

Exercise 2: Configuring Detection RulesLab 3: Detection Capabilities

Exercise 2: Configuring Detection Rules

In this exercise, you will work with FortiAnalyzer custom handlers to detect and trigger events for specific aspects of the adversary Group ABC behaviors.

Configure Custom Handlers

You will configure a data selector and some custom event handlers on FortiAnalyzer. These custom event handlers cover the following aspects of Group ABC behaviors:

- Reconnaissance using the **Gather Victim Identity Information** subtechnique
- Initial access using the **Spearphishing Attachment** subtechnique

To configure the data selector

1. On the bastion host, in Chrome, log in to the FAZ-SiteB GUI (10.200.4.238) with the following credentials:
 - Username: admin
 - Password: Fortinet1!
2. Click **Incidents & Events > Handlers**.
3. On the **Data Selectors** tab, click **Create New**.
4. In the **Add New Data Selector** window, configure the following settings:

Field	Value
Name	SOC SMTP Enumeration Data Selector
Devices	All Devices
Subnets	All Subnets
Filters	Any of the following conditions

Add New Data Selector

Name*

SOC SMTP Enumeration Data Selector

Devices

All DevicesSpecifyLocal Device

Subnets

All SubnetsSpecify

Filters

Any of the following conditions

+

5. Click **+** to add a new filter.
6. In the **Add New Filter** window, configure the following settings:

Field	Value
Name	SOC SMTP Enumeration filter
Log Device Type	FortiMail
Log Type	Anti-Spam Log (spam)
Logs match	Any of the following conditions

7. Click **x** to remove the default **Logs match** conditions.

Your configuration should match the following example:

Add New Filter

Name

SOC SMTP Enumeration filter

Log Device Type

FortiMail

Log Type

Anti-Spam Log (spam)

Logs match

All

Any of the following conditions

Log Field	Match Criteria	Value	Action
+			

Generic Text Filter

0/1023

8. Click **OK**.
9. Click **OK**.

To configure the notification profile

1. Continuing on the FAZ-SiteB GUI, click the **Notification Profile** tab.
2. Click **Create New**.
3. Configure the following settings:

Field	Value
Name	SOC SMTP Enumeration Alert
Send Alert Email	Enabled
To	admin@acmecorp.net
From	admin@acmecorp.net
Subject	Adversaries are scanning for email accounts
Email Server	Mail Server: 10.200.200.100

Add New Notification Profile

Name

SOC SMTP Enumeration Alert

Send Alert through Fabric Connectors

Send Alert Email

To

admin@acmecorp.net

From

admin@acmecorp.net

Subject

Adversaries are scanning for email accounts|

Email Server

Mail Server: 10.200.200.100

Send SNMP(v1/v2) Trap

Send SNMP(v3) Trap

Send Alert to Syslog Server

Send Each Alert Separately

4. Click **OK**.

To configure custom event handlers to detect SMTP enumeration

1. Continuing on the FAZ-SiteB GUI, click the **Basic Handlers** tab.
2. Click **Create New**.
3. Configure the following settings:

Field	Value
Status	Enabled
Name	SOC SMTP Enumeration Data Handler
Description	Adversaries may gather email addresses that can be used during targeting
MITRE Tech ID	T1589 Gather Victim Identity Information
	T1589.002 Email Addresses
Data Selector	SOC SMTP Enumeration Data Selector

Add New Basic Event Handler ✕

Status ☒

Name *

Description

MITRE Tech ID

✕

✕

2 entries selected

Data Selector ✕ ▼

Automation Stitch ☒

4. In the **Rules** section, click **Add New Rule**.

5. Click **x** to remove the default values in the **Log Field**, **Match Criteria**, **Value**, and **Action** fields.

Log Filters

Log Field	Match Criteria	Value	Action
<input type="text" value="Level (pri)"/>	<input type="text" value="Equal To"/>	<input type="text" value="Emergency"/>	✕ +

6. In the **Add New Rule** window, configure the following settings:

Field	Value
Status	Enabled
Name	SOC Antispam Rule 1
Event Severity	High
Log Device Type	FortiMail
Log Type	Anti-Spam Log (spam)
Log Field	Device Name (devname) From (from) Device ID (device_id)
Log Filters	Any One of the Filters
Log Filter by Text	type==spam
Trigger an event when	A group contains 10 or more log occurrences

Choose Your Logs

Log Device Type	FortiMail	▼
Log Type	Anti-Spam Log (spam)	▼

Log Field Device Name (devname) From (from) Device ID (device_id)

Refine Your Logs

The screenshot shows the "Log Filters" interface. At the top, there are two tabs: "All Filters" and "Any One of the Filters". Below the tabs is a table with columns: "Log Field", "Match Criteria", "Value", and "Action". A red box highlights the first row of the table, which contains the filter rule: "Log Filter by Text" (with an information icon), "type==spam", and an empty "Value" and "Action" column.

Define Event Conditions

Trigger an event when:

- ☒ A group contains or more log occurrences
- ☐ Within a group, the log field has or more unique values
- ☐ The sum of is greater than or equal to

All logs were generated within minutes

7. Click **Advanced Settings**.
8. Configure the following settings:

Field	Value
Allow FortiAnalyzer to choose	Clear the checkbox.
Event Status	Unhandled

Advanced Settings ▾

Event Type Override

Event Message ⓘ

Event Status ☐ Allow FortiAnalyzer to choose

Tags

Indicators	Log Field	Indicator Type	Count	Action
+				

Additional Info ☒ Use system default ☐ Use custom message ⓘ

9. Click **OK**.

10. In the **Notifications** field, select **SOC SMTP Enumeration Alert**.

Add New Basic Event Handler

Status

Name *

SOC SMTP Enumeration Data Handler

Description

Adversaries may gather email addresses that can be used during targeting

MITRE Tech ID

T1589 Gather Victim Identity Information

T1589.002 Email Addresses

2 entries selected

Data Selector

SOC SMTP Enumeration Data Selector

Automation Stitch

Rules

SOC Antispam Rule 1

Add New Rule

Handler Settings

Notifications

SOC SMTP Enumeration Alert

11. Click **OK**.

To configure a notification profile for a spearphishing attack

- Continuing on the FAZ-SiteB GUI, click the **Notification Profile** tab.
- Click **Create New**.
- Configure the following settings:

Field	Value
Name	Spearphishing Attack Alert
Send Alert	Enabled
Email	
To	admin@acmecorp.net
From	admin@acmecorp.net
Subject	Spearphishing attack might be in progress
Email Server	Mail Server: 10.200.200.100

Add New Notification Profile

Name*

Spearphishing Attack Alert

Send Alert through Fabric Connectors

☐

Send Alert Email

☒

To

admin@acmecorp.net

From

admin@acmecorp.net

Subject

Spearphishing attack might be in progress

Email Server

Mail Server: 10.200.200.100

Send SNMP(v1/v2) Trap

☐

Send SNMP(v3) Trap

☐

Send Alert to Syslog Server

☐

Send Each Alert Separately

☐

4. Click **OK**.

To configure custom event handlers to detect a spearphishing attachment

1. Continuing on the FAZ-SiteB GUI, click **Basic Handlers**.
2. Click **Create New**.
3. In the **Add New Basic Event Handler** window, configure the following settings:

Field	Value
Status	Enabled
Name	Spearphishing Handler
Description	Handler for detecting spearphishing attachments
MITRE Tech ID	T1566.001 Spearphishing Attachment
	T1204.002 Malicious File

Add New Basic Event Handler

Status

☒

Name*

Spearphishing Handler

Description

Handler for detecting spearphishing attachments

MITRE Tech ID

T1566.001 Spearphishing Attachment

T1204.002 Malicious File

2 entries selected

Data Selector

Click to select

Automation Stitch

☐

4. Click **Add New Rule**.
5. In the **Add New Rule** window, configure the following settings:

Field	Value
Status	Enabled
Name	Spearphishing Rule 1
Event Severity	Critical

Field**Value**

Log Device Type

FortiSandbox

Log Type

Antivirus Log (malware)

Log Field

Malware Name (mname) | Source Endpoint (endpoint) | File Name (fname)

Log Filters

Any One of the Filters

Click **x** to remove the default values in the **Log Field**, **Match Criteria**, **Value**, and **Action** fields.

Trigger an event when

A group contains 1 or more log occurrences

All logs were generated within

10 minutes

Add New Rule

Status

NameSpearphishing Rule 1

Event SeverityCritical

Choose Your Logs

Start by selecting the device and log type that you want to monitor for events.

Log Device TypeFortiSandbox

Log TypeAntivirus Log (malware)

The system will categorize logs into smaller groups based on the chosen log fields.

Log Field ⓘMalware Name (mname)Source Endpoint (endpoint)File Name (fname)

Refine Your Logs

Once logs are grouped, you can refine the data within each group by applying filter with other log fields. Logs that match the filters will be retained within each group.

Log Filters

All FiltersAny One of the Filters

Log Field	Match Criteria	Value	Action
Click to select	Equal To	0	

Log Filter by Text ⓘ

Define Event Conditions

Once you've organized and filtered the logs, set up criteria that enable the system to automatically initiate events when log records reoccur within each group.

Trigger an event when:

☒ A group contains 1 or more log occurrences

☐ Within a group, the log field Click to select has 1 or more unique values

☐ The sum of Click to select is greater than or equal to 1

☐ All logs were generated within 10 minutes

6. Click **Advanced Settings** to view more settings.

7. In the **Event Message** field, type FortiSandbox Detected Malware from \$groupby2.

8. Clear the **Allow FortiAnalyzer to choose** checkbox.

9. In the **Event Status** field, select **Unhandled**.

10. In the **Additional Info** field, select **Use custom message**, and then in the text box, type Malware:\$(mname) with severity:\$(risk) found in file:\$(fname), Checksum\$(md5) from \$(groupby2).



Event Type Override	Specify an event type, or leave blank to use default value			
Event Message ⓘ	FortiSandbox Detected Malware from \$groupby2			
Event Status	Unhandled ▾			
	<input type="checkbox"/> Allow FortiAnalyzer to choose			
Tags	Press enter to add tags			
Indicators	Log Field	Indicator Type	Count	Action
Additional Info	<input type="radio"/> Use system default			
	<input checked="" type="radio"/> Use custom message ⓘ			
	Malware:\$(mname) with severity:\$(risk) found in file:\$(fname), Checksum\$(md5) from \$(groupby2)			
<div>OK Cancel</div>				

11. Click **OK**.
12. In the **Notifications** field, select **Spearphishing Attack Alert**.

Add New Basic Event Handler ✕

Status	<input checked="" type="checkbox"/>
Name *	Spearphishing Handler
Description	Handler for detecting spearphishing attachments
	47/1024
MITRE Tech ID	<div><input type="text"/></div> <div>T1566.001 Spearphishing Attachment ✕ T1204.002 Malicious File ✕ 2 entries selected</div>
Data Selector	Click to select ▾
Automation Stitch	<input type="checkbox"/>

Rules

☒   Spearphishing Rule 1 >

Add New Rule

Handler Settings

Notifications

Spearphishing Attack Alert ✕ ▾

13. Click **OK**.



Due to time constraints, there are additional custom event handlers, which will be used in this lab guide, that have been preconfigured for you.

The goal of this lab is for you to understand the concepts of configuring different elements of

event handlers using the examples above.

LAB-3 > Configuring Detection Rules

Outline

preview

-