Google Cloud Platform (GCP) Audit Logs Integration - using Pub/Sub

Requirements

To integrate with Google Cloud Platform (GCP), you need to set up the following:

1. **Service Account with a Role.**
2. **Service Account Key to access data on your GCP project.**

Service Accounts

A **Service Account (SA)** is a special type of Google account intended for applications or services—not human users—that need access to GCP resources.

The **Log Collector** uses this SA to access GCP data via Google APIs.

Service Account with a Role

Assign the necessary privileges by creating a **custom role** with minimal required permissions:

Required Permissions:

- **compute.instances.list** (required for GCP Compute instance metadata collection) (**2)
- **monitoring.metricDescriptors.list**
- **monitoring.timeSeries.list**
- **pubsub.subscriptions.consume**
- **pubsub.subscriptions.create** (*1)
- **pubsub.subscriptions.get**
- **pubsub.topics.attachSubscription** (*1)

> **1 Only required if Agent is expected to create a new subscription. If you create the subscriptions yourself, you may omit these privileges.*

> ***2 Only required if corresponding collection will be enabled.*

>

> **After you have created the custom role, assign the role to your service account.**

Service Account Key

Next, with the Service Account (SA) with access to Google Cloud Platform (GCP) resources setup, you need some credentials to associate with it: a Service Account Key.

From the list of SA (Service Accounts):

1. Go to **IAM & Admin > Service Accounts** in the GCP Console.
2. Click the service account you created.
3. Under the **"Keys"** section, click **"Add Key" > "Create new key"**.
4. Choose **JSON** as the key type.
5. **Download and securely store** the generated private key (it cannot be retrieved again from GCP if lost).

GCP Integrations Procedures - GCP Audit Logs

The audit dataset collects audit logs of administrative activities and accesses within your Google Cloud resources.

Procedures

The "Project Id" and the "Credentials File" will need to be provided in the integration UI when adding the Google Cloud Platform integration.

Logs Collection Configuration

With a properly configured Service Account and the integration setting in place, it’s time to start collecting some logs.

Requirements

You need to create a few dedicated Google Cloud resources before starting, in detail:

1. **Log Sink**
2. **Pub/Sub Topic**
3. **Subscription**

> It’s recommended to have a separate Pub/Sub topics for each of the log types so that they can be parsed and stored in a specific data stream.

Here’s an example of collecting Audit Logs using a Pub/Sub topic, a subscription, and a Log Router. We will create the resources in the Google Cloud Console and then configure the Google Cloud Platform integration.

Example Setup Using Google Cloud Console

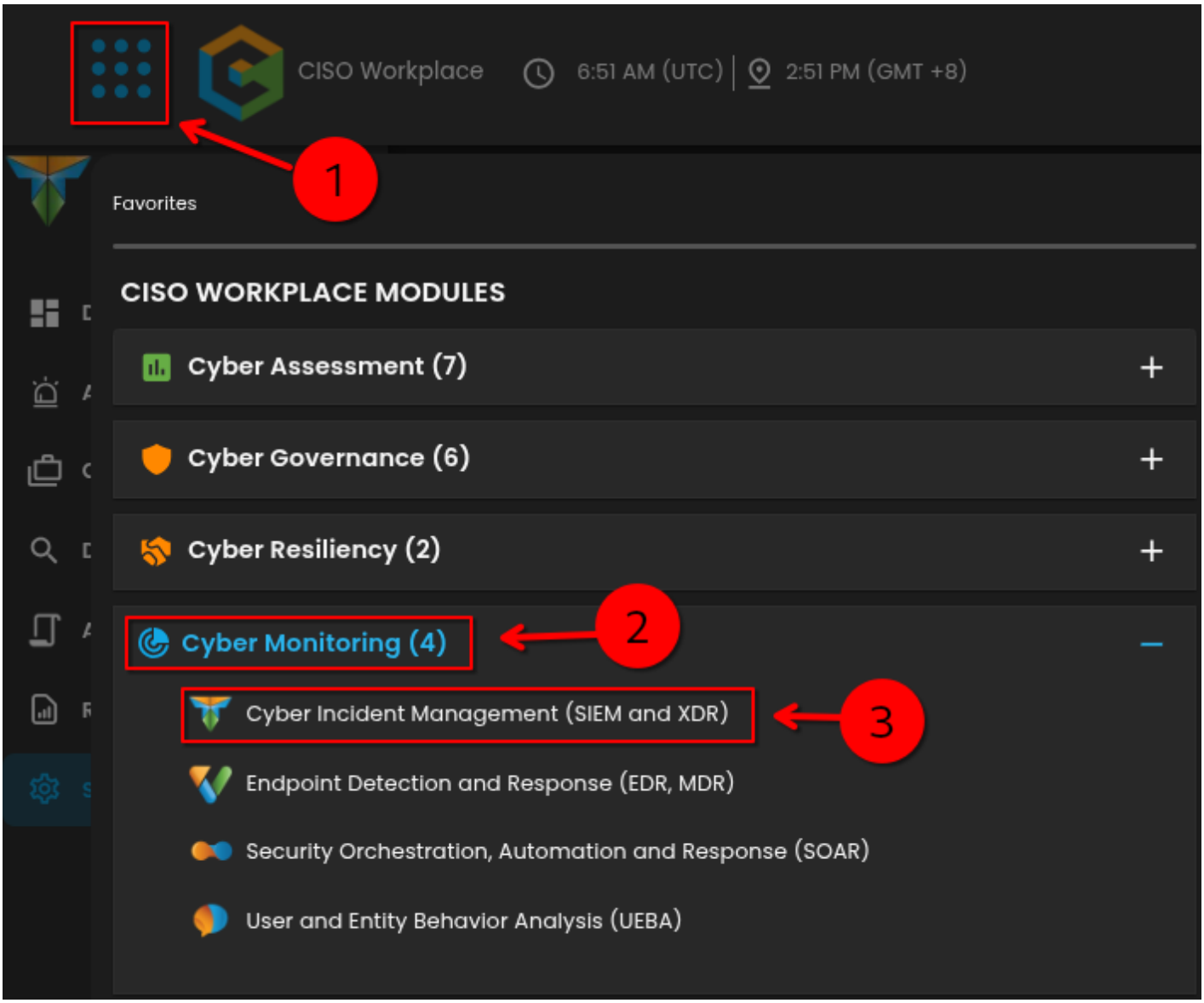
1. Navigate to **"Logging" > "Log Router" > "Create Sink"**.
2. Provide a **Sink name** and description.
3. For **Sink destination**, select **"Cloud Pub/Sub topic"**. Choose an existing topic or create a new one.
4. If a new topic is created, you must also **create a subscription** for it.
5. Under **"Choose logs to include in sink"**, use a filter like: logName:"cloudaudit.googleapis.com"

Please provide the following information to CyTech:

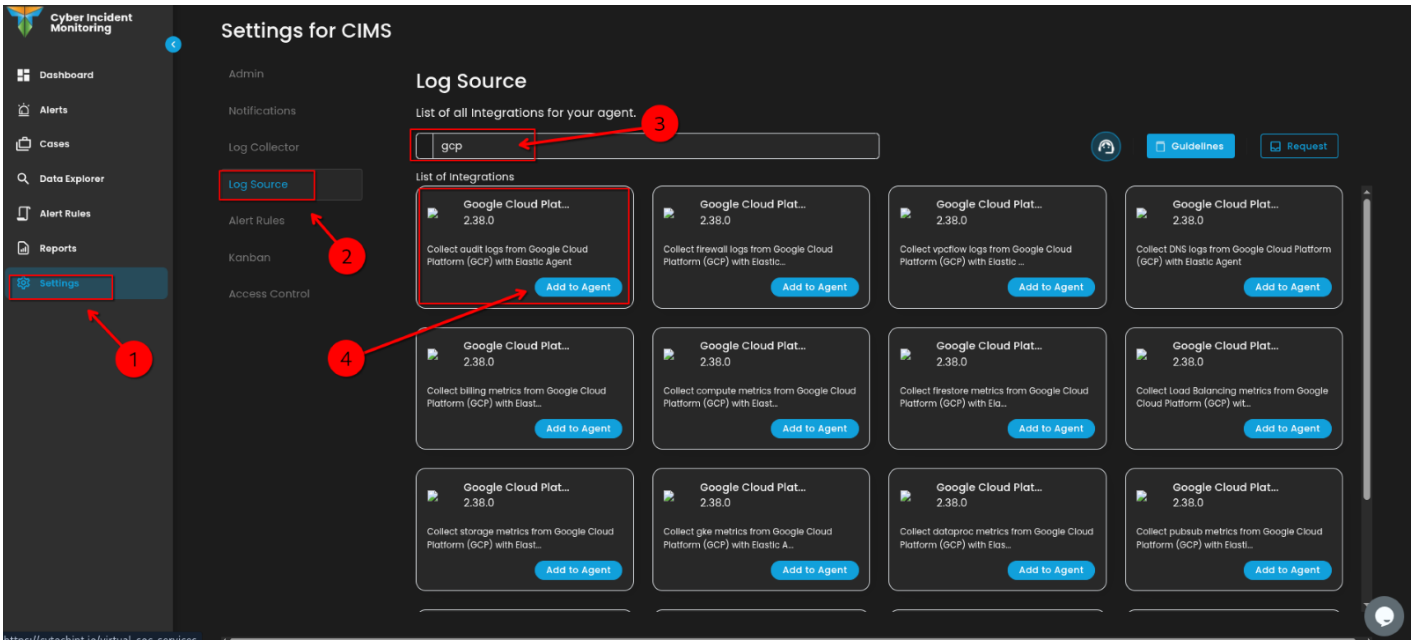
- **Project ID** - The Project ID is the Google Cloud project ID where your resources exist.
- **Credentials File** - Save the JSON file with the private key in a secure location of the file system, and make sure that the Log Collector Agent has at least read-only privileges to this file. Specify the file path in the Log Collector Agent integration UI in the "Credentials File" field. For example: /home/ubuntu/credentials.json.
- **Pub/Sub Topic** - Name of the topic where the logs are written to.
- **Subscription** - Use the short subscription name here, not the full-blown path with the project ID. You can find it as "Subscription ID" on the Google Cloud Console.

After setting up GCP. Go to> CISO Workplace to integrate your log source. Please follow the instructions below:

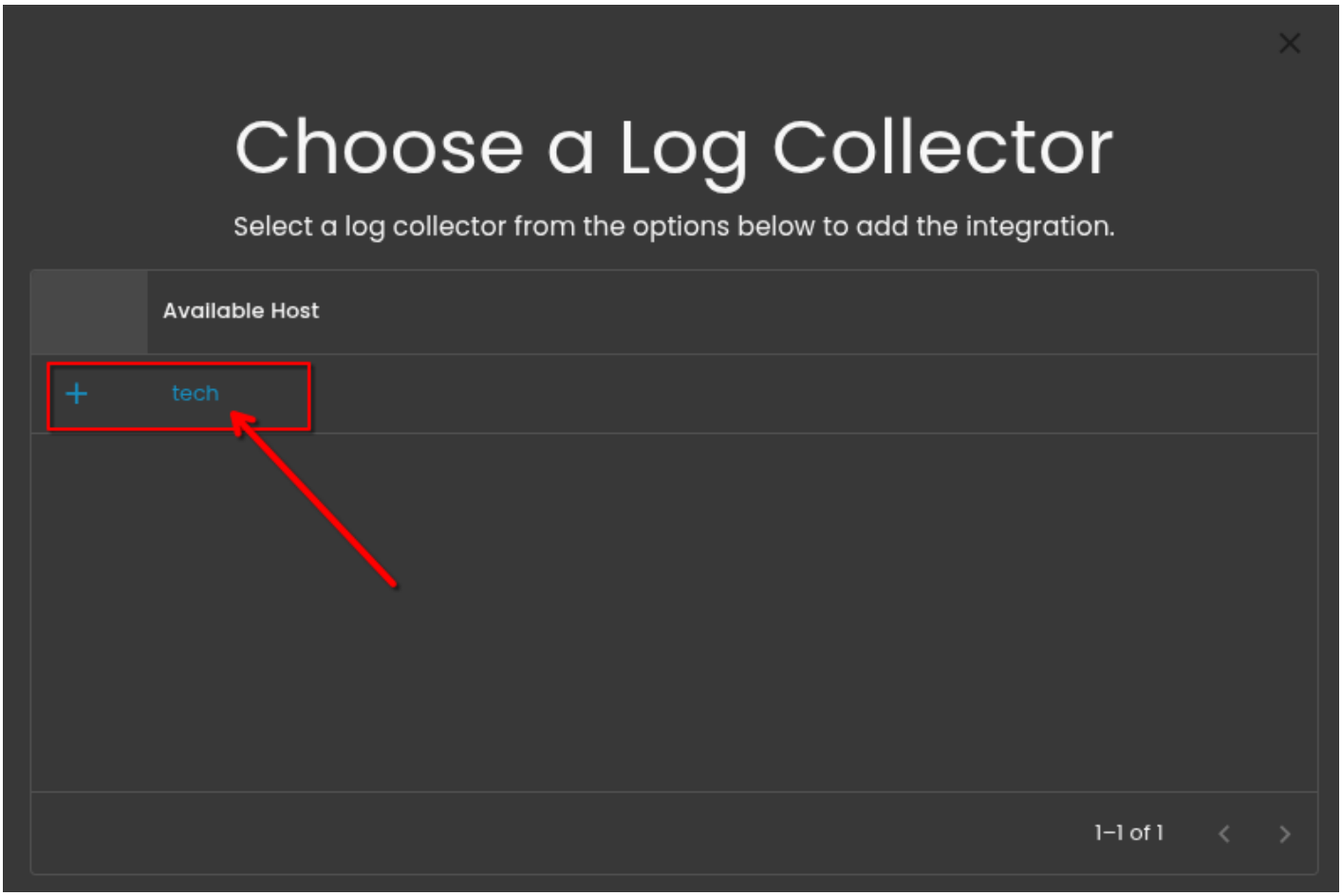
Step1: Log in CISO Workplace>CISO Workplace Modules>Cyber Monitoring>Cyber Incident Management



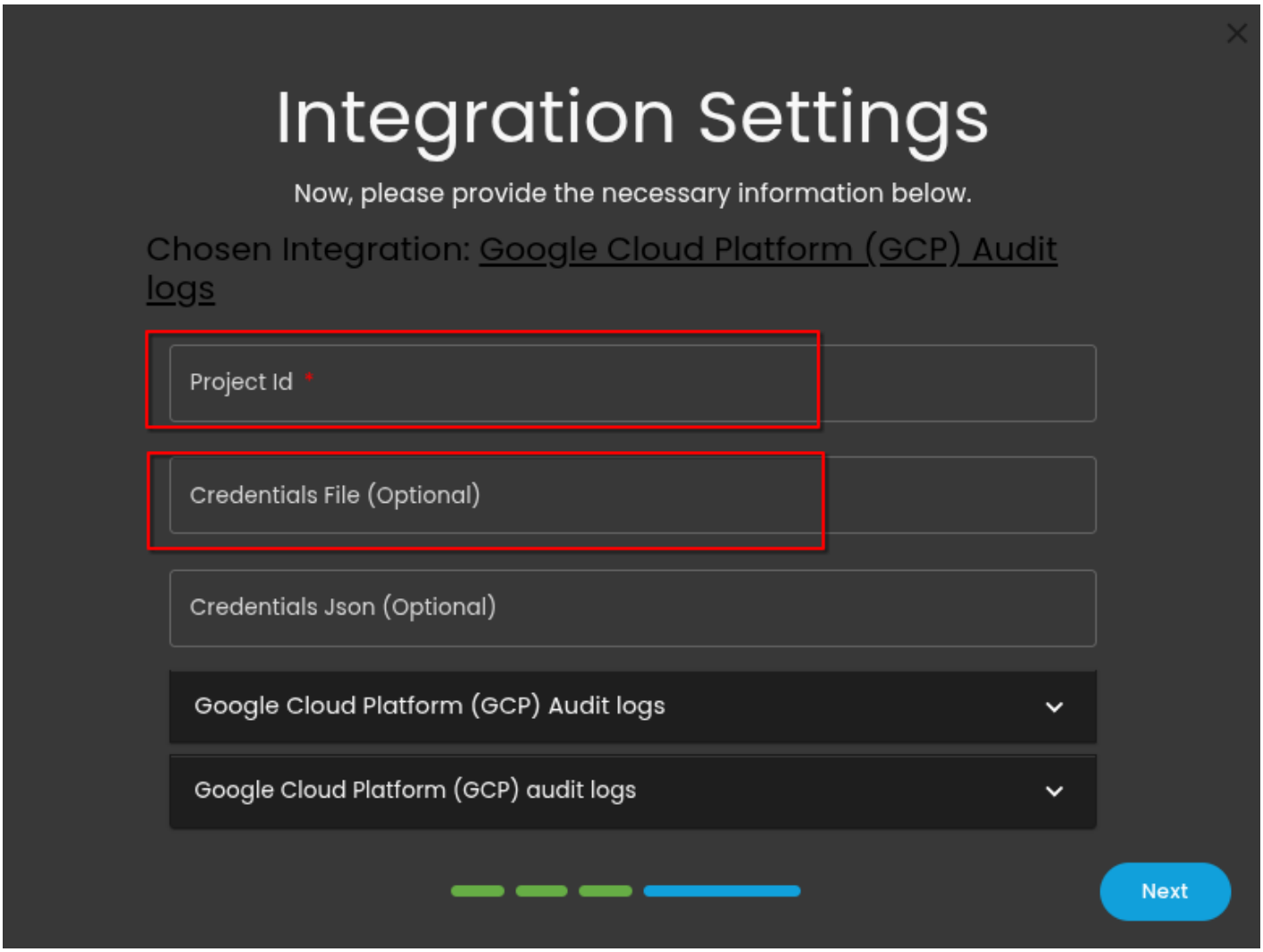
Step2: Navigate through Settings>Log Source>Search Bar(type GCP)>Choose the type of GCP*(for example- Google Cloud Platform (GCP) Audit Logs - Collect audit logs from Google Cloud Platform (GCP) with Elastic Agent)*>Click "*Add to Agent*".



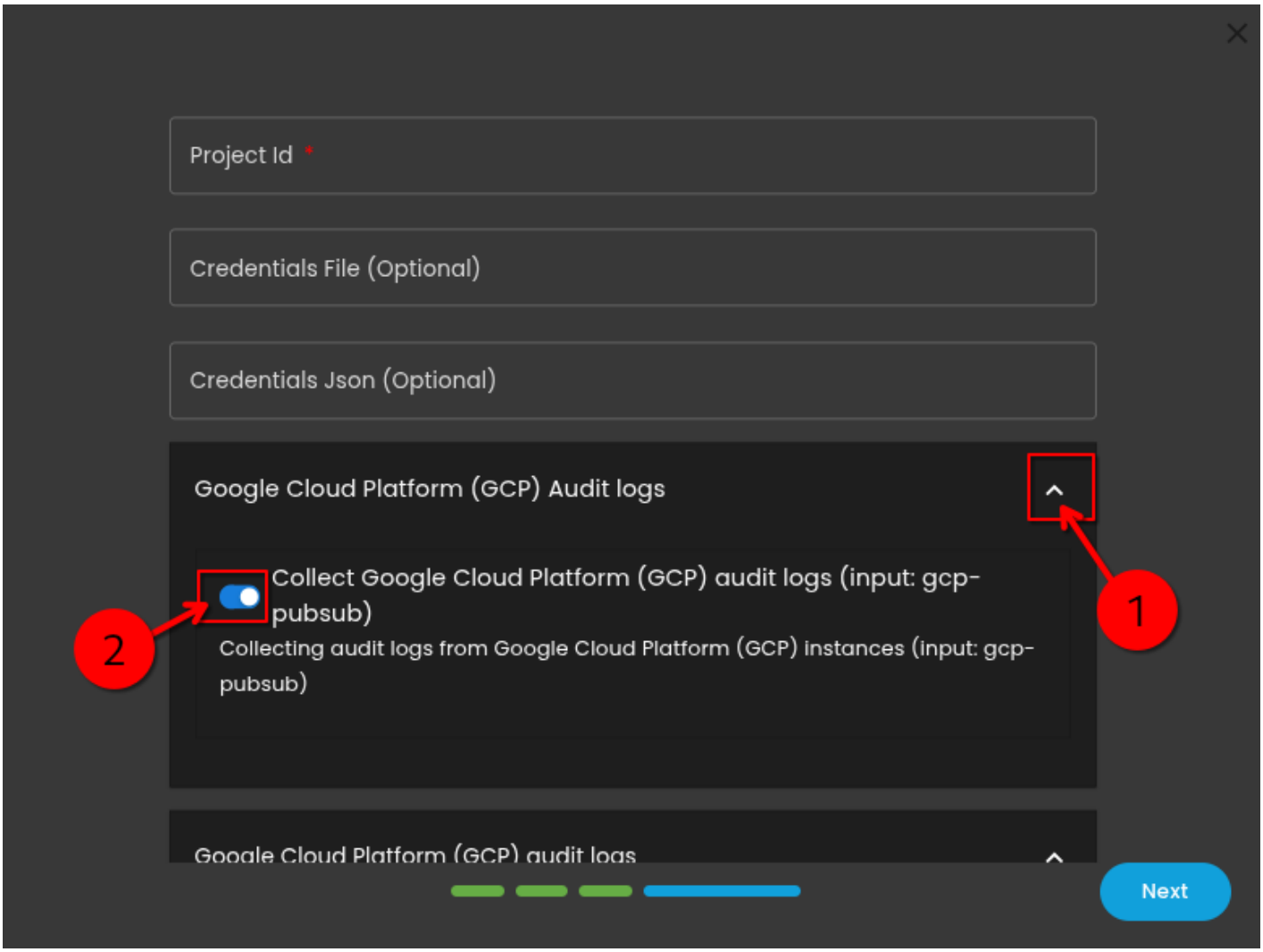
Step3: Choose your "Log Collector".



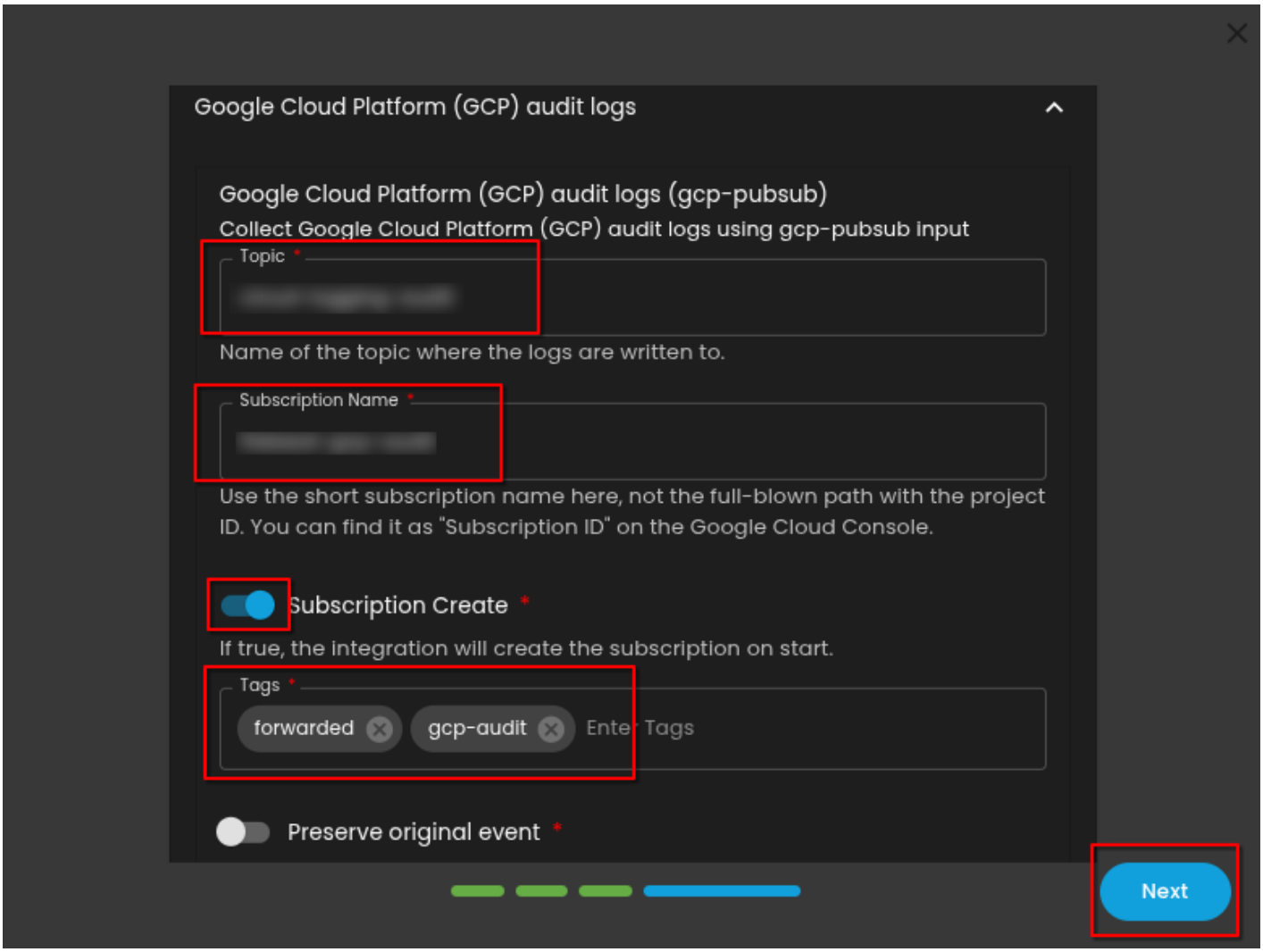
Step4: Provide the "Project ID" and "Credentials File".



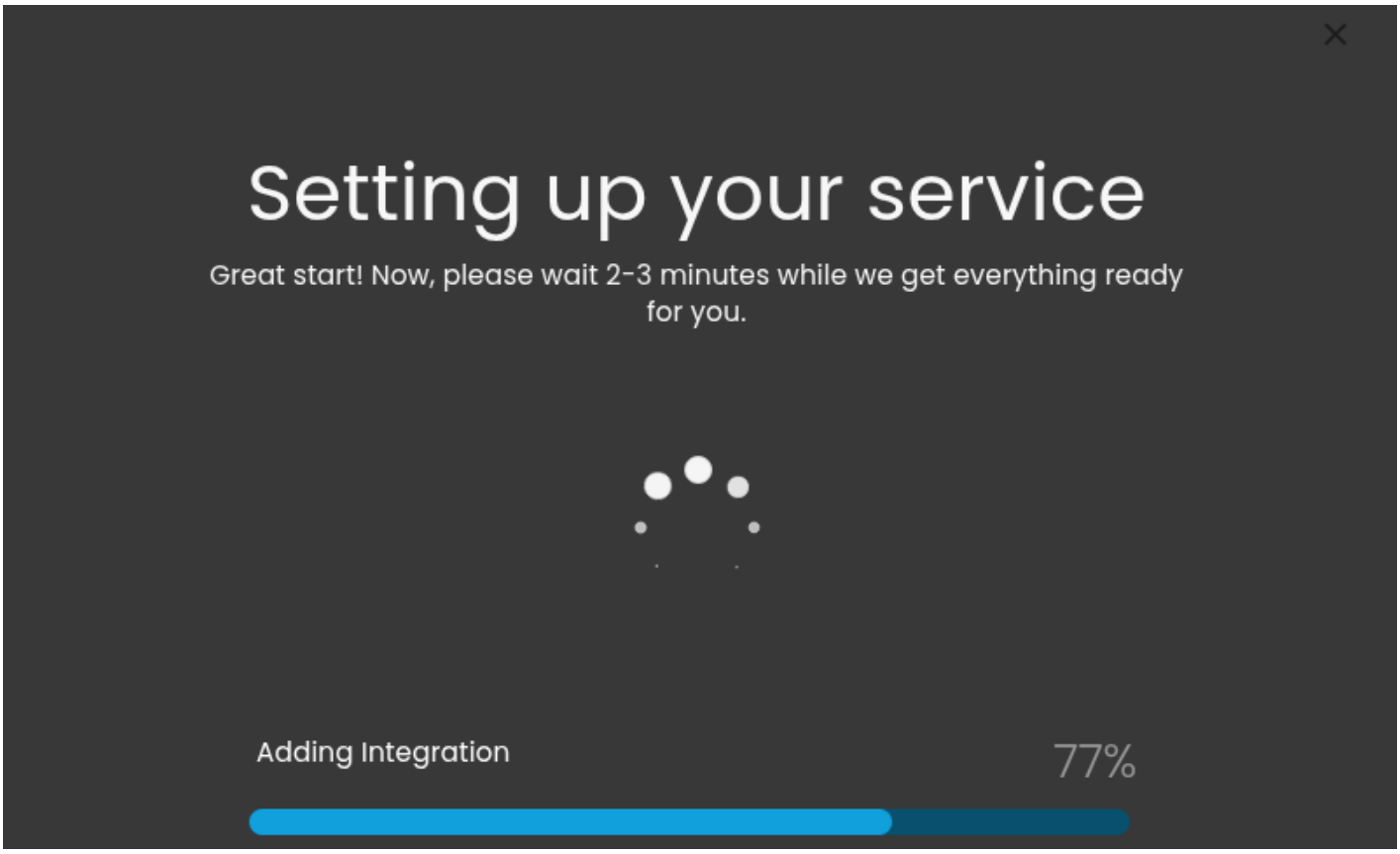
Step5: Click down the arrow button and make sure to "enable" Collect Google Cloud Platform (GCP) audit logs.



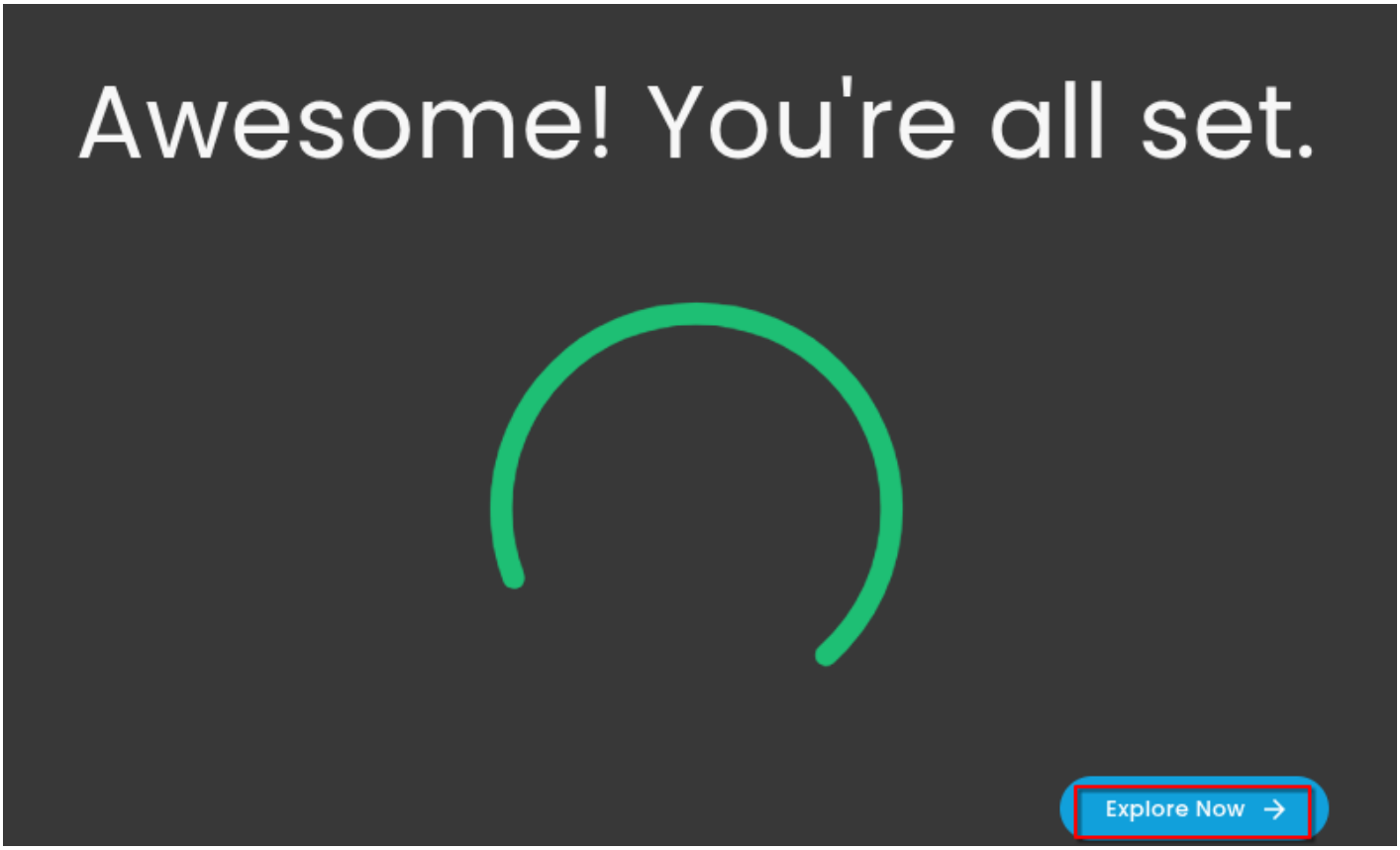
Step6: In the Google Cloud Platform (GCP) Audit logs. Provide the "Topic" and "Subscription Name". Additionally, make sure to enable "Subscription Create" and enter "Tags"(*forwarded and gcp-audit*) by clicking the box. Click "Next" to proceed.



Step7: Wait for a couple of moment to finalize your integration.



Step8: A confirmation that the integration is finish installing.



Documentation reference: *https://www.elastic.co/guide/en/integrations/current/gcp.html*

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

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