	Access libraries.
Access to manage the template framework apps	☐	Allows access to create, update, and manage apps from templates, analytics, data, and other assets.
Access to manage the template framework templates	☐	Allows access to create, update, and manage app templates.
Access Tracer for External Data Sources	☐	Access the Tracer tool for testing queries to External Data Sources.
Act As User	☐	Gives the mapped user ability to access core data in a multi org use case that use C2C Act As User JWT for authN. (Note: This p CloudToCloudPilotFeatures)
Allow Access to Customized Actions	☐	Unsupported. Use the page layout editor to customize which actions show up in Salesforce and in the Salesforce mobile app.
Allow blockchain data upload	☐	Let the user upload blockchain data

API Enabled	☑	Access any Salesforce.com API.
View All Data	☑ i	View all organizational data, regardless of sharing settings.

SETUP

Permission Sets

Permission Set

Event Monitoring Access

Find Settings... | Clone | Edit Properties | Manage Assignments | View Summary

Permission Set Overview

Description		API Name	Event_Monitoring_Access
License	Salesforce	Namespace Prefix	
Session Activation Required	☐	Created By	, 10/7/2025, 5:14 PM
Permission Set Groups Added To	0	Last Modified By	, 10/8/2025, 2:41 PM

Apps

Assigned Apps
Settings that specify which apps are visible in the app menu

Assigned Connected Apps
Settings that specify which connected apps are visible in the app menu

Object Settings
Permissions to access objects and fields, and settings such as tab availability

App Permissions
Permissions to perform app-specific actions, such as "Manage Call Centers"

Apex Class Access
Permissions to execute Apex classes

Visualforce Page Access
Permissions to execute Visualforce pages

External Data Source Access
Permissions to authenticate against external data sources

Flow Access

... > SETUP > PERMISSION SET 'EVENT MONITORING ACCESS'

Event Monitoring Access

Current Assignments

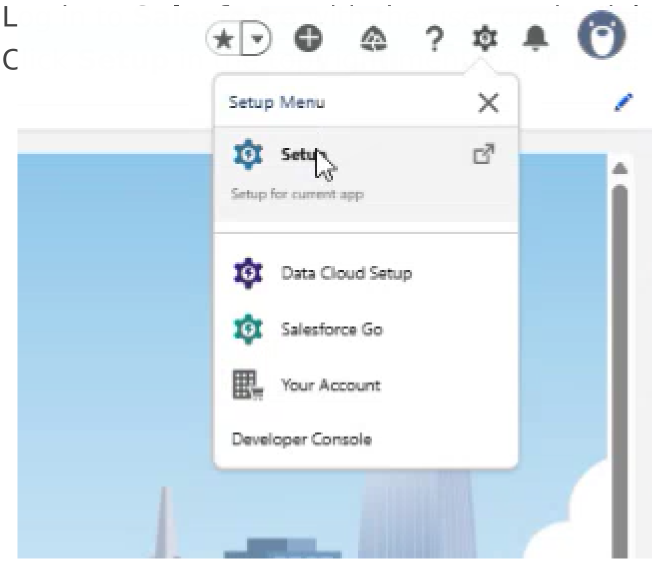
Add Assignment

Full Name ↑	Active	Role	Profile	User License	Expires On
	✓		System Administrator	Salesforce	

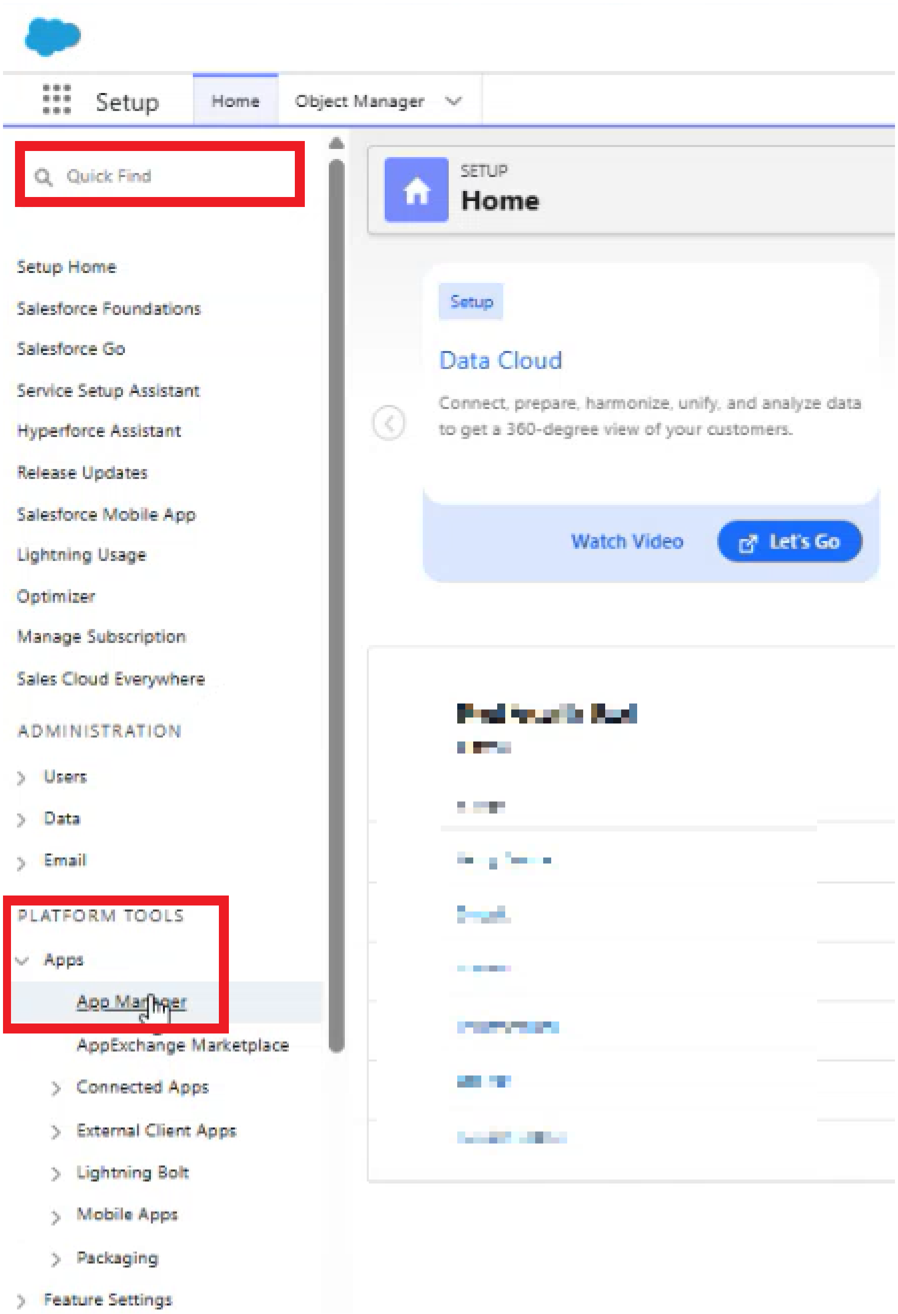
Client Key and Certification Signature Configuration

To use this integration, you need to create a new Salesforce Application using OAuth. Follow these steps to create a connected application in Salesforce:

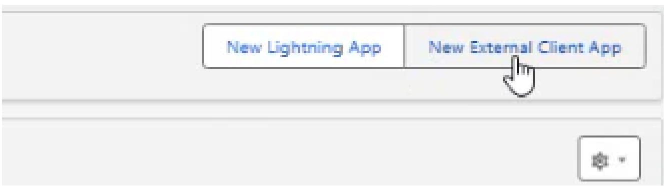
- L you want to collect data with.
- C



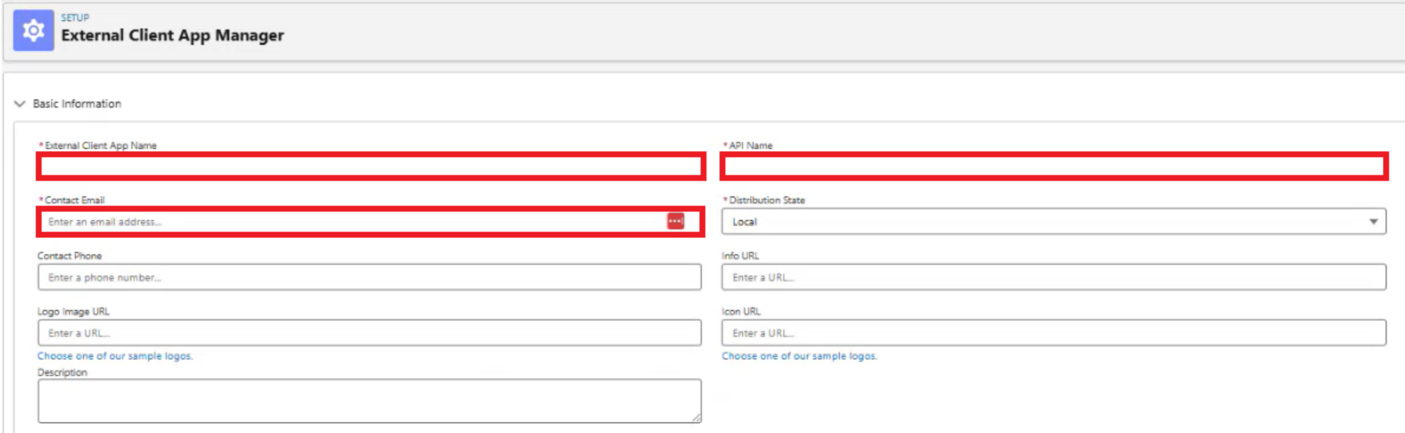
- In the **Quick Find textbox**, search for **App Manager** or you can scroll down to **PLATFORM TOOLS** and select **App Manager.**



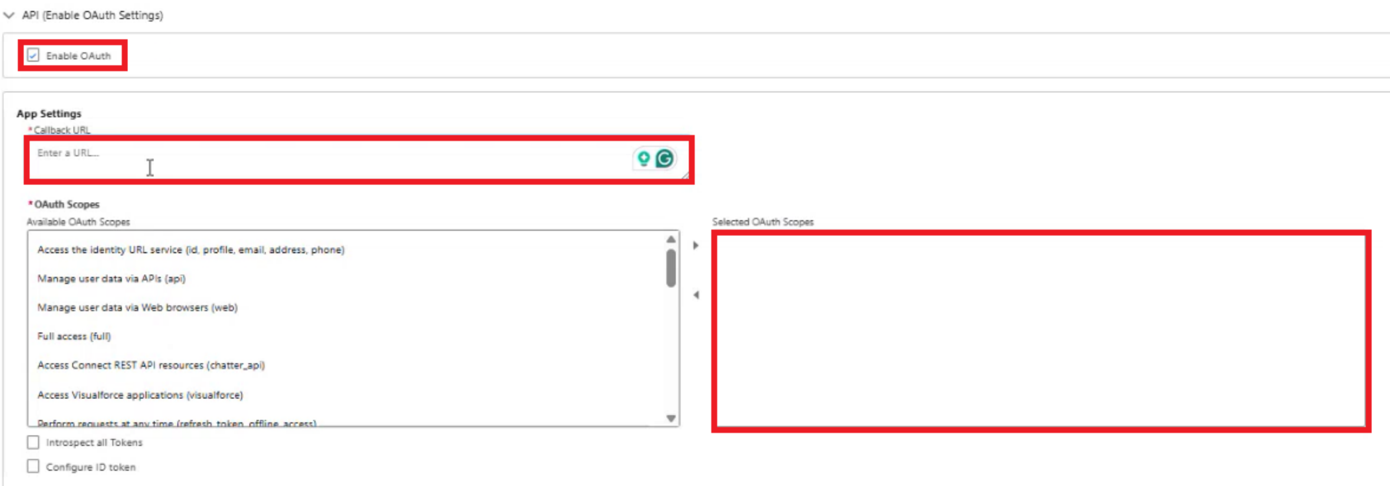
- In the upper right corner, choose the **New External Client App.**



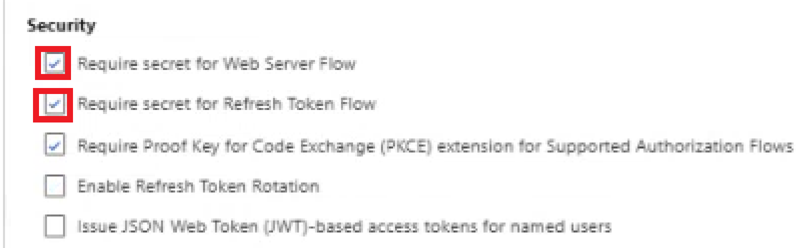
- Provide a name for the connected application. This name will be displayed in the App Manager and on its App Launcher tile.
- Enter the API name. The default is a version of the name without spaces. Only letters, numbers, and underscores are allowed. If the original app name contains any other characters, edit the default name.
- Enter the **email address** of the **new account** you created earlier.



- Under the **API (Enable OAuth Settings)** section, check the box for **Enable OAuth Settings**.
- In the **Callback URL** field, enter the instance URL as specified in **Salesforce instance URL.** Example URL: https://na9.salesforce.com
- Select the following OAuth scopes to apply to the connected app:
  - **Manage user data via APIs (api)**
  - **Perform requests at any time (refresh_token, offline_access)**
  - (Optional) If you encounter any permission issues during data collection, add the **Full access (full)** scope.

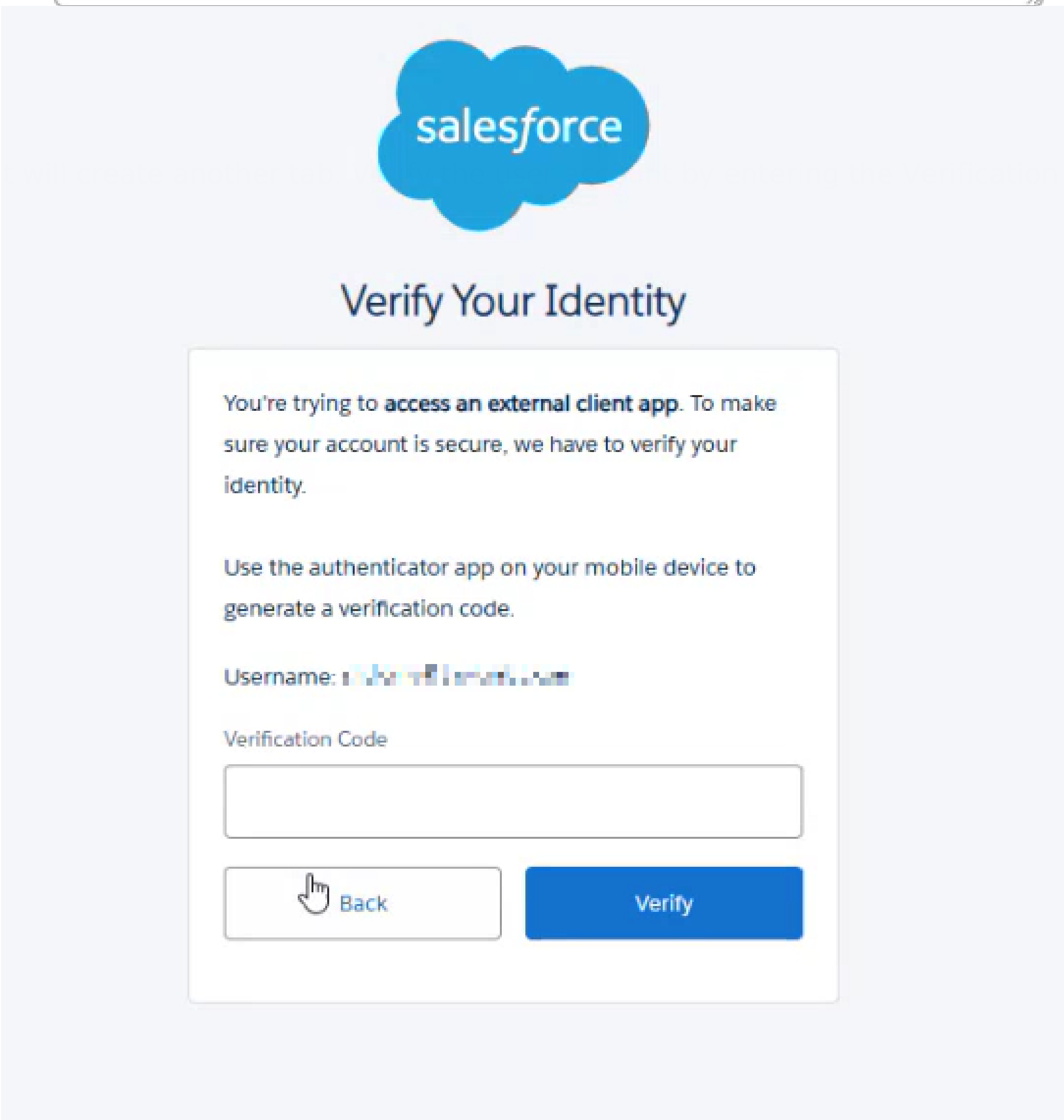


- Select **Require Secret for the Web Server Flow** to require the app's client secret in exchange for an access token.
- Select **Require Secret for Refresh Token Flow** to require the app's client secret in the authorization request of a refresh token and hybrid refresh token flow.



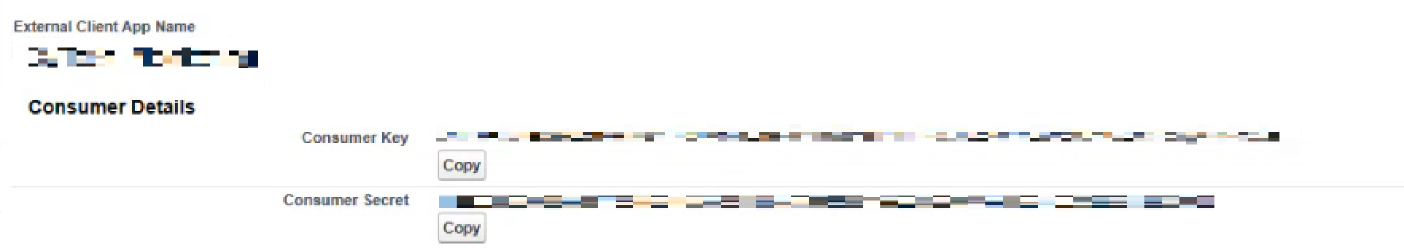
- Then scroll up above the **Callback URL** on the **App Settings** you will see the **Consumer** I

- I



Code.

- Copy the `Consumer Key` and `Consumer Secret` from the Consumer Details section. These values should be used as the **Client ID** and **Client Secret**, respectively, in the integration.



- Close that tab and go back to the **External Client App Manager**. Click **Save**.

Required fields for JWT Authentication Integration:

- JWT Authentication Audience URL
- JWT Authentication Client Key Path
- Username
- Client ID
- Instance URL
- Token URL

Provide this required fields to **CyTech Support**.

Reference Link:

[OAuth 2.0 JWT Bearer Flow for Server-to-Server Integration in Salesforce]

*If you need further assistance, kindly contact our support at **support@cytechint.com** for prompt assistance and guidance.*

Revision #9
Created 1 August 2025 13:36:48 by Jeff Saguing
Updated 9 October 2025 10:09:22 by Jeff Saguing