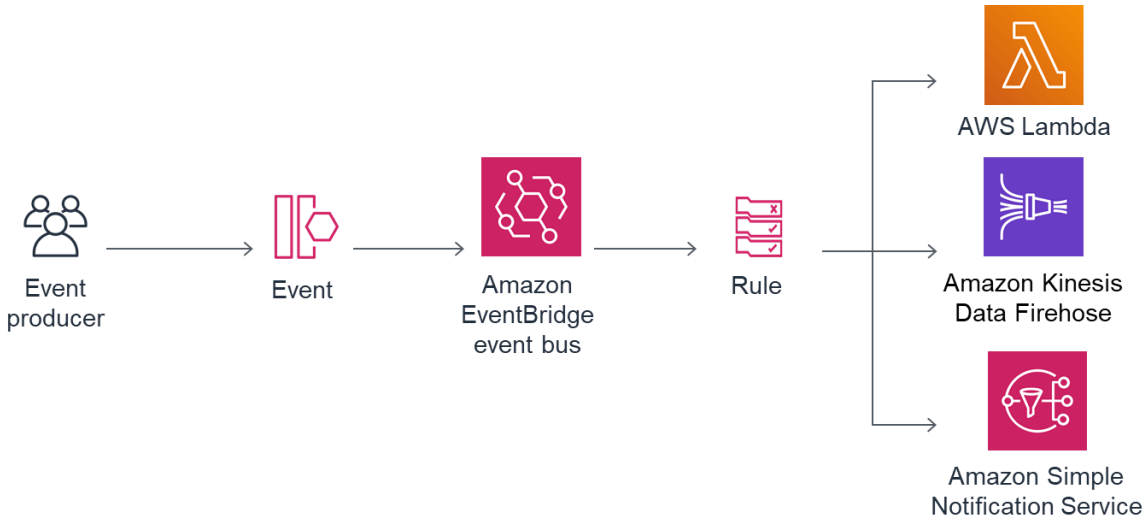
Event Bridge

We all have been familiar with AWS services like SQS, SNS. Now, let's dive into the event bridge. Amazon event bridge was launched to make it easy for us to develop, and build powerful, event-driven architecture at any scale. Event bridge is a serverless event that lets you receive, filter, transform, route, and deliver events. It gets events from sources like AWS Services and third-party SAAS applications such as Shopify, PageDuty, and DataDog.



The event bridge consists of:

1. Event Bus: Acts as a bus that routes the event. There are 3 kinds of Event Bus.

a. default event bus: receives events from AWS services

b. custom event bus: receives events from Custom Application and Services

c. partner event bus: receives events from SAAS application

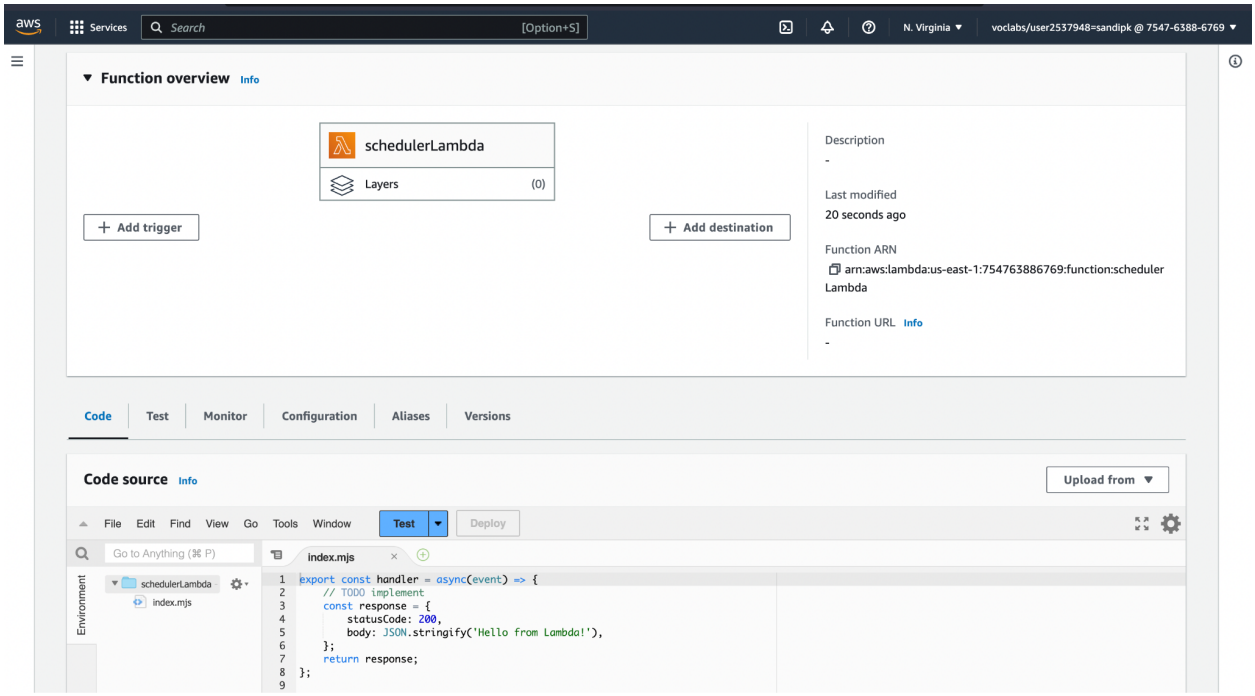
2. Rules: matches events from event source and sends them to the target

- can write up to 300 rules for each event but can be raised

3. Targets: targets are where the event bus routes to

- each rule can have only on target
Advantages of Event Bridge
1.Content-based filtering
2.DLQ can be configured per the target
3.Third-party service integration without writing code

Today we will learn to schedule an AWS lambda function on AWS event bridge and content-based filtering:
1. Schedule an AWS lambda function:
a . create a scheduler lambda which will be triggered when a schedule is created



b.Create a rule which will run the lambda function at a specific time scheduled rule is not supported on custom event.

Define rule detail Info

Rule detail

Name

schdule-event

Maximum of 64 characters consisting of numbers, lower/upper case letters, .,-,_.

Description - *optional*

Enter description

Event bus Info

Select the event bus this rule applies to, either the default event bus or a custom or partner event bus.

default

Enable the rule on the selected event bus

Rule type Info

- Rule with an event pattern
  A rule that runs when an event matches the defined event pattern. EventBridge sends the event to the specified target.
- Schedule
  A rule that runs on a schedule

EventBridge Scheduler - A new AWS scheduling capability! New

A new EventBridge scheduling functionality that provides one-time and recurring scheduling functionality independent of Event buses and rules. You can create a schedule to invoke targets such as a Lambda function.

Learn More

Continue to create rule | Cancel | Continue in EventBridge Scheduler

Schedule name and description

Schedule name

schdule-event

Use only letters, numbers, dashes, dots or underscores. Max 64 characters.

Description - *optional*

Enter description

Maximum of 512 characters.

Schedule group

Each schedule needs to be placed in a schedule group. By default, a schedule is placed in the 'Default' group. You can also **create your own schedule group**. You can only add tags to a schedule group, not a schedule.

default

Schedule pattern

Occurrence | Info

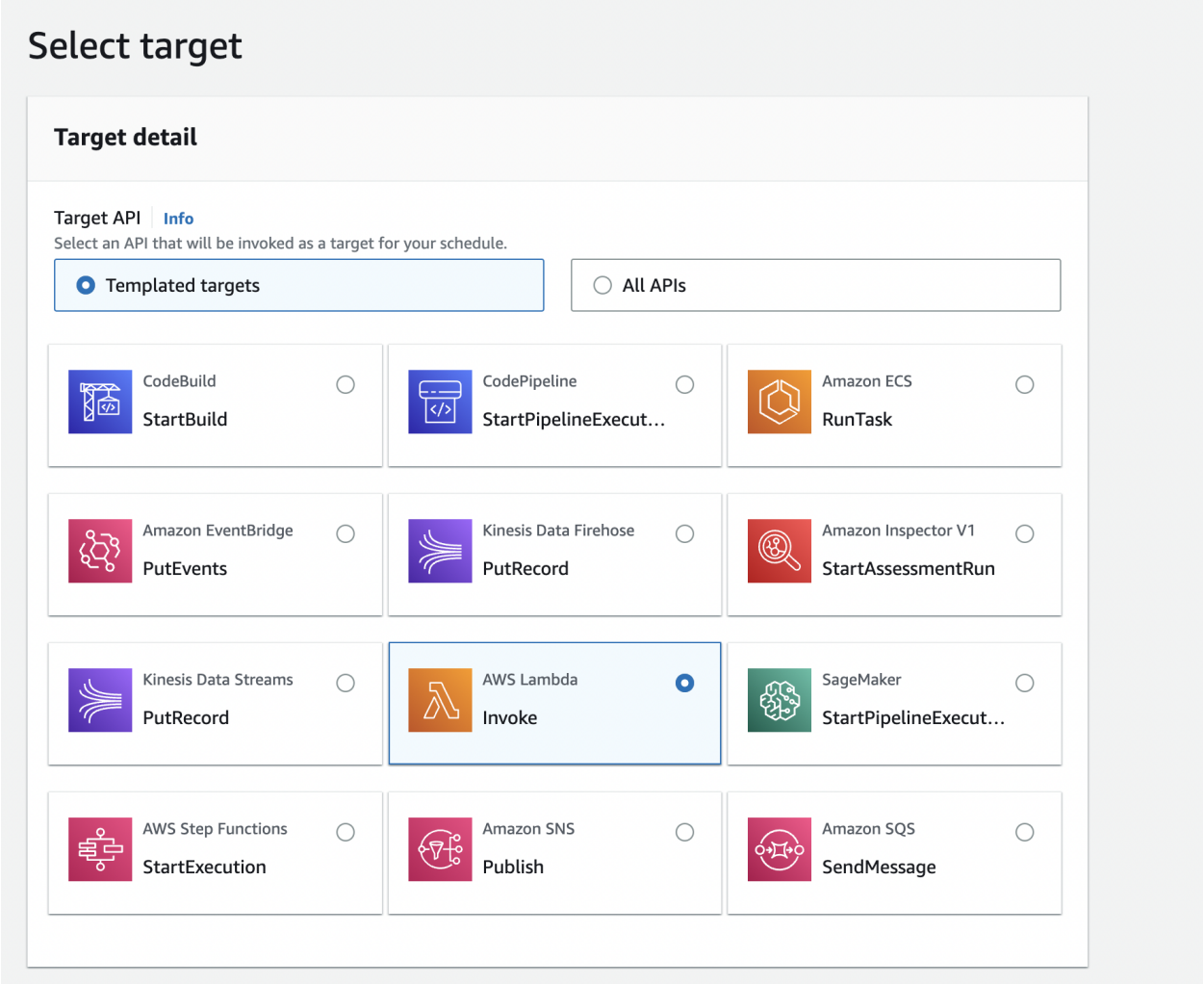
You can define an one-time or recurrent schedule.

- (•) One-time schedule
- ( ) Recurring schedule

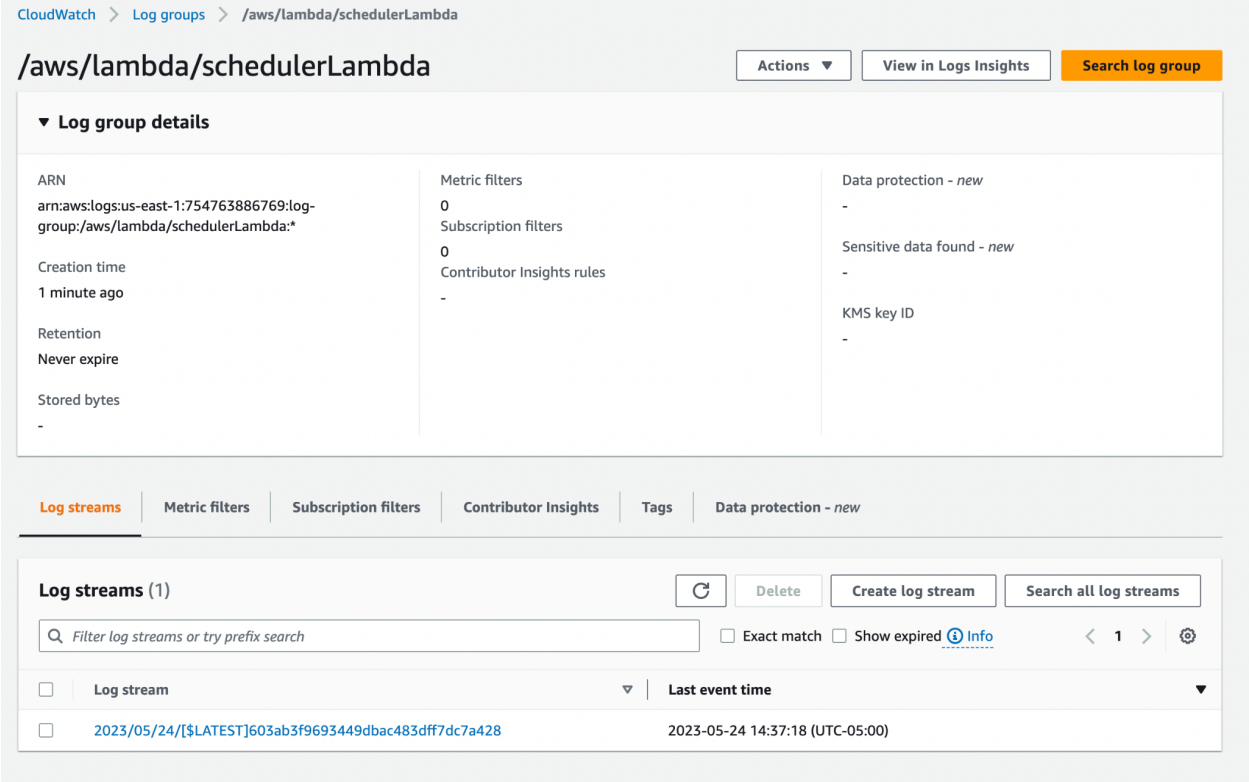
Date and time

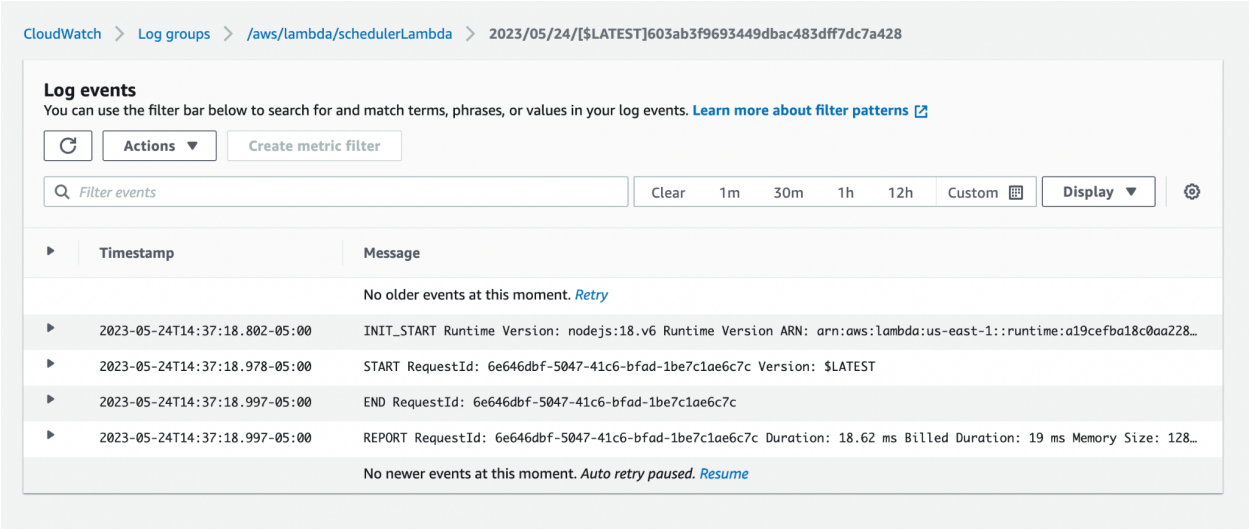
The date and time to invoke the target.

2023/05/22 | *hh:mm* | (UTC -05:00) America/Chicago

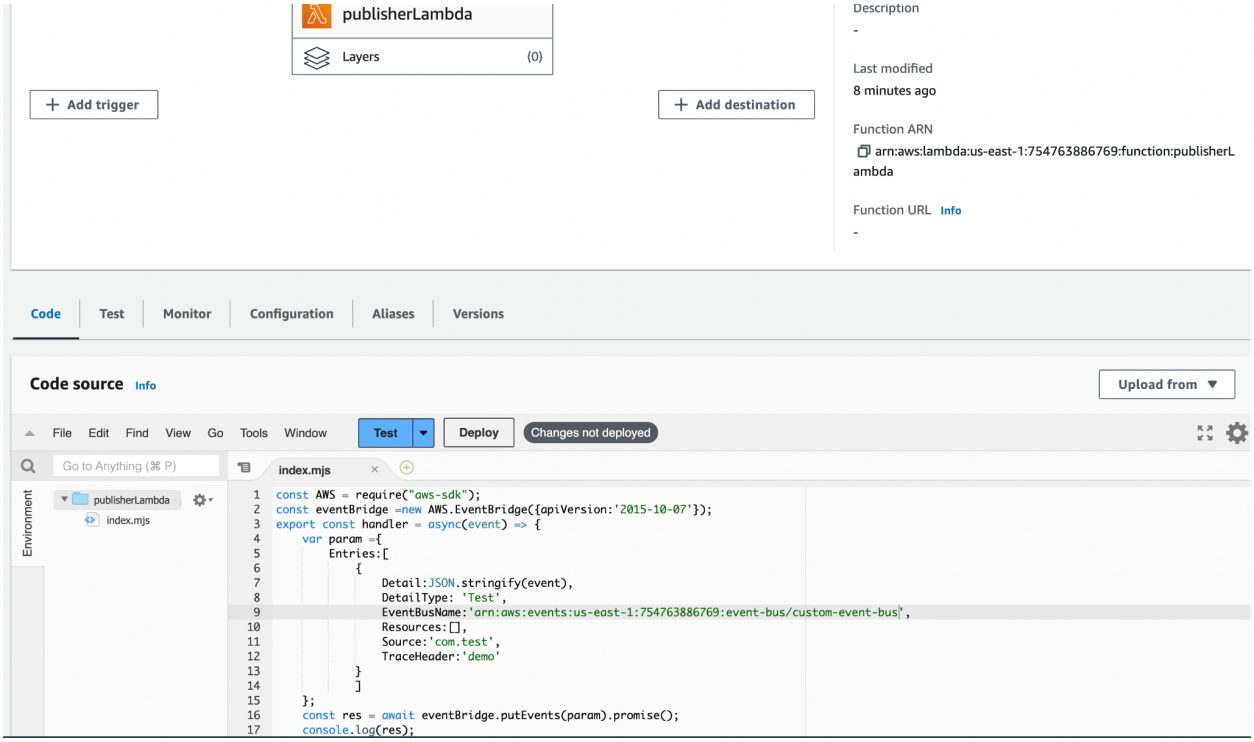


c. After the rule is set the scheduler lambda will be invoked and logs can be seen in cloud watch

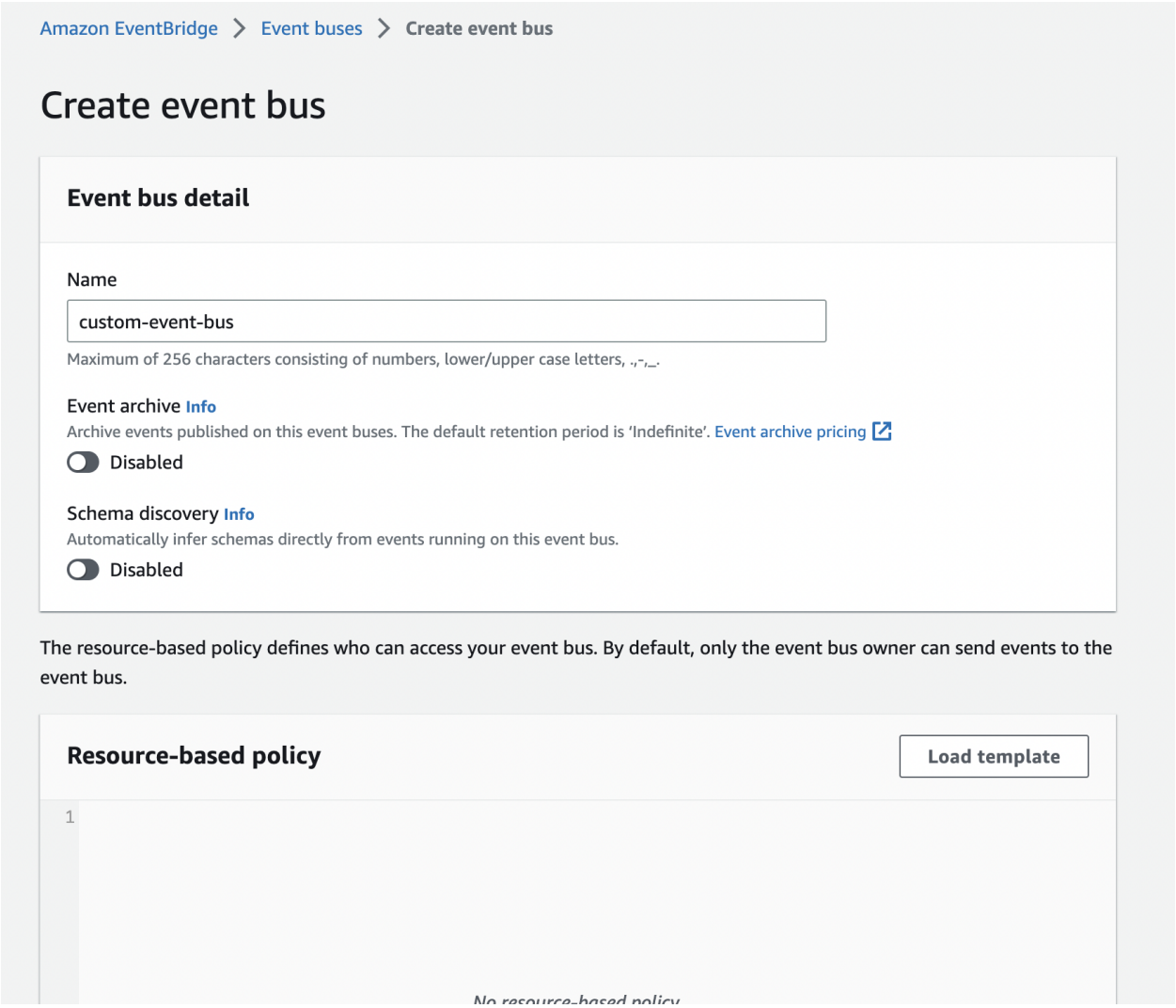




2.Content Based Filtering
-create a publisher lambda which will trigger the the custom event bus

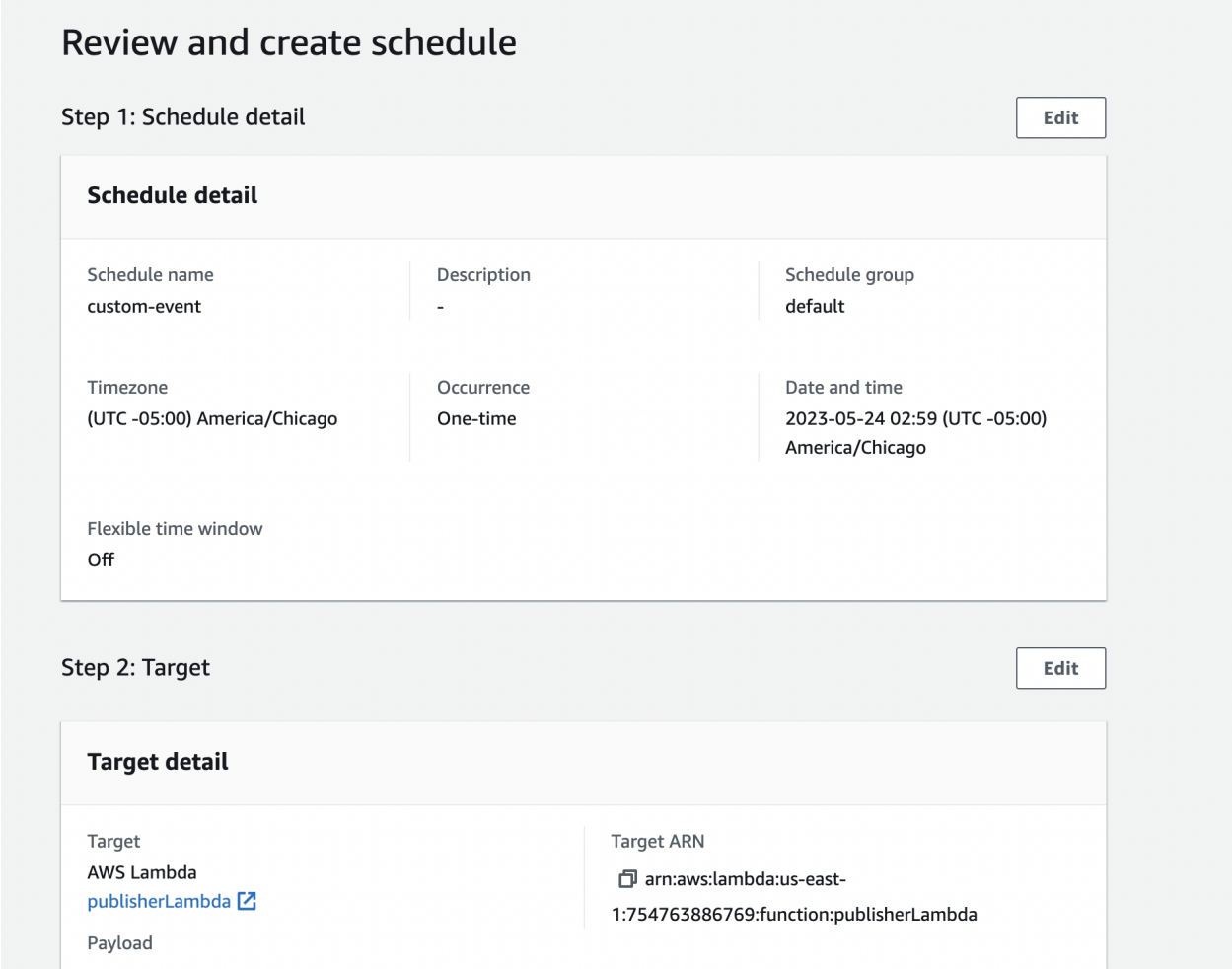


-create a consumer lambda which will be invoked by the event
-create a custom event



Add the arn of the custom event to the publisher lambda Event Bus attribute

-create rule for the custom event bus which will filter based on the condition



Since I am using the student account, I am not able to create the rule but using regular account we can create the rule and trigger the event of the publisher lambda and watch the logs on cloud watch.

Thank You

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