

# SOC Project: SOAR Implementation Using Tines and LimaCharlie

## Introduction:

In today's rapidly evolving cybersecurity landscape, **Security Orchestration, Automation, and Response (SOAR)** solutions are becoming essential components of Security Operations Centers (SOCs). The primary goal of SOAR is to automate repetitive tasks, enabling SOC teams to focus on more complex incidents, streamline workflows, and enhance incident response through structured playbooks.

This report details the process of integrating **Tines** as the SOAR platform with **LimaCharlie** as an Endpoint Detection and Response (EDR) system. The project demonstrates how SOAR can be effectively used in a SOC environment to automate responses to detections, such as password recovery tool activity, and escalate actions based on user input. This project also emphasizes the importance of understanding the functionality of tools, irrespective of the specific vendor, by focusing on core SOAR concepts rather than proprietary features.

## Project Objectives:

1. **Automate Detection and Response:** Automate the detection of password recovery tools on Windows machines using LimaCharlie and respond to incidents using Tines.
2. **Design and Implement Playbooks:** Create a custom playbook (referred to as "story" in Tines) that integrates alerts with communication tools such as Slack and email for incident notification and escalation.
3. **User Interaction in Incident Response:** Provide a mechanism for user input to determine further actions, such as isolating a machine upon detecting unauthorized activity.
4. **Develop Hands-On SOAR and EDR Experience:** Gain practical experience with SOAR and EDR platforms by setting up detection rules, generating events, and automating responses.

## Project Workflow Overview:

1. **Preparation:**
  - Install **Tines** as the SOAR platform and **LimaCharlie** as the EDR solution.
  - Deploy a Windows Virtual Machine (VM) to act as the test environment.
  - Ensure the VM has an active internet connection to communicate with the SOAR and EDR platforms.
2. **Detection Setup:**

- **Custom Detection Rules in LimaCharlie:** Implement a detection rule to identify the usage of password recovery tools on the Windows VM.
- **Data Collection:** Start collecting event data from LimaCharlie, which will act as the EDR solution for the project.

### 3. **Playbook Creation (SOAR Story in Tines):**

- Design the **playbook** (story) in Tines, which will automate the response to detections.
- The playbook will:
  - Send an alert via **email** and **Slack** when a detection is made.
  - Query the user to ask whether the detected machine should be isolated.
  - **Isolate the machine** using LimaCharlie's capabilities if the user confirms the action.

### 4. **Slack and Email Integration:**

- Integrate **Slack** and **email** with the playbook to enable real-time incident notifications and escalations.
- Test the integration to ensure that notifications are triggered upon detection.

### 5. **User Interaction:**

- The playbook will prompt the user with a **confirmation** to isolate the machine if suspicious activity is detected. Based on the user's response, LimaCharlie will execute an automated isolation process.

### **Challenges Encountered:**

1. **Playbook Design Iterations:** The creation of a functional playbook (story) required several iterations. As is common in SOC environments, some planned functions didn't work as expected, and adjustments were made during the development process.
2. **Integration and Event Handling:** Ensuring smooth integration between LimaCharlie and Tines involved troubleshooting compatibility issues, particularly in passing alerts and data between the platforms. Documenting these integration steps was key to resolving problems efficiently.
3. **Handling User Inputs:** Allowing user interaction in automated processes posed some challenges. The logic required to handle user responses within the playbook was adjusted to ensure accuracy, as incorrectly configured logic could lead to improper incident response actions.

## Results:

By the end of the project, we have successfully:

- Created a **detection rule** in LimaCharlie to monitor and alert on the use of password recovery tools.
- Integrated **Slack** and **email** notifications into the SOAR playbook, enabling real-time communication of incidents to the SOC team.
- Developed a **fully functional playbook** that provided users with options for manual intervention in incident handling, such as isolating compromised machines.

The project showcased the value of SOAR platforms like Tines in automating SOC workflows and allowed for hands-on experience in managing and responding to security threats in real-time.

## Lessons Learned:

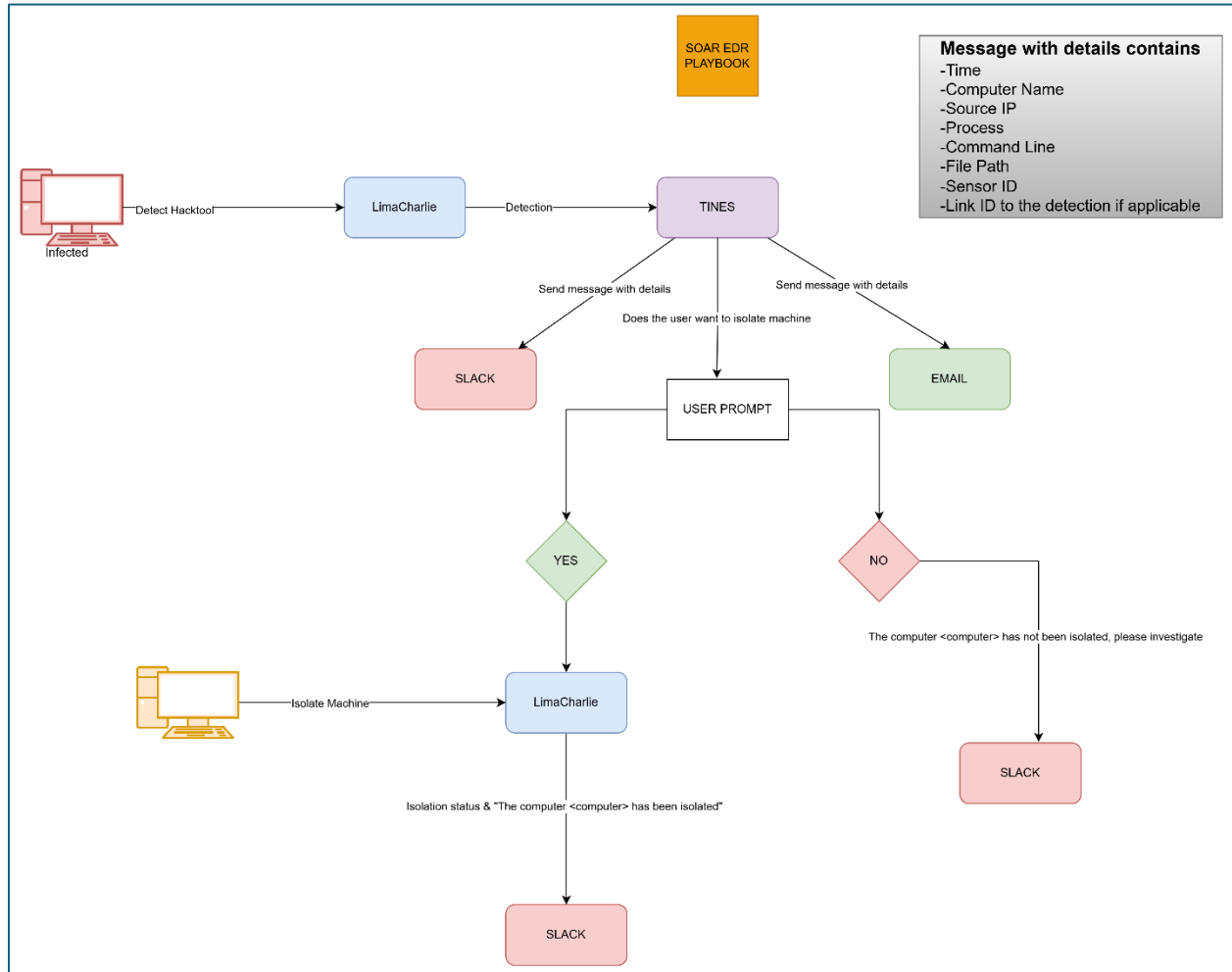
1. **Tool Agnosticism:** While we used **Tines** as the SOAR platform and **LimaCharlie** as the EDR tool, the principles of SOAR implementation remain largely vendor-agnostic. The key takeaway is that SOC processes should be designed with flexibility in mind, as the tools may vary, but the goals of automation and structured responses stay the same.
2. **Importance of Iteration in Playbook Development:** During the creation of playbooks, it's crucial to anticipate changes and continuously refine the workflows. Playbooks evolve based on operational requirements, tool limitations, and new security threats.
3. **Practical Experience Matters:** This project reinforced that hands-on practice with SOAR tools is essential for building confidence and technical proficiency in SOC operations. The integration of LimaCharlie and Tines provided valuable insight into orchestrating responses in real-time.

## Conclusion:

This project successfully demonstrated the use of **SOAR platforms** like Tines to streamline SOC workflows by automating repetitive tasks, providing real-time incident notifications, and enabling user interaction during incident response. The integration of EDR with SOAR platforms is a critical strategy for modern SOC teams to ensure that security incidents are handled efficiently and effectively. This hands-on project provided a solid foundation for future SOC automation projects and real-world application of SOAR tools.

## Part 1

This is what my workflow looks like and everything I'd be configuring and integrating.



## Part 2: LimaCharlie EDR and Tines Integration

In this phase, the goal is to:

- Install and set up **LimaCharlie EDR** on my **Windows Server 2022 virtual machine (VM)** running in VirtualBox.
- Ensure the VM is enrolled in **LimaCharlie** and is generating **event data**.
- Prepare the environment for creating **custom detection and response rules**.

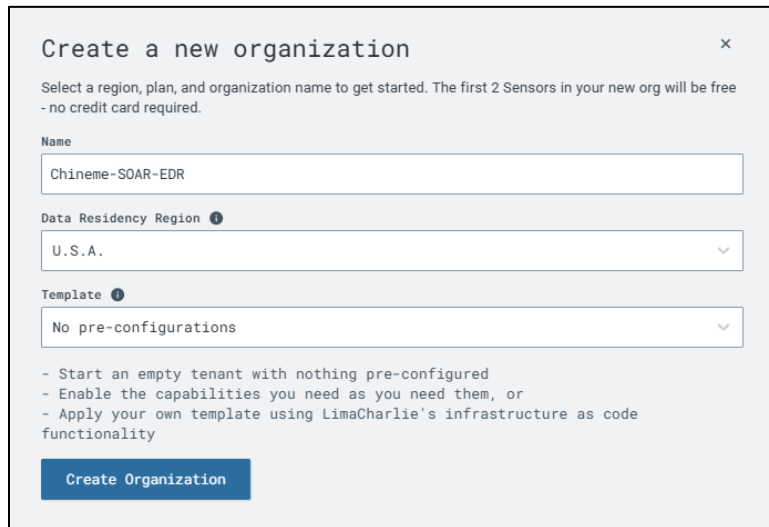
### Step-by-Step Setup Process:

#### 1. Environment Setup (Windows Server 2022 in VirtualBox):

- I will be using my existing VM running Windows Server 2022 on VirtualBox. It's important to ensure that the VM has internet connectivity since LimaCharlie needs to communicate with its cloud dashboard to report events.

#### 2. LimaCharlie Setup:

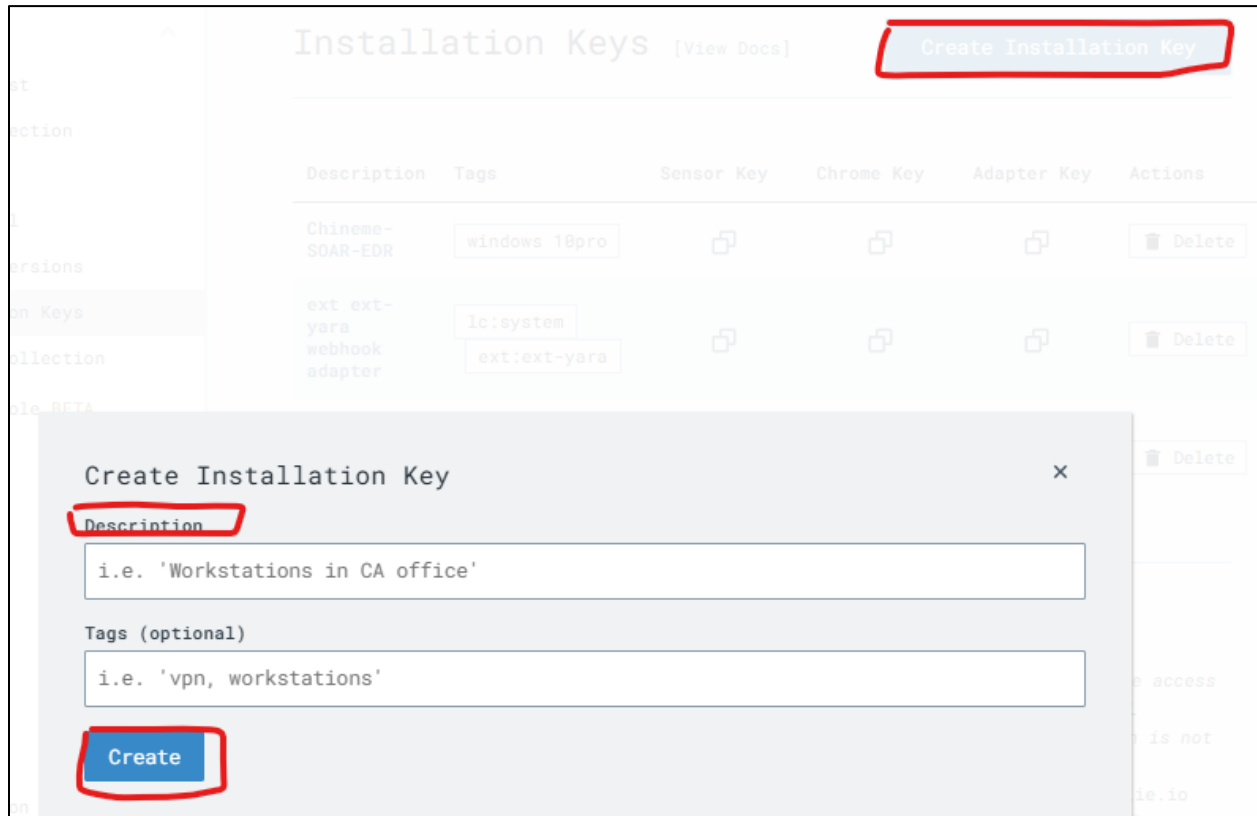
- Go to the **LimaCharlie website** and sign up if you haven't done so already.
- Once logged in, follow the LimaCharlie onboarding wizard, which includes creating an organization.
- Give your organization a meaningful name, such as "**chineme-SOAR-EDR**".
- Then select the appropriate **data residency region**, like "USA" or your preferred location.



The screenshot shows a web form titled "Create a new organization" with a close button (X) in the top right corner. Below the title is a sub-header: "Select a region, plan, and organization name to get started. The first 2 Sensors in your new org will be free - no credit card required." The form contains three main input sections: 1. "Name" with a text box containing "Chineme-SOAR-EDR". 2. "Data Residency Region" with a dropdown menu showing "U.S.A.". 3. "Template" with a dropdown menu showing "No pre-configurations". Below these sections is a list of bullet points: "- Start an empty tenant with nothing pre-configured", "- Enable the capabilities you need as you need them, or", and "- Apply your own template using LimaCharlie's infrastructure as code functionality". At the bottom of the form is a blue button labeled "Create Organization".

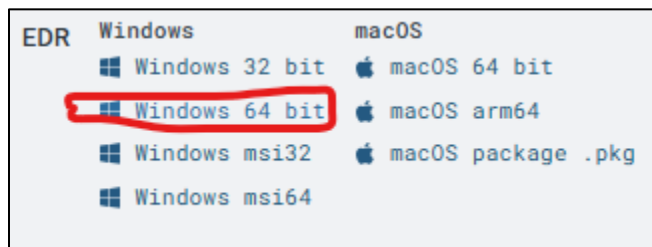
#### 3. Creating Installation Keys in LimaCharlie:

- Navigate to the **Installation Keys** section on the LimaCharlie dashboard. These keys are used to enroll sensors (my VM) into the LimaCharlie environment.
- Click on **Create Installation Key** and provide a description such as "**Chineme-SOAR-EDR**".
- Save the key for later use during the agent installation process.



#### 4. Installing the LimaCharlie Agent on Windows Server 2022:

- Now that I have my installation key, it's time to install the **LimaCharlie Agent** on my Windows Server VM.
- Download the **LimaCharlie Windows Agent** from the platform.
  - In LimaCharlie, navigate to the **Downloads** section and select the Windows agent for **64-bit systems**.



- ## Installation [\[View Docs\]](#)
- Installing the sensor requires administrator (or root) execution:
- Windows EXE:** `lc_sensor.exe -i`  
`YOUR_INSTALLATION_KEY`

- I'll ensure the agent installs successfully, and I should see a confirmation message once the installation is complete.

[illegible]

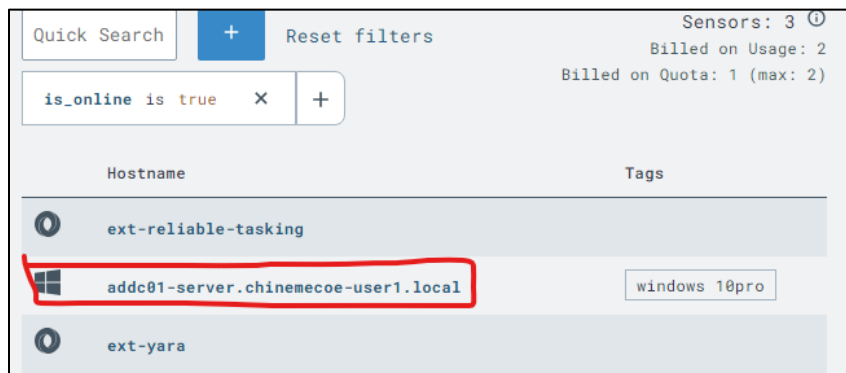
```
LimaCharlie Agent Installer
https://limacharlie.io

*** SUCCESS
*** Agent installed successfully!

PS C:\Users\Administrator\Downloads>
```

## 5. Verifying Enrollment in LimaCharlie:

- After installation, head back to the **LimaCharlie dashboard** and navigate to **Sensors**.



- You should now see **Windows Server 2022 VM** listed under the **Sensors List**. The dashboard will provide details such as:
  - Hostname
  - Internal and external IP addresses
  - Enrollment date
  - Platform type
- I can also see basic analytics like **event collection** and **file system** data.



addc01-server.chinemecoe-user1.local 

### Sensor Details

Hostname	addc01-server.chinemecoe-user1.local 	Platform	 Windows x86 64 bit
Network Access	Allowed  Isolate From Network	Kernel	Available
Seal Status	Not Sealed  Seal	Enrollment Date	2024-09-25 16:45:20 
Last Time Alive	2024-09-25 17:21:07 	Internal IP	192.168.10.7 
External IP	63.229.160.42 	Mac Address	08-00-27-78-8C-C6 
Sensor ID	c8571ce0-eede-46ff-ba72-9b87bfc3a2dd 	Organization ID	71d82da1-396d-428a-a570- 428a-a570-e0e0625d0791/console/c8571ce0-eede-46ff-ba72-9b87bfc3a2dd/analysis...

## 6. Initial Test Commands:

- With my sensor now visible in the LimaCharlie dashboard, it's time to run some basic commands to verify the setup.
  - I'll use the **Netstat** command from within the LimaCharlie console to view active network connections on my Windows Server VM:
    - In LimaCharlie, navigate to **Console** under the enrolled sensor and run:
    - I'll verify that the output shows network connections along with their process IDs (PIDs).

# Console

[\[View Docs\]](#)

CONNECTED

2024-09-25 18:27:32

Connection established. Sensor ready to receive commands.

ISSUED

2024-09-25 18:27:32

netstat

NETSTAT\_REP

2024-09-25 17:27:32

```
netstat
{
  "event": {
    "FRIENDLY": 0,
    "NETWORK_ACTIVITY": [
      {
        "DESTINATION": {
          "IP_ADDRESS": "0.0.0.0",
          "PORT": 0
        },
        "PROCESS_ID": 2748,
        "PROTOCOL": "tcp4",
        "SOURCE": {
          "IP_ADDRESS": "127.0.0.1",
          "PORT": 53
        }
      }
    ]
  }
}
```

## 7. Preparing for Custom Detection and Response:

- Now that my VM is generating telemetry and I've verified the communication with LimaCharlie, I'm ready for the next phase of the project: **creating detection and response rules**.
- The focus will be on generating specific events related to **password recovery tools** and crafting custom responses to mitigate the threat.

## Part 3: Generating Telemetry and Creating Detection & Response Rules in LimaCharlie

In this part, our main objective is to:

1. Generate telemetry from the **LaZagnea password recovery tool**.
2. Create a **detection and response rule** in LimaCharlie to identify this activity.
3. Set the groundwork for forwarding the detection to **Tines** for automated actions.

### Step 1: Download and Run LaZagne

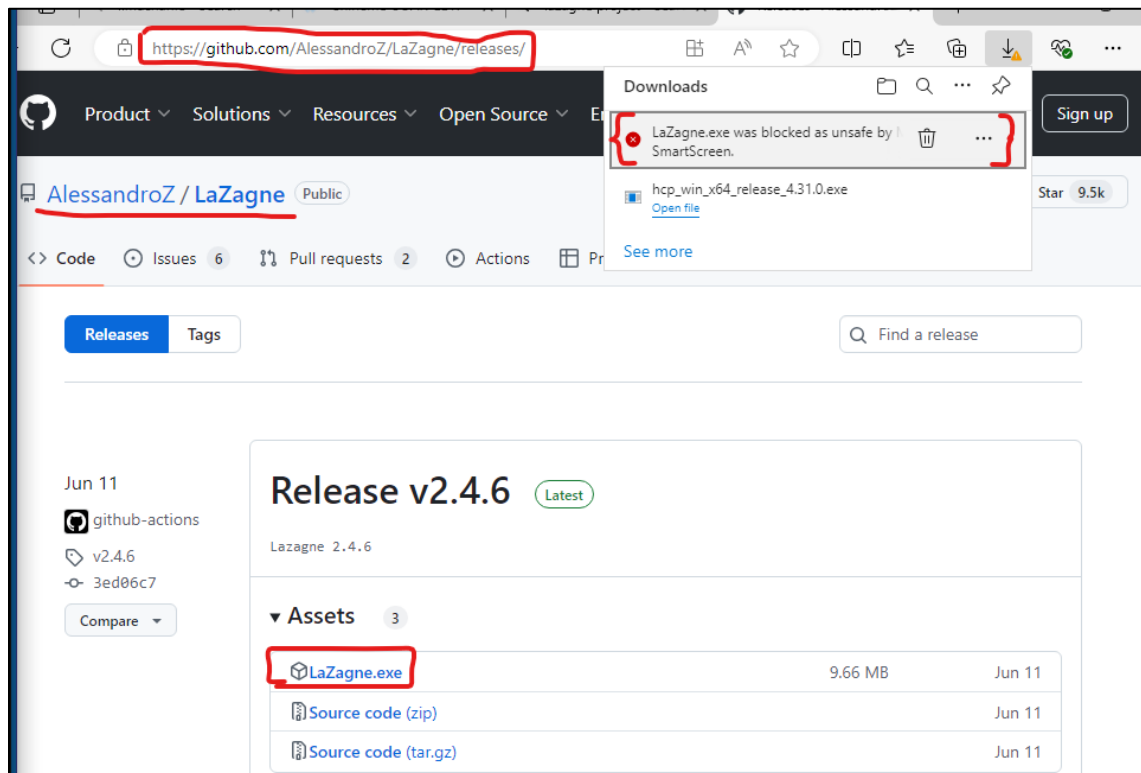
The first step is to generate activity by downloading and running **LaZagne**, a popular password recovery tool. LimaCharlie will monitor this execution, allowing us to create a detection rule based on telemetry.

#### 1. Download LaZagne:

- Visit **LaZagne 's GitHub repository**.

LaZagne: <https://github.com/AlessandroZ/LaZagne>

- Navigate to the **Releases** section and download the **LaZagne.exe** file.



#### 2. Disable Windows Security:

- Open **Windows Security** and go to **Virus & Threat Protection**.

- Temporarily **disable real-time protection** to prevent Windows Defender from blocking LaZagne.

*Note: Disabling real-time protection is necessary for this demo but should be re-enabled after completing the project.*

### 3. Running LaZagne:

- Open **PowerShell** in the directory where LaZagne is downloaded.
- Run the tool by typing:

.\LaZagne.exe

```
PS C:\Users\Administrator\Downloads> dir

Directory: C:\Users\Administrator\Downloads

Mode                LastWriteTime         Length Name
----                -
d-----          9/18/2024   11:05 PM             Sysmon
-a-----          9/25/2024   10:42 AM       782752 hcp_win_x64_release_4.31.0.exe
-a-----          9/25/2024   11:37 AM     10132516 LaZagne.exe
-a-----          9/18/2024   11:05 PM     136097792 splunkforwarder-9.3.1-0b8d769cb912-x64-release.msi
-a-----          9/18/2024   11:04 PM       4866436 Sysmon.zip
-a-----          9/18/2024   11:05 PM       253169 sysmonconfig.xml

PS C:\Users\Administrator\Downloads> .\LaZagne.exe

=====
                        The LaZagne Project
                        ! BANG BANG !
=====

[+] System masterkey decrypted for 0b1dc122-a844-43ce-b613-f85ce20b578f
[+] System masterkey decrypted for 9ad00374-01ee-4987-a60e-9a5fcf86e732

##### User: SYSTEM #####

----- Lsa_secrets passwords -----
```

4. At this point, LimaCharlie should begin capturing telemetry related to the execution of LaZagne.

## Step 2: Viewing Telemetry in LimaCharlie

After running LaZagne, we can head over to **LimaCharlie** to view the generated events.

### 1. Navigate to the Sensor:

- In LimaCharlie, go to the **Sensors List** and select your **Windows Server VM**.

### 2. View the Event Timeline:

- Navigate to the **Timeline** tab to see recent events. Since we just executed LaZagne, the telemetry should be visible here.
- Filter the events using the term **LaZagne** to quickly find the specific process creation event.

### 3. Telemetry Details:

- Click on the event for more details. Here, you'll see useful information such as the **file path, command line arguments, process ID**, and more.
- This information will form the foundation for our custom detection rule.

The screenshot shows the LimaCharlie interface with the **Timeline** tab selected. A search filter for **LaZ** is applied. The event details for **LaZagne.exe** are shown on the right, including the following information:

- Event:**
  - BASE\_ADDRESS:** 140699324055552
  - COMMAND\_LINE:** "C:\Users\Administrator\Downloads\LaZagne.exe"
  - FILE\_IS\_SIGNED:** 0
  - FILE\_PATH:** "C:\Users\Administrator\Downloads\LaZagne.exe"
  - HASH:** "467e49f1f795c1b08245ae621c59cd06df630fc19a032858a486"
  - MEMORY\_USAGE:** 1871872
  - PARENT:**
    - BASE\_ADDRESS:** 140700917039104
    - COMMAND\_LINE:** "C:\Windows\Explorer.EXE /NoUACCheck"
    - CREATION\_TIME:** 1727285675926
    - FILE\_IS\_SIGNED:** 1
    - FILE\_PATH:** "C:\Windows\Explorer.EXE"
    - HASH:** "a3c36c8481af88a925bfff1bb0283c028b531e1c6a046091bf37ce"
    - MEMORY\_USAGE:** 71712768
    - PARENT\_ATOM:** "5d1af3a90570be87b9fc5b65"

## Step 3: Creating the Detection Rule in LimaCharlie

Now that we have telemetry from LaZagne, it's time to create a **detection and response (DNR) rule** in LimaCharlie. This rule will detect the execution of LaZagne in the future and trigger a response.

### 1. Navigate to Detection & Response (DNR) Rules:

- Go to the **Automation** section in LimaCharlie.
- Click on **New Rule** to create a new detection rule.

### 2. Base the Rule on Existing Templates:

- Instead of starting from scratch, use an existing rule as a foundation.
- Search for **Credential Access** related rules, as LaZagne is a password recovery tool. Select a rule related to **process creation** and view its content.

### 3. Customizing the Rule for LaZagne:

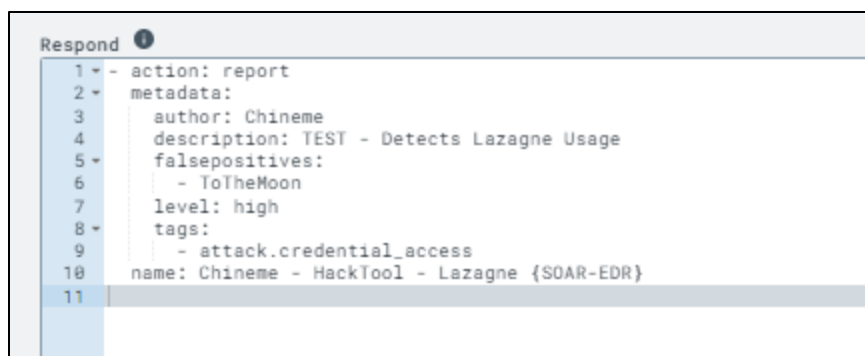
- Edit the rule to fit our use case. The key event type we're interested in is **new process creation**.
- We will match the **file path** and **command line arguments** from the telemetry we viewed earlier.
- For example, the rule can trigger if the file path ends with **LaZagne.exe** or if the **command line** contains specific arguments (like **all**).

### 4. Refining the Criteria:

- The rule should check:
  - **Process Creation Event:** The event type should be either **new process** or **existing process**.
  - **File Path:** The file path should end with LaZagne.exe (case-insensitive).
  - **Command Line:** The command line should contain **all** or similar relevant arguments from the telemetry.
  - **File Hash:** Optionally, you can match the hash of the LaZagne executable to ensure accuracy.



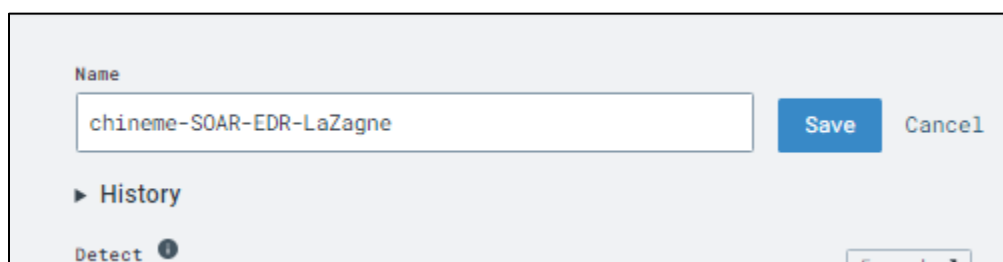
```
1 events:
2   - NEW_PROCESS
3   - EXISTING_PROCESS
4 op: and
5 rules:
6   - op: is windows
7   - op: or
8     rules:
9       - case sensitive: false
10        op: ends with
11        path: event/FILE_PATH
12        value: LaZagne.exe
13      - case sensitive: false
14        op: contains
15        path: event/COMMAND_LINE
16        value: LaZagne
17      - case sensitive: false
18        op: is
19        path: event/HASH
20        value: 3cc5ee93a9ba1fc57389705283b760c8bd61f35e9398bbfa3210e2becf6d4b05
21
```



Here is the GitHub link to the rule: [GitHub - MyDFIR/SOAR-EDR-Project](#)

## 5. Saving the Rule:

- Once customized, name the rule something relevant like "**LaZagne Detection Rule**" and save it.



## Step 4: Testing the Rule

After saving the rule, it's important to test whether it works as intended.

### 1. Testing with Past Events:

- Go back to the previously captured event for LaZagne.
- Use LimaCharlie's **Test Event** functionality by pasting the raw event data into the test field. Run the test and ensure that the rule is correctly detecting the event.

Chineme-SOAR-EDR

Search

Organizations Groups Add-ons Support

Back to Chineme-SOAR-EDR

NEW RULES New Rule

Chineme-SOAR-EDR-LaZagne

Scan History Target Event

Event

```

1 | {
2 |   "event": {
3 |     "BASE_ADDRESS": "14069932405552",
4 |     "COMMAND_LINE": "\"C:\\Users\\Administrator\\Downloads\\LaZagne.exe\"",
5 |     "FILE_IS_SIGNED": 0,
6 |     "FILE_PATH": "C:\\Users\\Administrator\\Downloads\\LaZagne.exe",
7 |     "HASH": "467e49f1795c1b08245a021c59cdf630fc1631dc095d9a032858486",
8 |     "MEMORY_USAGE": 4911104,
9 |     "PARENT": {
10 |       "BASE_ADDRESS": "140702242963456",
11 |       "COMMAND_LINE": "\"C:\\Windows\\System32\\WindowsPowerShell\\v1.0\\powershell.exe\"",
12 |       "CREATION_TIME": "1727286207929",
13 |       "FILE_IS_SIGNED": 1,
14 |       "FILE_PATH": "C:\\Windows\\System32\\WindowsPowerShell\\v1.0\\powershell.exe",
15 |       "HASH": "1e8a8803269f24876ed9f49fad10b49f77e1e92e8918fc164c3d02ef9a94",
16 |       "MEMORY_USAGE": 72577024,
17 |       "PARENT_AIDOM": "2bd8018835c5c1cf0d5c89d166f43e39",
18 |       "PARENT_PROCESS_ID": 968,
19 |       "PROCESS_ID": 6780,
20 |       "THIS_AIDOM": "ea28f62f6284cc97820131b566f43e3a",
21 |       "THREADS": 10,
22 |       "TIMESTAMP": "1727282746059",
23 |       "USER_NAME": "CHINEMECCOE-USER\\Administrator"
24 |     },
25 |     "PARENT_PROCESS_ID": 6780,
26 |     "PROCESS_ID": 7892,
27 |     "THREADS": 3,
28 |     "USER_NAME": "CHINEMECCOE-USER\\Administrator"
29 |   },
30 |   "routing": {
31 |     "arch": 2,
32 |     "sid": "",
33 |     "event_id": "a6f213e6-e211-405a-8dcd-5df59ee06001",
34 |     "event_time": "1727285922233",
35 |     "event_type": "NEW_PROCESS",
36 |     "ext_id": "63.229.166.42",
37 |     "hostname": "addc01-server.chinemecoe-user1.local",
38 |     "iid": "340920a2-3009-40d6-07f6-e86c29f0a0a0"
39 |   }
40 | }

```

Test Event

Match. 4 operations were evaluated with the following results:

- true => (is windows) {"op": "is windows"}
- true => (~ends with) {"case sensitive": false, "op": "ends with", "path": "event/FILE\_PATH", "value": "LaZagne.exe"}
- true => (or) {"op": "or", "rules": [{"case sensitive": false, "op": "ends with", "path": "event/FILE\_PATH", "value": "LaZagne.exe"}, {"case sensitive": false, "op": "contains", "path": "event/CMDLINE", "value": "LaZagne"}], {"case sensitive": false, "op": "is", "path": "event/HASH", "value": "3cc5ee93a9ba1fc57389705283b760c8bd61f35e9398b"}}
- true => (and) {"events": ["NEW\_PROCESS", "EXISTING\_PROCESS"], "op": "and", "rules": [{"op": "is windows"}, {"case sensitive": false, "op": "ends with", "path": "event/FILE\_PATH", "value": "LaZagne.exe"}, {"case sensitive": false, "op": "contains", "path": "event/CMDLINE", "value": "LaZagne"}, {"case sensitive": false, "op": "is", "path": "event/HASH", "value": "3cc5ee93a9ba1fc57389705283b760c8bd61f35e9398b"}]}

## 2. Running LaZagne Again:

- Clear the previous telemetry for a clean slate.
- Run **LaZagne.exe** again in your Windows Server VM.
- Check **LimaCharlie's detection tab** to verify that the rule triggered and generated a detection.

LimaCharlie has a new version available. [Click to Update Now](#) See [Release Notes](#)

Chineme-SOAR-EDR

Search

Organizations Groups Add-ons Support

Sensors

Query Console BETA

Artifacts

Dashboard

Detections

Automation

Extensions

Outputs

Generations Settings

Detections [View Docs]

Select Source

Jump to time

Select...

2024-09-25 19:35:08

Quick Search

+ Add Filter

Delete

You're up-to-date!

2024-09-25 18:32:49 Chineme - HackTool - LaZagne (SOAR-EDR) addc01-server.chinemecoe-user1.local {"event":{"BASE\_ADDRESS":14069932405552,"COMMAND\_LINE":"\"C:\\Users\\Administrator\\Downloads\\LaZagne.exe\"",

2024-09-25 18:32:48 Chineme - HackTool - LaZagne (SOAR-EDR) addc01-server.chinemecoe-user1.local {"event":{"BASE\_ADDRESS":14069932405552,"COMMAND\_LINE":"\"C:\\Users\\Administrator\\Downloads\\LaZagne.exe\"",

That's all! No more past detections to fetch.



## Part 4: Integrating Slack, Tines, and LimaCharlie for Automation

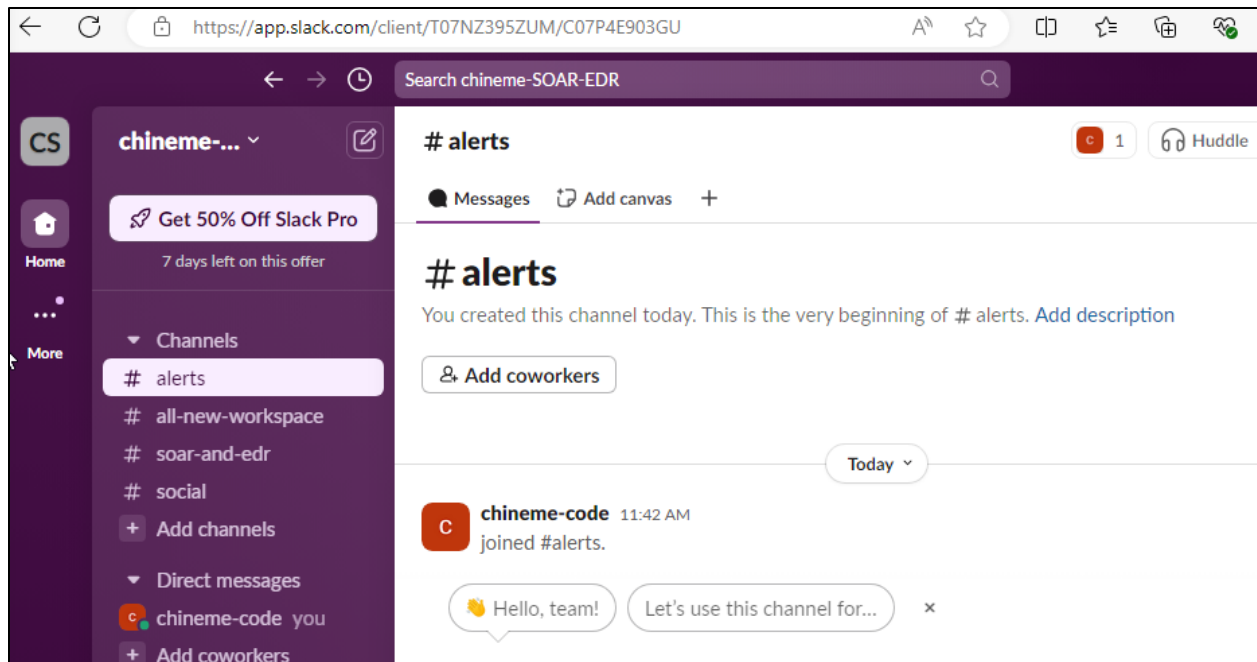
In this phase, we will:

1. Set up **Slack** to receive alerts.
2. Configure **Tines** to connect with LimaCharlie.
3. Test the connection between LimaCharlie and Tines to ensure that **SOAR** (Security Orchestration, Automation, and Response) processes are receiving the detections generated by LimaCharlie.

### Step 1: Setting up Slack

The first tool we'll configure is **Slack**, where we'll be sending our alerts from LimaCharlie via Tines.

1. **Create a Slack Workspace:**
  - Go to [Slack.com](https://slack.com) and click on the "Get Started Free" button to create an account.
  - Use a **valid email account**, as Slack will send a confirmation code to complete the signup process.
  - Name your workspace something meaningful like "**chineme-SOAR-EDR**".
2. **Create an Alerts Channel:**
  - In your new workspace, create a dedicated channel for alerts:
    - Click on **Add Channels** and select **Create a New Channel**.
    - Name the channel **alerts** and set it to **public**.
    - Skip inviting people for now.
  - This channel will receive detection alerts from LimaCharlie via Tines.

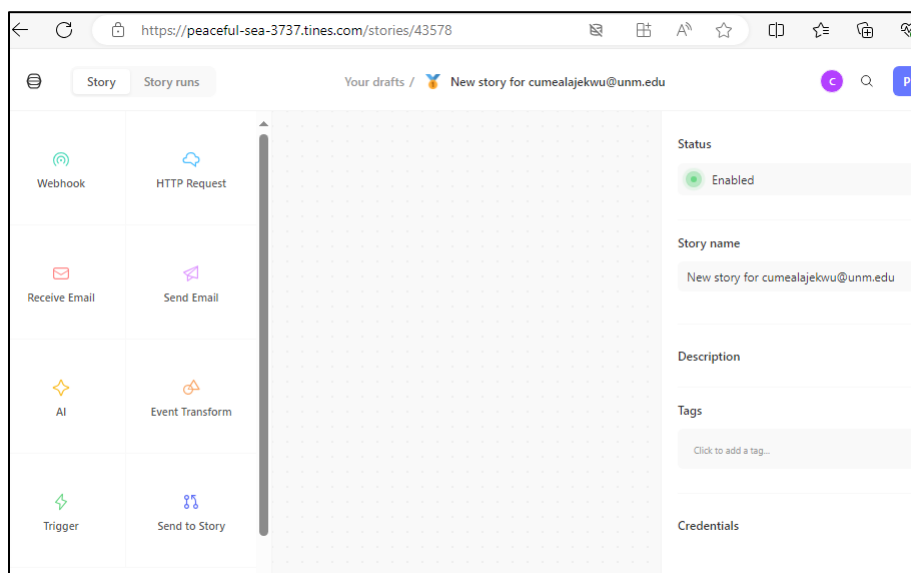


## Step 2: Setting up Tines

Next, we'll configure **Tines**, which will handle automation based on the detections reported by LimaCharlie.

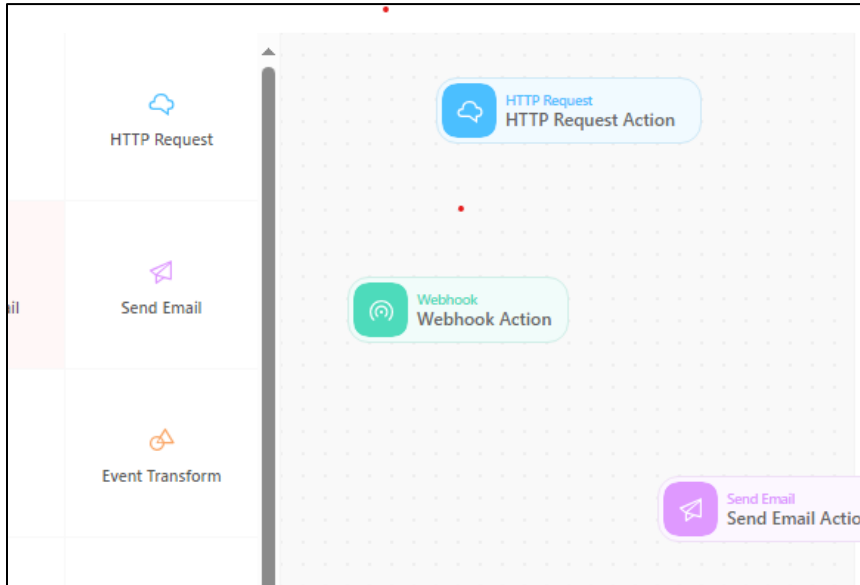
### 1. Create a Tines Account:

- Head over to [Tines.com](https://tines.com) and sign up using your email. You can also sign in with **Google** or **Microsoft** accounts.
- Once logged in, exit the introduction tour by clicking on the "X" and "End Tour."



## 2. Exploring Tines' Actions:

- On the left-hand side, you'll see different actions you can use to build your playbook (known as **stories** in Tines).
- For example, you can drag an **HTTP Request** or **Web Hook** action onto the storyboard. We'll use a **Web Hook** to receive detections from LimaCharlie.
- Templates are also available if you'd prefer starting with a pre-built example.

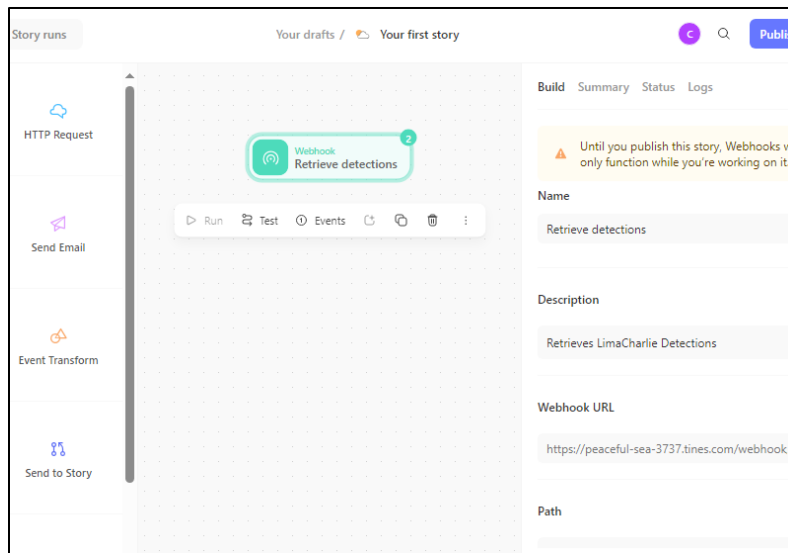


### Step 3: Connecting LimaCharlie and Tines

Now that we have both **Slack** and **Tines** set up, the next step is to establish the connection between **LimaCharlie** and **Tines**, ensuring that detection data flows between them.

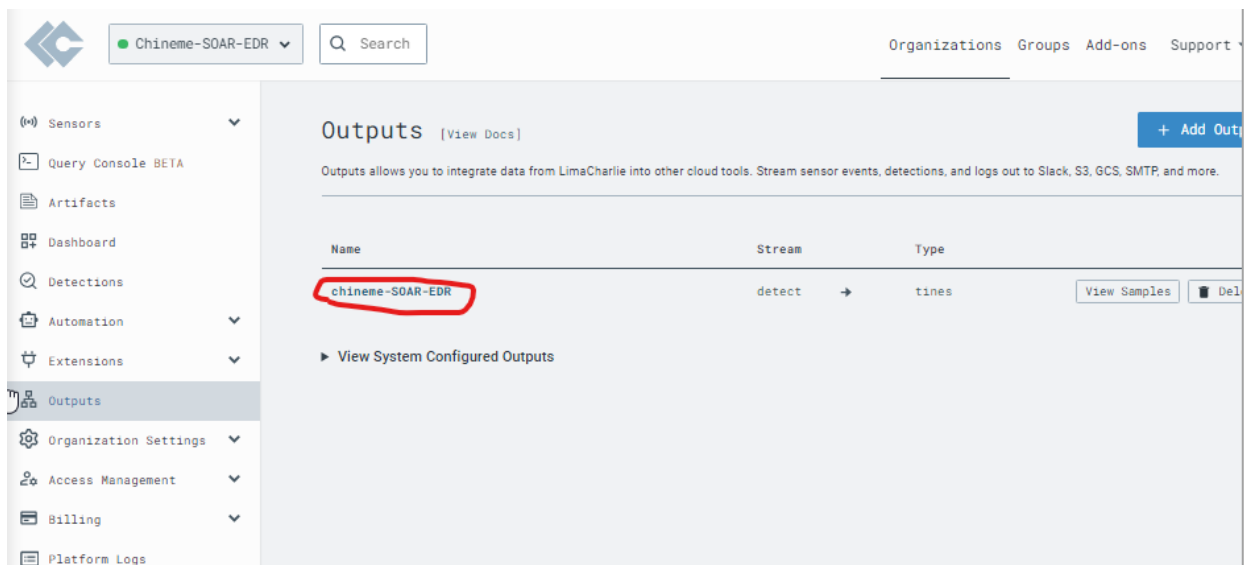
#### 1. Create a Web Hook in Tines:

- In Tines, drag a **Web Hook** onto the storyboard and name it **Retrieve Detections**.
- For the **Web Hook URL**, copy the provided link.



## 2. Configuring Outputs in LimaCharlie:

- Head back to **LimaCharlie** and navigate to your organization's **Outputs**.
- Click on **Add Output** and select **Detections** (since we want to capture all detections from our rule).
- In the output configuration:
  - Select **Tines** as the destination.
  - Paste the **Web Hook URL** from Tines into the **Destination Host** field.
  - Name the output something like **chineme-SOAR-EDR**

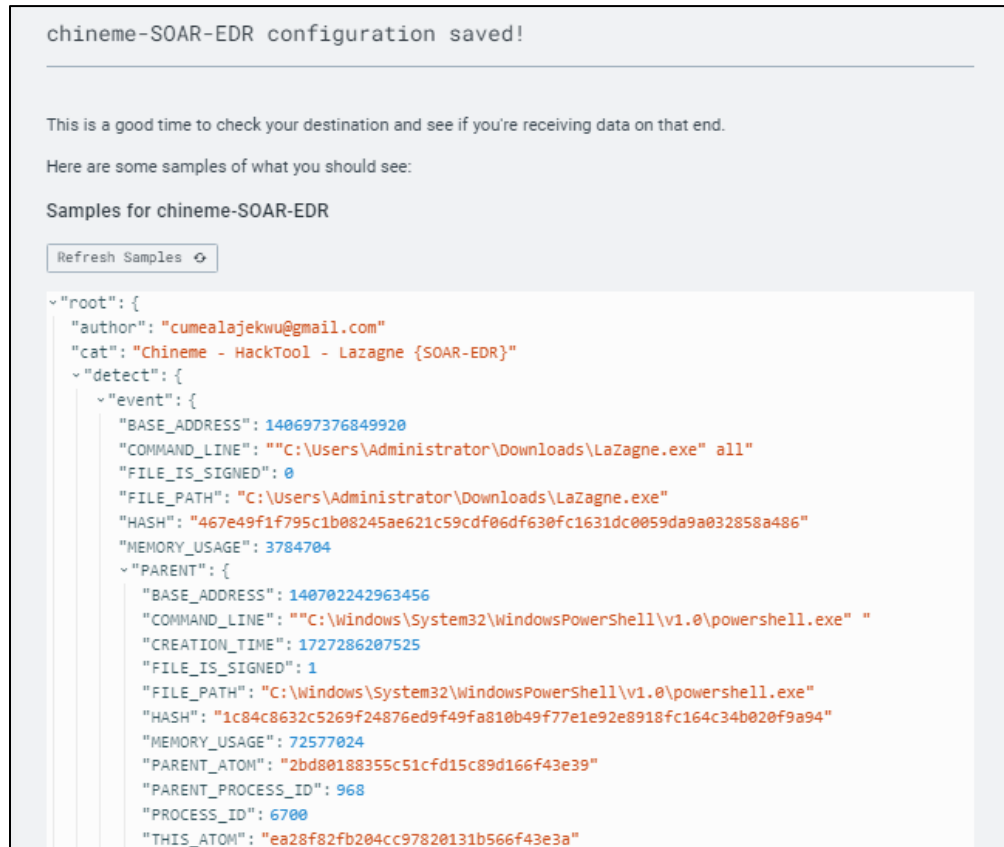


### 3. Generating a Detection Event:

- To test if the connection is working, return to your **Windows Server VM** and run **Lasagna.exe** again:

.\Lasagna.exe

- This will trigger a detection in LimaCharlie, which should be forwarded to **Tines** via the Web Hook.



The screenshot shows a web interface for 'chineme-SOAR-EDR'. At the top, it says 'chineme-SOAR-EDR configuration saved!'. Below this, it provides instructions to check the destination and shows some samples of what to see. A 'Refresh Samples' button is present. The main content is a JSON sample for a detection event. The JSON structure is as follows:

```
{
  "root": {
    "author": "cumealajekwu@gmail.com",
    "cat": "Chineme - HackTool - Lazagne {SOAR-EDR}",
    "detect": {
      "event": {
        "BASE_ADDRESS": "140697376849920",
        "COMMAND_LINE": "\"C:\\Users\\Administrator\\Downloads\\LaZagne.exe\" all",
        "FILE_IS_SIGNED": 0,
        "FILE_PATH": "C:\\Users\\Administrator\\Downloads\\LaZagne.exe",
        "HASH": "467e49f1f795c1b08245ae621c59cdf06df630fc1631dc0059da9a032858a486",
        "MEMORY_USAGE": 3784704,
        "PARENT": {
          "BASE_ADDRESS": "140702242963456",
          "COMMAND_LINE": "\"C:\\Windows\\System32\\WindowsPowerShell\\v1.0\\powershell.exe\" ",
          "CREATION_TIME": 1727286207525,
          "FILE_IS_SIGNED": 1,
          "FILE_PATH": "C:\\Windows\\System32\\WindowsPowerShell\\v1.0\\powershell.exe",
          "HASH": "1c84c8632c5269f24876ed9f49fa810b49f77e1e92e8918fc164c34b020f9a94",
          "MEMORY_USAGE": 72577024,
          "PARENT_ATOM": "2bd80188355c51cfd15c89d166f43e39",
          "PARENT_PROCESS_ID": 968,
          "PROCESS_ID": 6700,
          "THIS_ATOM": "ea28f82fb204cc97820131b566f43e3a"
        }
      }
    }
  }
}
```

### Step 4: Verifying the Integration

Now that the connection is configured, let's confirm that **Tines** is receiving detections from LimaCharlie and forwarding them to **Slack**.

#### 1. Check the Detection in Tines:

- Go back to **Tines** and check the **Retrieve Detections** Web Hook.
- You should see the detection event from **LimaCharlie**. This will contain information like the **command line**, **file path**, **hash**, and **username** associated with the Lasagna execution.

Tines - Profile 1 - Microsoft Edge

https://peaceful-sea-3737.tines.com/events-console?story=52229&event=644048730&action=673042

Your drafts / Your first story

Retrieve detections

Filter event ID or substring

Search payload: event 644048730

Re-emit

1 event selected

644048730

2024-09-25 18:51:40 UTC ~1h ago

644048729

2024-09-25 18:51:40 UTC ~1h ago

{

"retrieve\_detections": > {

"body": > {

"author": "cumealajekwu@gmail.com",

"cat": "Chineme - HackTool - Lazagne {SOAR-EDR}",

"detect": > { ... },

"detect\_id": "a7536c7e-d6a5-449b-a9db-2a0866f45bb9",

"detect\_mtd": > { ... },

"gen\_time": 1727290297657,

"link": > "https://app.limacharlie.io/orgs/71d82da1-396d-4",

"namespace": "general",

"routing": > { ... },

"source": > "71d82da1-396d-428a-a570-e9e9635d9781.34b920a2",

"source\_rule": "general.chineme-SOAR-EDR-LaZagne"

},

"headers": > { ... },

"response": > { ... }

}

## Part 5: Building the Final Playbook with LimaCharlie, Tines, and Slack Integration

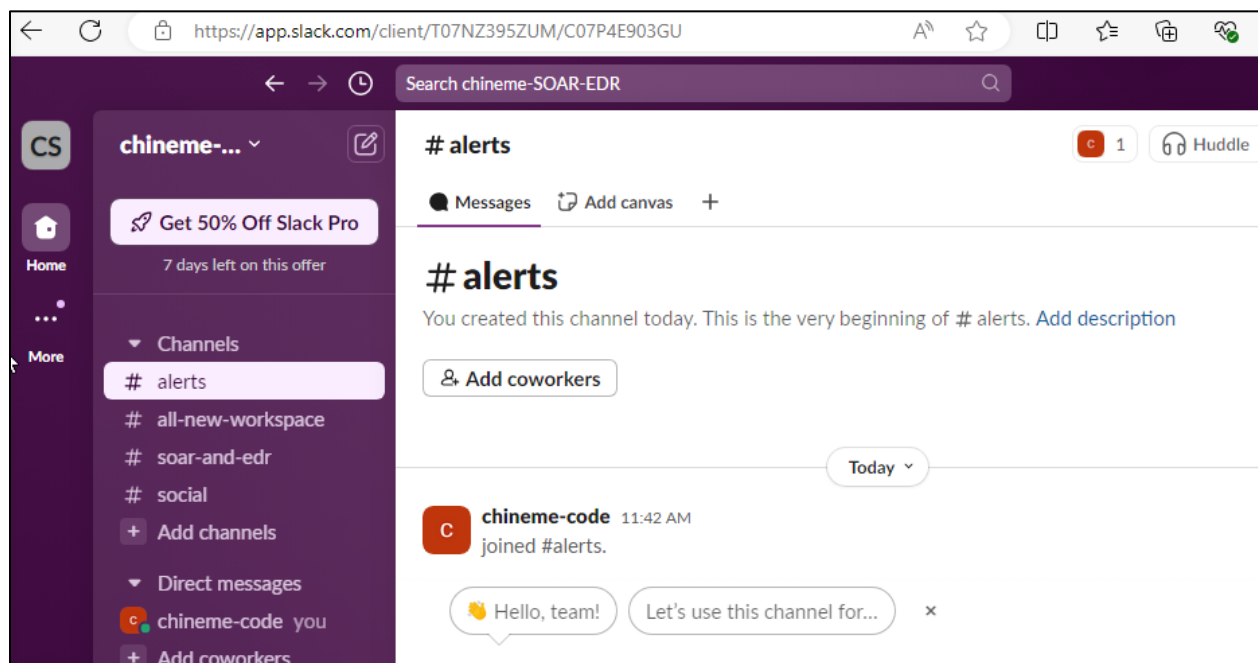
Today's objective is to build our **Playbook** (or story) that will:

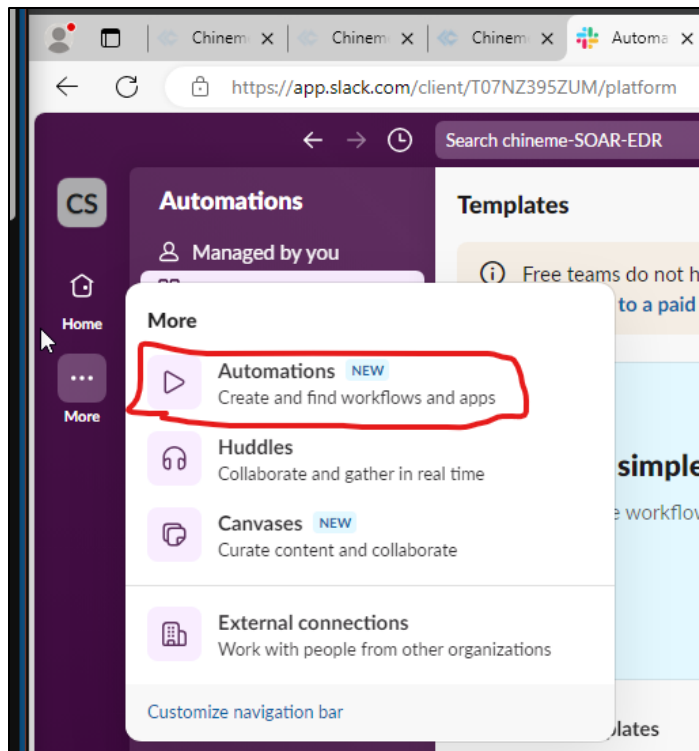
1. **Send a message to Slack** with the details of the detection.
2. **Send an email** to notify the team.
3. **Prompt the user** to decide whether to isolate the affected machine.
4. **Isolate the machine** using LimaCharlie if the user chooses to do so.
5. **Send confirmation** of the machine's isolation status to Slack.

This is the culmination of all the steps we've been working on, and by the end of this section, you'll have a fully automated detection and response Playbook in **Tines** connected to **LimaCharlie**.

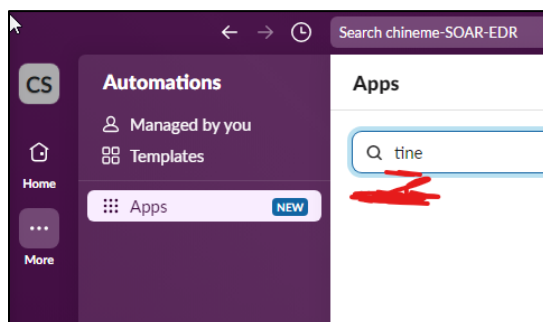
### Step 1: Connecting Slack to Tines

1. **Create Slack Workspace:**
  - Ensure you have your **Slack workspace** ready (as set up in Part 4).
  - You will also need a dedicated **alerts channel** where the messages from Tines will be sent.



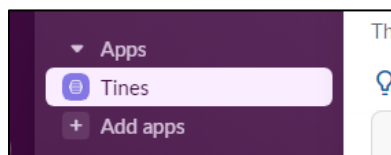


I already downloaded the tines app that's why I cant see it in my search



### Steps for installing the app:

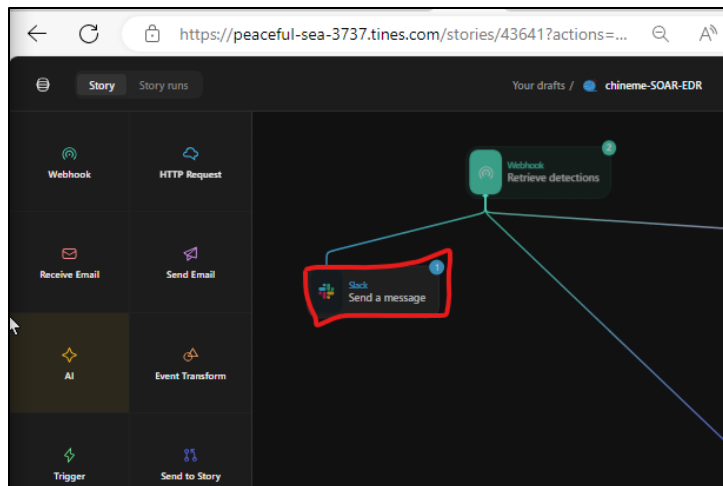
1. [Login](#) to your Tines tenant
2. Navigate to the team that will be using the API and click "Credential"
3. Click "+ New Credential" and select "Slack" and follow the prompts to connect.



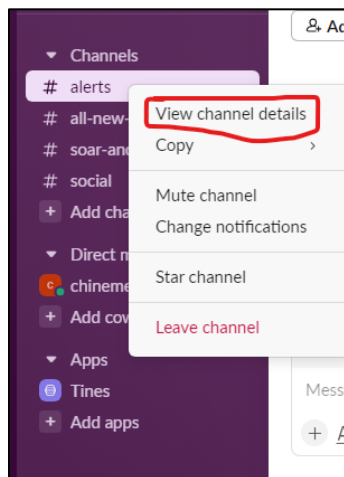
## 2. Establish the Link Between Tines and Slack:

- In **Tines**, drag the **Slack** action from the template library into your Playbook.





- Use the Slack API to send a message to your **alerts** channel. The message should contain the details of the detection (such as the detection name, time, affected computer, and IP address).
- Use the Slack **Channel ID** to specify where the message should be sent.



# alerts

☆

🔔 Enable Notifications

🗨 Huddle

AboutMembers 1TabsIntegrationsSettings

Add a topic

Description

Add a description

Edit

Created by

chineme-code on September 25, 2024

Leave channel

Files

There aren't any files to see here right now. But there could be — drag and drop any file into the message pane to add it to this conversation.

Channel ID: [REDACTED]

Slack

Send a message

Send a message

Description

Posts a message to a public channel, private channel, or direct message/IM channel.

Link to documentation: <https://api.slack.com/methods/chat.postMessage>

Required scope: chat:write

Channel / User ID

C07P4E903GU

Message

Hello, again

```
{
  "retrieve_detections": {
    "body": {
      "author": "cumealajekwu@gmail.com",
      "cat": "Chineme - HackTool - Lazagne {SOAR-EDR}",
      "detect": {
        "event": {
          "BASE_ADDRESS": 140697447366656,
          "COMMAND_LINE": "\"C:\\Users\\Administrator\\Downloads\\LaZagne.exe\" all",
          "FILE_IS_SIGNED": 0,
          "FILE_PATH": "C:\\Users\\Administrator\\Downloads\\LaZagne.exe",
          "HASH": "467e49f1f795c1b08245ae621c59cdf06df630fc1631dc0059da9a032858a486",
          "MEMORY_USAGE": 22781952,
          "PARENT": "> { ... }",
          "PARENT_PROCESS_ID": 2332,
          "PROCESS_ID": 7460,
          "THREADS": 4,
          "USER_NAME": "CHINEMECOE-USER\\Administrator"
        },
        "routing": {
          "arch": 2,
          "did": "",
          "event_id": "764bd439-6079-4601-a6d9-53ac736b1da6",
          "event_time": 1727320732560,
          "event_type": "NEW_PROCESS",
          "ext_ip": "10.10.10.10",
          "hostname": "addc01-server.chinemecoe-user1.local",
          "iid": "34b920a2-3bb9-4bdd-87f0-e96429fbaa6a",
          "int_ip": "10.10.10.10",
          "moduleid": 2,

```

Copy and paste on the notepad!

```
*Untitled - Notepad
File Edit Format View Help
Title: <<retrieve_detections.body.cat>>
Time:<<retrieve_detections.body.detect.routing.event_time>>
Computer: <<retrieve_detections.body.detect.routing.hostname>>
Source IP: <<retrieve_detections.body.detect.routing.int_ip>>
Username: <<retrieve_detections.body.detect.event.USER_NAME>>
File Path: <<retrieve_detections.body.detect.event.FILE_PATH>>
Command Line: <<retrieve_detections.body.detect.event.COMMAND_LINE>>
Sensor ID: <<retrieve_detections.body.detect.routing.sid>>
Detection Link: <<retrieve_detections.body.link>>
```

Paste in slack(tines)

**Build** Status Logs

Slack  
Send a message

Send a message

Description

Posts a message to a public channel, private channel, or direct message/IM channel.

Link to documentation:  
<https://api.slack.com/methods/chat.postMessage>

Channel / User ID Required

C07P4E9B3GU

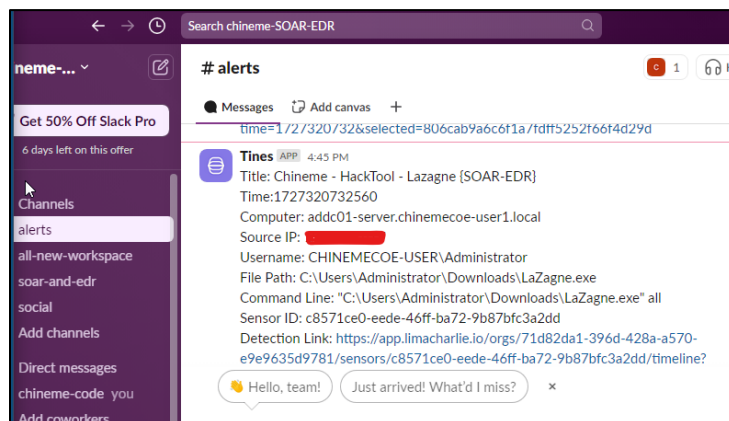
Message Required

```

Title: {} retrieve_detections.body.cat
Time: {} retrieve_detections.body.detect.ra
Computer: {} retrieve_detections.body.detect.ra
Source IP: {} retrieve_detections.body.detect.ra
Username: {} retrieve_detections.body.detect.ev
File Path: {} retrieve_detections.body.detect.ev
Command Line: {} retrieve_detections.body.detect.ev
Sensor ID: {}

```

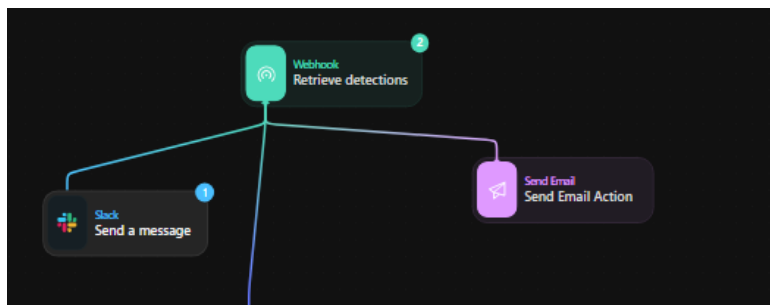
Run test. Here is the result of the test



## Step 2: Configuring Email Notifications in Tines

### 1. Set up the Email Notification:

- Add an **email notification** action in Tines to send the detection details via email.
- Use your organization's email system or a disposable email provider (like **Squarex**) to test.
- Ensure the email includes relevant information such as the **detection name**, **computer name**, **IP address**, and a **link to the detection** in LimaCharlie.



Build Status Logs

List

xenodochialshirley3@fearlessmails.com

+ Add item

Reply to

xenodochialshirley3@fearlessmails.com

Sender name

Alerts

Subject

tests

Body

A real email body could go here

Use the same step as step 3. Just copy and paste the message you want to receive in your email.

Test: Send Email Action

Events Log Memory Metadata

Search this payload...

```
[
  {
    "send_email_action": {
      "status": "success",
      "mail": {
        "from": "Alerts <mail@tines.io>",
        "to": "xenodochialshirley3@fearlessmails.com",
        "on": "26/09/2024 4:58:08 PM",
        "title": "Chineme - HackTool - Lazagne [SOAR-EDR] Time:1727320732560 Computer: addc01-server.chinemecoe-user1.local Source IP: 192.168.10.7 Username: CHINEMECOE-USER\\Administrator File Path: C:\\Users\\Administrator\\Downloads\\LaZagne.exe Command Line: \"C:\\Users\\Administrator\\Downloads\\LaZagne.exe\" all Sensor ID: c8571ce0-eede-46ff-ba72-9b87bfc3a2dd Detection Link: https://applimacharlie.io/orgs/71d82da1-396d-428a-a570-e9e9635d9781/sensors/c8571ce0-eede-46ff-ba72-9b87bfc3a2dd/timeline?time=1727320732&selected=806cab9a6c6f1a7fdff5252f66f4d29d",
        "body": "A real email body could go here"
      }
    }
  }
]
```

SquareX Inbox Notifications

Go back

tests

From: Alerts <mail@tines.io>  
To: xenodochialshirley3@fearlessmails.com  
On: 26/09/2024 4:58:08 PM

Title: Chineme - HackTool - Lazagne [SOAR-EDR] Time:1727320732560 Computer: addc01-server.chinemecoe-user1.local Source IP: 192.168.10.7 Username: CHINEMECOE-USER\\Administrator File Path: C:\\Users\\Administrator\\Downloads\\LaZagne.exe Command Line: \"C:\\Users\\Administrator\\Downloads\\LaZagne.exe\" all Sensor ID: c8571ce0-eede-46ff-ba72-9b87bfc3a2dd Detection Link: https://applimacharlie.io/orgs/71d82da1-396d-428a-a570-e9e9635d9781/sensors/c8571ce0-eede-46ff-ba72-9b87bfc3a2dd/timeline?time=1727320732&selected=806cab9a6c6f1a7fdff5252f66f4d29d

### Step 3: Adding a User Prompt for Isolation Decision

#### 1. Create a User Prompt Page:

- Now, create a **User Prompt Page** in Tines that asks the user whether they want to isolate the machine.
- The page should display the detection details for the user to review before making the decision.

#### 2. Yes/No Decision:

- Include **Yes** and **No** buttons on the page.
- If the user selects **Yes**, the Playbook should continue to isolate the machine using **LimaCharlie**. If the user selects **No**, a message should be sent to Slack indicating that the machine was not isolated.

chineme-SOAR-EDR / User Prompt

Style

Rich text

Button

Map

Table

Long text

chineme-SOAR-EDR-Project

Title: `{{ retrieve_detections.body.cat }}`

Time: `{{ retrieve_detections.body.detect.routing.event_`

Computer: `{{ retrieve_detections.body.detect.routing.hostn_`

Source IP: `{{ retrieve_detections.body.detect.routing.int_ip`

Username: `{{ retrieve_detections.body.detect.event.USER_NA_`

File Path: `{{ retrieve_detections.body.detect.event.FILE_PA_`

Command Line: `{{ retrieve_detections.body.detect.event.COMMAND_`

Sensor ID: `{{ retrieve_detections.body.detect.routing.sid`

Detection Link: `{{ retrieve_detections.body.link`

Isolate

Yes No

Submit

**chineme-SOAR-EDR-Project**

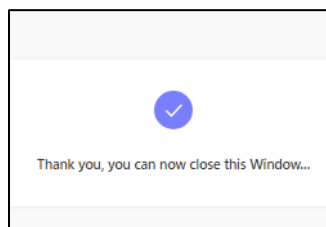
Title: Chineme - HackTool - Lazagne [SOAR-EDR]  
Time: 1727320732560  
Computer: addc01-server.chinemecoe-user1.local  
Source IP: 192.168.10.7  
Username: CHINEMECOE-USER\Administrator  
File Path: C:\Users\Administrator\Downloads\LaZagne.exe  
Command Line:  
"C:\Users\Administrator\Downloads\LaZagne.exe" all  
Sensor ID: c8571ce0-ee0e-46ff-ba72-9b87bfc3a2dd  
Detection Link: [https://app.limacharlie.io/\\_9d](https://app.limacharlie.io/_9d)

Isolate

Yes

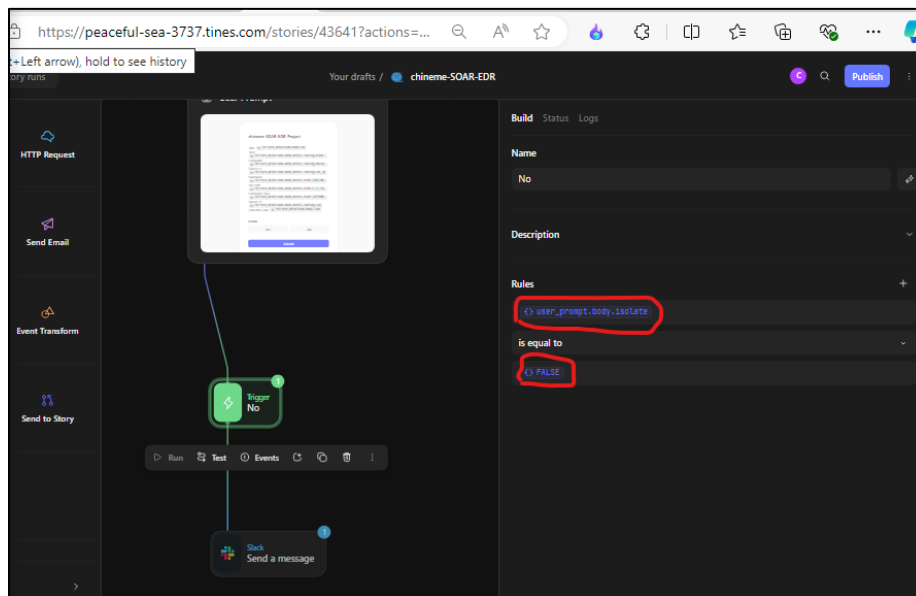
No

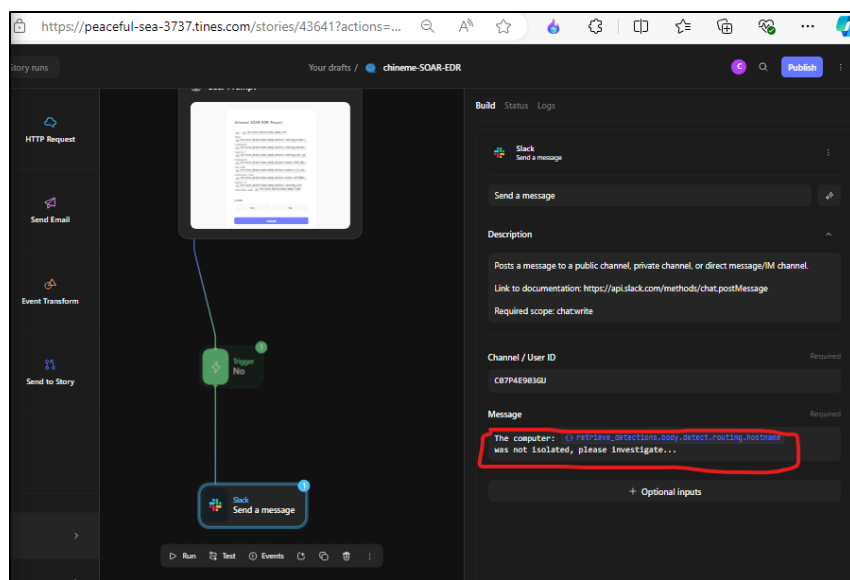
Submit



Configuring the workflow so that when you say no, it shows you a message and then sends you a slack message

This can be done with this configuration

The screenshot shows the Logic Builder interface in a web browser. The main workspace displays a workflow: an "HTTP Request" node is connected to a "Trigger No" node (a green square with a lightning bolt icon and the text "Trigger No"). This node is then connected to a "Slack Send a message" node (a blue square with the Slack logo and the text "Slack Send a message"). On the right side, the "Rules" panel is open, showing a rule configuration. The rule is named "No". The "Rules" section contains a single rule: a JavaScript expression `{ user_prompt.body.isolate }` is followed by the text "is equal to" and the value `{ FALSE }`. Both the JavaScript expression and the value `{ FALSE }` are highlighted with red rectangular boxes. The left sidebar contains various action categories like "HTTP Request", "Send Email", "Event Transform", and "Send to Story". The top of the interface shows the URL "https://peaceful-sea-3737.times.com/stories/43641?actions=..." and the name of the workflow "chineme-SOAR-EDR".

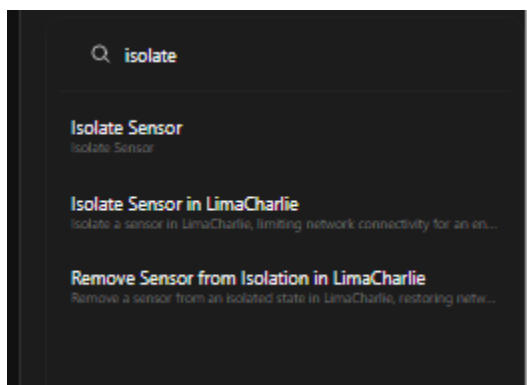


## Step 4: Isolating the Machine in LimaCharlie

### 1. Automate Machine Isolation:

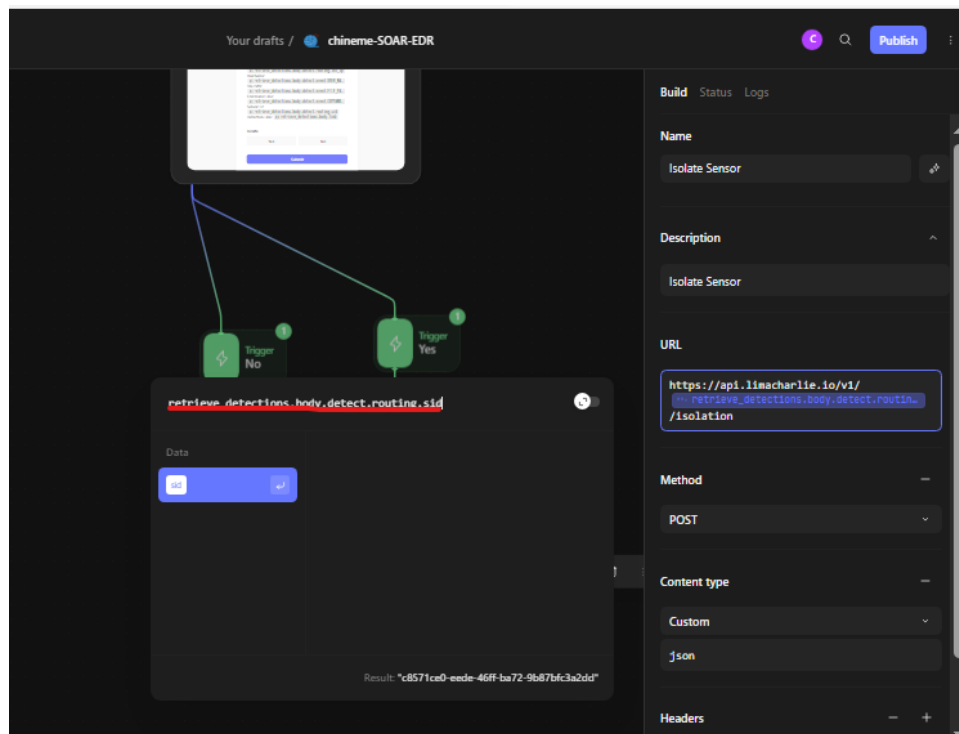
- If the user chooses to isolate the machine, configure Tines to send an **isolation request** to LimaCharlie.

If you are in doubt what to put in the use the search bar and type in “isolate”



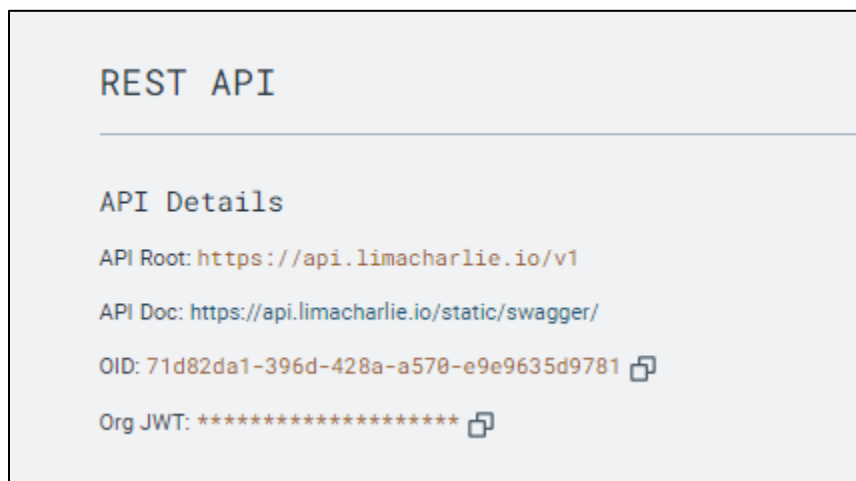
- Use the **Sensor ID** (which you’ll get from the detection event) to identify the machine to be isolated.





- Use the **LimaCharlie API** to issue the isolation command.

Under access management in limacharlie you'd click on REST API and copy Org JWT because that is what limacharlie documents suggested to be safer.



We would create a credential to add to tines so the limaCharlie can link and isolate the machine. In the Value box, that's where to post the API

New Text credential

Name

Description

Describe your credential...

Value

☐ Preserve newline characters

Additional Configurations

URLs and Domains

Specify which URLs, domains and/or server hosts are allowed to use restricted credentials in HTTP Request Actions, Receive Email Actions (in IMAP mode) and

Save

## 2. Verify Isolation:

- After issuing the isolation command, verify that the machine has been successfully isolated by checking the **LimaCharlie** dashboard.

Before we Isolated

addc01-server.chinemecoe-user1.local

Sensor Details

Hostname

addc01-server.chinemecoe-user1.local

Platform

Windows x86 64 bit

Network Access

Allowed

Isolate From Network

Seal Status

Not Sealed

Last Time Alive

2024-09-27 01:56:48

External IP

63.229.160.42

Sensor ID

c8571ce0-eede-46ff-ba72-9b87bfc3a2dd

Installer ID

34b920a2-3bb9-4bdd-87f0-e96429fbaa6a

Internal IP

192.168.10.7

Mac Address

08-00-27-78-8C-C6

Organization ID

71d82da1-396d-428a-a570-e9e9635d9781

Device ID

N/A

Tags

windows 10pro

Update Tags

addc01-server.chinemecoe-user1.local

Sensor Details

Hostname

addc01-server.chinemecoe-user1.local

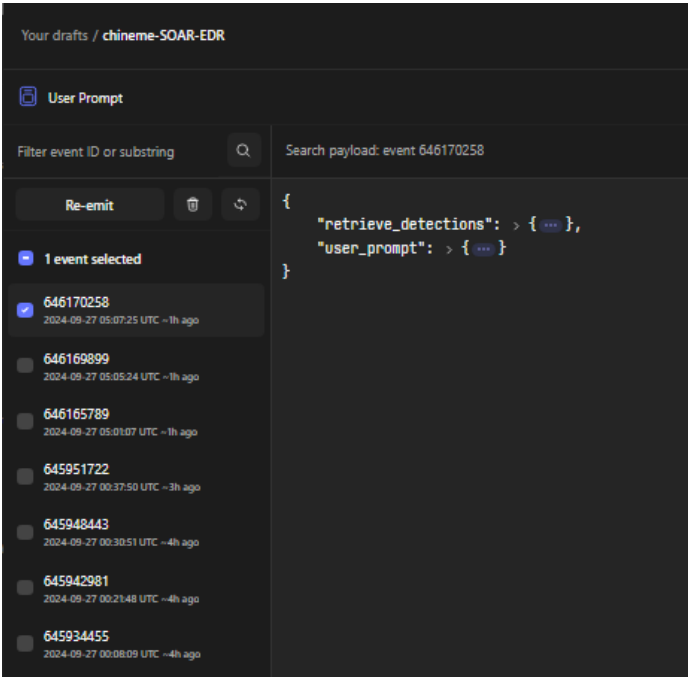
Network Access

Isolated

Rejoin Network

Seal Status

N/B: To start another test click on re-emit in the events tag of user prompt. The ame thing goes for webhook as well. If you want to run another test.

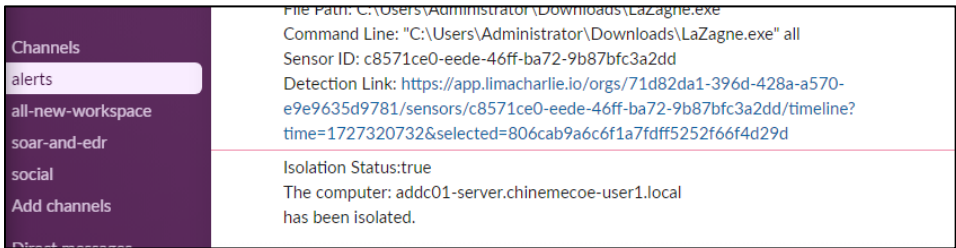


Step 5: Sending Confirmation to Slack

- 1. Confirmation Message:
  - Once the machine has been isolated, send a confirmation message to the Slack channel. This message should include the **isolation status** and the **computer name**.
- 2. Customize the Message:
  - Ensure the message is clear and formatted, for example:

The computer [Computer Name] has been isolated.

Isolation Status: Success



Step 6: Testing the Entire Playbook

- 1. Run the Playbook:

- Generate a **Lasagna.exe** detection on your Windows Server VM.
- The detection should trigger the entire Playbook, sending a Slack message, an email, and a user prompt to isolate the machine.

## 2. Check for Errors:

- Test all branches of the Playbook:
  - If the user chooses **No**, ensure the correct message is sent to Slack.
  - If the user chooses **Yes**, verify the machine is isolated and a confirmation message is sent.