Troubleshoot Event Stream on Private Cloud

Contents

Introduction

This document describes how to troubleshoot Event Streams in Advanced Malware Protection Secure Endpoint Private Cloud.

Prerequisites

Requirements

Cisco recommends that you have knowledge of the topics:

- Secure Endpoint Private Cloud
- API query

Components Used

The information in this document is based on these software and hardware versions:

- Secure Endpoint Private Cloud v3.9.0

- cURL v7.87.0
- cURL v8.0.1

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Configuration

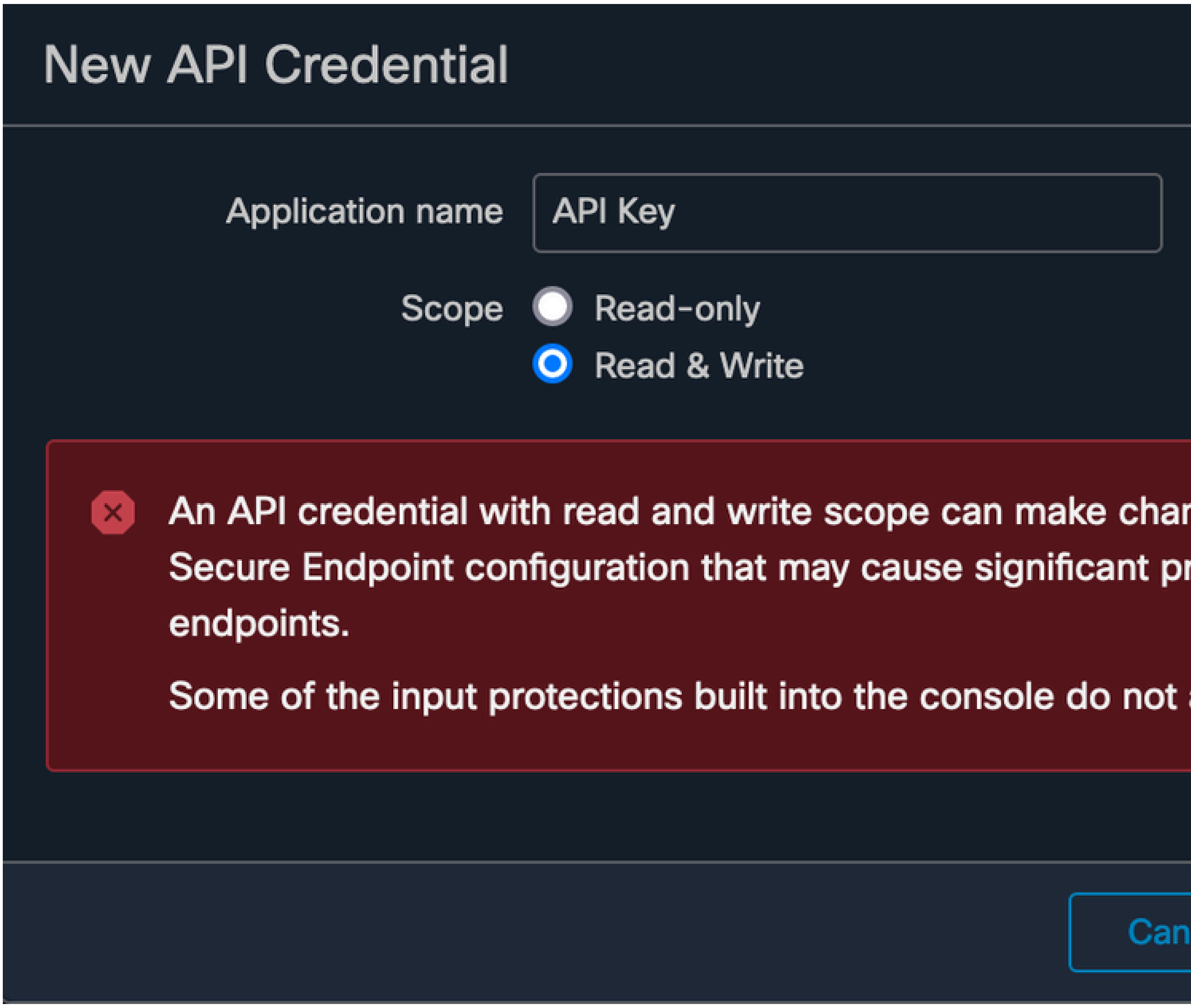
Create API Key

Step 1. Login to Private Cloud Console.

Step 2. Navigate to Accounts > API Credentials.

Step 3. Click New API Credential.

Step 4. Add the Application name and click Read & Write scope.


New API Credential

Application name: API Key

Scope: Read-only [✓ Read & Write]

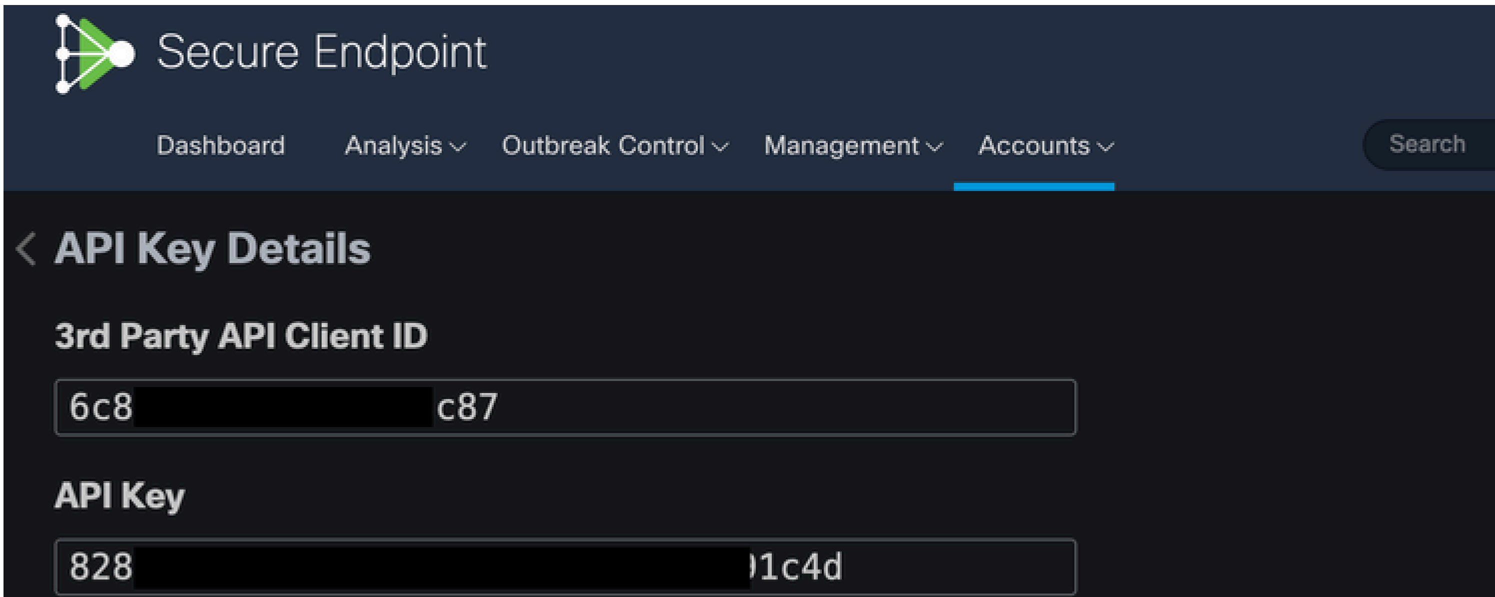
An API credential with read and write scope can make char
Secure Endpoint configuration that may cause significant pr
endpoints.

Some of the input protections built into the console do not

Create API Key

Step 5. Click `Create`.

Step 6. Save API credentials.



API Key Details

3rd Party API Client ID

6c8[redacted]c87

API Key

828[redacted])1c4d

```
(...)
"data": {
  "id": 17,
  "name": "EVENT_STREAM_NAME",
  "amqp_credentials": {
    "user_name": "17-1bfXXXXXXXXXX",
    "queue_name": "event_stream_17",
    "password": "3961XXXXXXXXXXXXXXXXXXXXXX814a77",
    "host": "FMC_SERVICE_URL",
    "port": 443,
    "proto": "https"
  }
}
```

List of Event Streams

This shows a list of event streams created on Private Cloud.

MacOS/Linux

You can list the Event Streams on MacOS/Linux with the use of:

```
curl -k -H 'Accept: application/json' -H 'Content-Type: application/json' -u 'CLIENT_ID:API_KEY' -i 'htt
```

Windows

You can list the Event Streams on Windows with the use of:

```
curl -k -H "Accept:application/json" -H "Content-Type:application/json" -u "CLIENT_ID:API_KEY" -i "https
```

Response

```
HTTP/1.1 200 OK
(...)
"data": {
  "id": 17,
  "name": "EVENT_STREAM_NAME",
  "amqp_credentials": {
    "user_name": "17-1bfXXXXXXXXXX",
    "queue_name": "event_stream_17",
    "host": "FMC_SERVICE_URL",
    "port": 443,
    "proto": "https"
  }
}
```

Delete Event Streams

Deletes an active event stream.

MacOS/Linux

You can delete Event Streams on MacOS/Linux with the use of:

```
curl -X DELETE -k -H 'Accept: application/json' -H 'Content-Type: application/json' -u 'CLIENT_ID:API_KE
```

Windows

You can delete Event Streams on Windows with the use of:

```
curl -X DELETE -k -H "Accept:application/json" -H "Content-Type:application/json" -u "CLIENT_ID:API_KEY"
```

Response

```
HTTP/1.1 200 OK
(...)
 "data": {}
```

Verify

Step 1. Copy the Python script to your device and save it as EventStream.py.

```
import pika
import ssl

user_name = "USERNAME"
queue_name = "QUEUE_NAME"
password = "PASSWORD"
host = "FMC_SERVICE_URL"
port = 443
proto = "https"

def callback(channel, method, properties, body):
print(body)

amqp_url = f"amqps://{user_name}:{password}@{host}:{port}"

context = ssl.SSLContext(ssl.PROTOCOL_TLSv1_2)
amqp_ssl = pika.SSLOptions(context)
```

```
params = pika.URLParameters(amqp_url)
params.ssl_options = amqp_ssl

connection = pika.BlockingConnection(params)
channel = connection.channel()

channel.basic_consume(
   queue_name,
   callback,
   auto_ack = False
)

channel.start_consuming()
```

Step 2. Execute it in the terminal as `python3 EventStream.py`.

Step 3. Trigger any event which is added to the Event Stream queue.

Step 4. Check if the events appear in the terminal.

Troubleshooting

In order to execute these commands you must log in via SSH into the Private Cloud.

Check the AMQP Service

Verify if the service is enabled:

```
[root@fireamp rabbitmq]# amp-ctl service status rabbitmq
running enabled rabbitmq
```

Verify if the service is running:

```
[root@fireamp ~]# svstat /service/rabbitmq
/service/rabbitmq: up (pid 25504) 7402137 seconds
```

Check the Connection to Event Stream Receiver

Execute the command:

```
tail /data/log/rabbitmq/rabbit@fireamp.log
```

Connection is established:

```
=INFO REPORT==== 19-Apr-2023::08:40:12 ===
accepting AMQP connection <0.17588.27> (127.0.0.1:32946 -> 127.0.0.1:5672)
```

Connection is closed:

```
=WARNING REPORT==== 19-Apr-2023::08:41:52 ===
closing AMQP connection <0.17588.27> (127.0.0.1:32946 -> 127.0.0.1:5672):
connection_closed_abruptly
```

Check for the Events in the Queue

Events in the queue are ready to be sent on this event stream to the receiver after the connection is established. In this example, there are 14 events for Event Stream ID 23.

<#root>

```
[root@fireamp rabbitmq]# rabbitmqctl list_queues
Listing queues ...
1acb0eb6-39f7-4b11-bd9b-fc4dd0e3bd77_60b15rn8mpftaico6or6l8zxavl1usm 26
1acb0eb6-39f7-4b11-bd9b-fc4dd0e3bd77_61984nlu8p11eeopmgmtcjra1v8gf5p 26
1acb0eb6-39f7-4b11-bd9b-fc4dd0e3bd77_iesRAgVo0h287mO_DetOx9PdDu8MxkS6kL4oSTeBm9s 26
event_decoration 0
event_log_store 0

event_stream_23 14


event_streams_api 0
events_delayed 0
events_retry 0
mongo_event_consumer 0
out_events_q1 0
tevent_listener 0
```

Collect Network Traffic File

In order to verify the Event Stream traffic from the Private Cloud, you can collect capture with a `tcpdump` tool:

Step 1. SSH into the Private Cloud.

Step 2. Execute the command:

```
tcpdump -vvv -i eth1 host <Event_Stream_Receiver_IP> -w file.pcap
```

Step 3. Stop the capture with `Ctrl+C` (Windows) or `Command-C` (Mac).

Step 4. Extract the `pcap` file from the Private Cloud.

Related Information

- Configure AMP for Endpoints Event Stream Feature
- Technical Support & Documentation - Cisco Systems