Lab Exercises

Lab typographical conventions:

[sourcetype=db_audit] OR [cs_mime_type] indicates either a source type or the name of a field.

NOTE: Lab work will be done on your personal computer or virtual machine, no lab environment is provided. We suggest you **DO NOT** do the lab work on your production environment.

The lab instructions refer to these source types by the types of data they represent:

Type	Sourcetype	Fields of interest
Web Application	access_combined_wcookie	action, bytes, categoryId, clientip, itemId, JSESSIONID, productId, referer, referer_domain, status, useragent, file
Database	db_audit	Command, Duration, Type
Web server	linux_secure	COMMAND, PWD, pid, process

Lab Module 13 – Creating Alerts

WARNING: This lab will not work with a free license. Please only do this lab if your trial license has not converted to a free license.

NOTE: This lab document has two sections. The first section includes the instructions without answers. The second section includes instructions with the expected search string (answer) in red. This course will use internal Splunk data and require an Admin account.

Description

In this lab exercise, you will create and trigger an alert that will display in the Splunk interface.

Scenario: For security reasons, you need to monitor failed login attempts on your Splunk search head. You are only interested in failed logins from the admin account. You want to be notified when there is more than one failed login attempt within one minute.

Task 1: Change user account and run a sample search.

1. Log out of Splunk Enterprise using the **uname > Logout** menu. Enter
2. admin for user name and the password of WrongPassword.
3. Now, enter admin for user name and the password you selected in Module 3.
4. Navigate to the Search view. (If you are in the **Home** app, click **Search & Reporting** from the column on the left side of the screen. You can also access the Search view by clicking the **Search** menu option on the green bar at the top of the screen.)

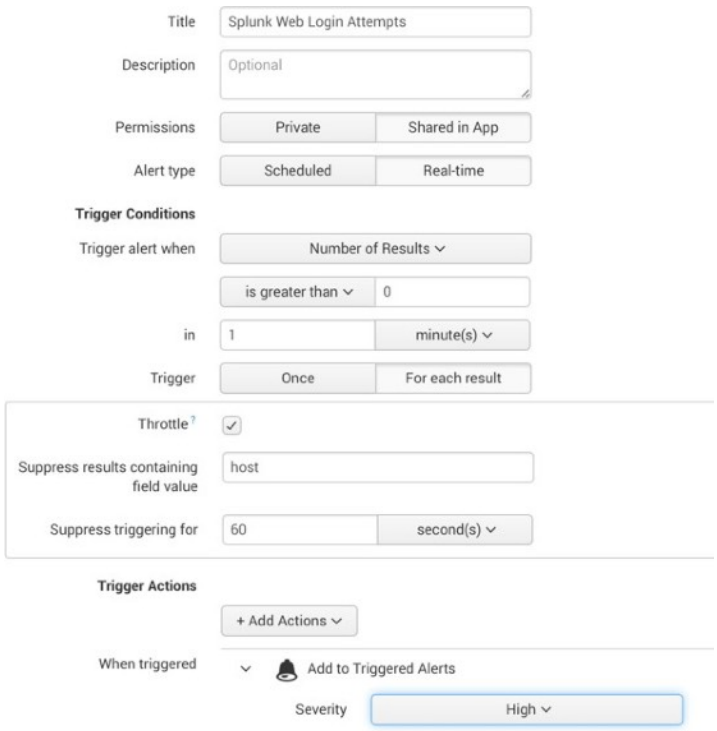
5. Search the `_audit` index for events where the `action` of "`login attempt`" returned a "`failed`" `info` value for the `username` of `admin` over the **Last 15 Minutes**.

Example Results:

i	Time	Event
>	5/4/17 7:47:42.298 PM	Audit:[timestamp=05-04-2017 19:47:42.298, user=admin, action=login attempt, info=failed, src=127.0.0.1][n/a] host = cbreshears-mbp15r.sv.splunk.com source = audittrail sourcetype = audittrail

Task 2: Create an alert.

6. From the **Save As** menu, select **Alert.**
7. Title the alert: `Splunk Web Login Attempts`
8. For **Permissions**, select **Shared in App**.
9. For **Alert type**, select **Real-time**.
10. For **Trigger alert when**, select **Number of Results**.
11. Set the number of results to: **is greater than** `0`**.**
12. The **in** field should be set to `1` **minute**.
13. For **Trigger**, select **For each result**.
14. Check the **Throttle** checkbox.
15. For **Suppress results containing field value**, type: `host`
16. Make sure **Suppress triggering** for is set to `60` seconds.
17. Click **Add Actions** and select **Add to Triggered Alerts**. Set the **Severity** to **High**.
18. *Example:*



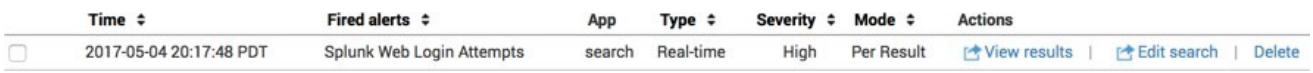
19. Click **Save** and Click **View Alert.**

Task 3: Test alert.

20. Log out of Splunk Enterprise using the **Administrator > Logout** menu.

21. Enter `admin` for user name and the password of `WrongPassword` three times in a row. Now,
22. enter `admin` for user name and the correct password.
23. From the Splunk bar, click **Activity** > **Triggered Alerts**.
24. Make sure **Search & Reporting** is selected for **App.**

Example:



25. Click the **View results** link on a triggered alert to see the event(s) that caused the alert.

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Database	`db_audit`	`Command, Duration, Type`
Web server	`linux_secure`	`COMMAND, PWD, pid, process`

Lab Module 13 – Creating Alerts with Solutions

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3. Navigate to the Search view. (If you are in the **Home** app, click **Search & Reporting** from the column on the left side of the screen. You can also access the Search view by clicking the **Search** menu option on the green bar at the top of the screen.)

5. Search the `_audit` index for events where the `action` of "`login attempt`" returned a "`failed`" `info` value for the `username` of `admin` over the **Last 15 Minutes**.

   (index=_audit action="login attempt" info=failed user=admin)

Example Results:

i	Time	Event
>	5/4/17 7:47:42.298 PM	Audit:[timestamp=05-04-2017 19:47:42.298, user=admin, action=login attempt, info=failed, src=127.0.0.1][n/a] host = cbreshears-mbp15r.sv.splunk.com source = audittrail sourcetype = audittrail

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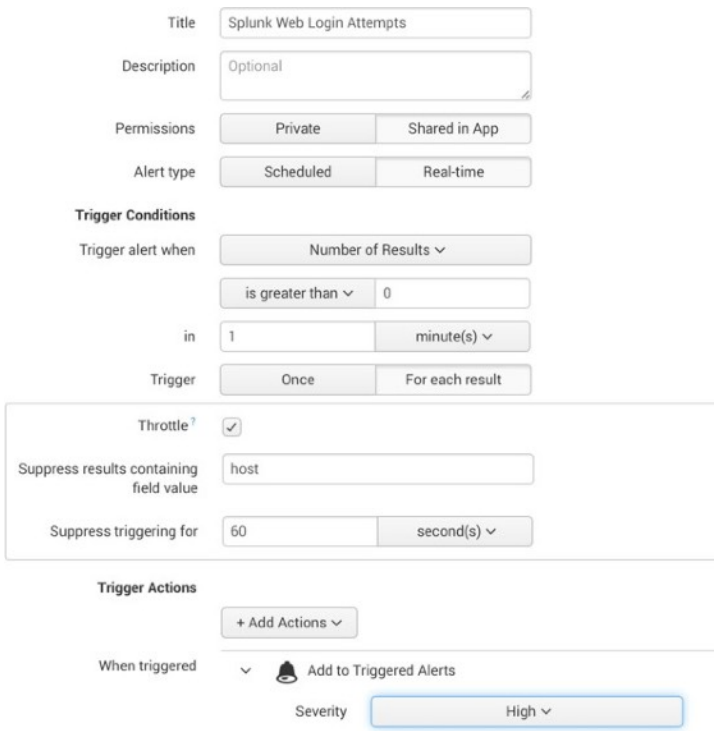
9. For **Alert type**, select **Real-time**.
10. For **Trigger alert when**, select **Number of Results**.
11. Set the number of results to: **is greater than** `0`**.**
12. The **in** field should be set to `1` **minute**.
13. For **Trigger**, select **For each result**.
14. Check the **Throttle** checkbox.
15. For **Suppress results containing field value**, type: `host`
16. Make sure **Suppress triggering** for is set to `60` seconds.
17. Click **Add Actions** and select **Add to Triggered Alerts**. Set the **Severity** to **High**.
18. *Example:*

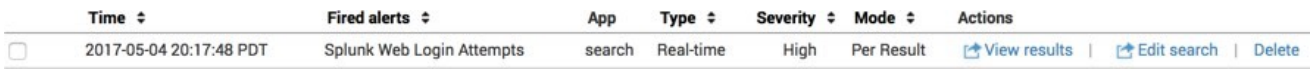


19. Click **Save** and Click **View Alert.**

Task 3: Test alert.

20. Log out of Splunk Enterprise using the **Administrator > Logout** menu.
21. Enter `admin` for user name and the password of `WrongPassword` three times in a row. Now,
22. enter `admin` for user name and the correct password.
23. From the Splunk bar, click **Activity** > **Triggered Alerts**.
24. Make sure **Search & Reporting** is selected for **App.**

Example:



25. Click the **View results** link on a triggered alert to see the event(s) that caused the alert.