Lab Exercise 11 : Creating and Using Workflow Actions

Description

These steps create GET, POST, and Search workflow actions.

Steps

Scenario: **Hackers are continually trying to log into the Linux server. IT Ops analysts need to track ongoing attempts by external sources trying to log in with invalid credentials.**

Task 1: Create a GET workflow action that opens a new browser window with information about the source IP address.

1. Navigate to Settings > Fields > Workflow actions.
2. Click **New Workflow Action** to create a workflow action.
3. For the Destination App, select class_Fund2.
4. For **Name**, type: get_whois_info
5. For **Label**, type: Get info for IP: src_ip
6. For Apply only to the following fields, type: src_ip
7. For **Action type**, make sure link is selected.
8. For **URI**, type: http://who.is/whois-ip/ip-address/src_ip
9. From the **Open link in** dropdown menu, verify New window is selected.
10. From the **Link Method** dropdown menu, verify get is selected.
11. Save your workflow action.
12. Verify your workflow action works as expected. Return to the **CLASS: Intermediate** app and search for `index=security sourcetype=linux_secure src_ip=*` over the **last 24 hours**. (You may need to refresh your browser for the workflow action to appear.)
13. Expand the first event containing a value for `src_ip` and click **Event Actions**.
14. Click **Get info for IP**: {src_ip}. A secondary browser window or tab should open to the URI and display the IP address information.

NOTE: If whois is not behaving as expected, try http://whois.domaintools.com /src.

Results Example:

Scenario: **The revenue accounting department is having issues with sales transactions not posting to the accounting system. This issue is causing revenue recognition discrepancies and the IT department is tasked with notifying the accounting system administrators when there is a transaction error in the system.**

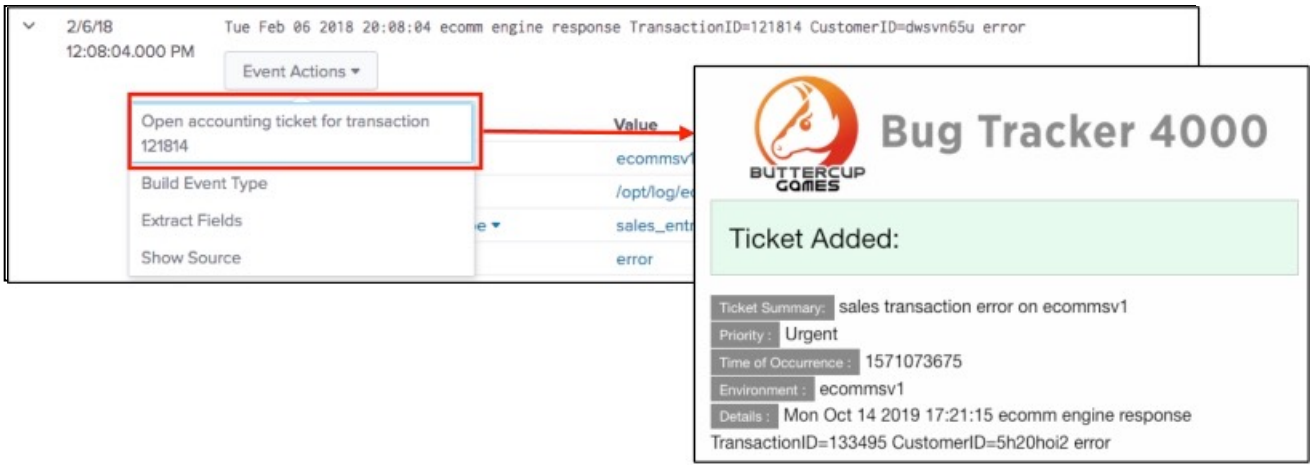
Task 2: Create a POST workflow action that uses fields from events with errors to create a ticket in the IT ticket tracking system.

15. Perform a search on the `sales_entries` sourcetype for events posting errors.
    These events contain two fields that are needed when creating tickets in the tracking system: `TransactionID` and `CustomerID`.
16. Create a field extraction with a field name of **result** for the string "error." This allows you to easily search for events where **result=error**.

NOTE: If you don't recall how to create a field extraction, please refer to Lab Exercise 7. If the **result=error** field extraction isn't done, the rest of this task will **not** work.

17. Navigate to Settings > Fields > Workflow actions.
18. Select New Workflow Action.
19. For the Destination App, select **class_Fund2**.
20. For **Name**, type: Create accounting system ticket
21. For **Label**, type: Open accounting ticket for transaction $TransactionID$
22. For Apply only to the following fields, type: result
23. For **Show Action in**, select Event menu.
24. For **Action type**, make sure link is selected.
25. For **URI**, type: http://52.3.246.206
26. From the **Open link in** dropdown menu, select **New window**.
27. From the **Link Method** dropdown menu, select **post**.
28. Enter the following values for the **Post arguments**:
    - details = $_raw$
    - environment = $host$
    - occurred = $_time$
    - priority = Urgent
    - summary = sales transaction error on $host$
29. Click **Save**.
30. Rerun your search for events where **result=error** and view the details of one of the returned event s. Does your POST workflow action appear?
31. Click on your workflow action. A new browser window should appear with the ticket details.

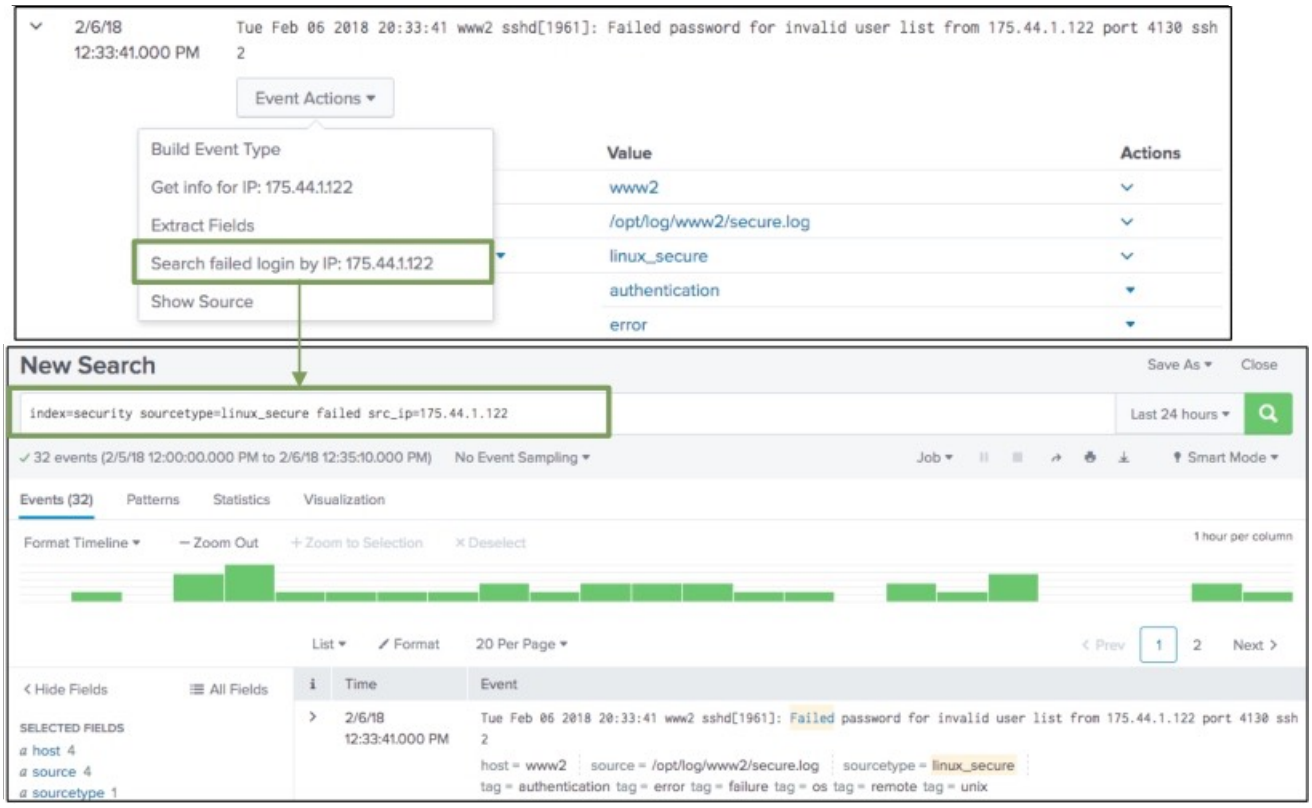
Results Example:



Task 3: Create a Search workflow action that performs a search for all failed password events associated with a specific IP address.

32. Navigate to Settings > Fields > Workflow actions.
33. Click New Workflow Action.
34. For the Destination App, select **class_Fund2**.
35. For **Name**, type: search_access_by_ipaddress
36. For **Label**, type: Search failed login by IP: src_ip
37. For Apply only to the following fields, type: src_ip
38. From the **Action Type** dropdown menu, select search.
39. In the **Search string** field, type: index=security sourcetype=linux_secure failed src_ip=src_ip
40. From the **Run in app** dropdown, select **class_Fund2**.
41. From the **Run search in** dropdown menu, verify New window is selected.
42. Select the Use the same time range as the search that created the field listing checkbox.
43. Save your workflow action.
44. Verify your workflow action works as expected. Return to the **CLASS: Intermediate** app and search for `index=security sourcetype=linux_secure src_ip=*` over the **last 24 hours**. (You may need to refresh your browser for the workflow action to appear.)
45. Expand an event with an IP address field and click **Event Actions**.
46. Select Search failed login by IP: {src_ip}
47. A secondary search window should open with the search results for the IP address.

Results Example:


2/6/18
12:33:41.000 PM
Tue Feb 06 2018 20:33:41 www2 sshd[1961]: Failed password for invalid user list from 175.44.1.122 port 4130 ssh 2
Event Actions
Build Event Type
Get info for IP: 175.44.1.122
Extract Fields
Search failed login by IP: 175.44.1.122
Show Source
Value
Actions
www2
/opt/log/www2/secure.log
linux_secure
authentication
error
New Search
Save As
Close
index=security sourcetype=linux_secure failed src_ip=175.44.1.122
Last 24 hours
32 events (2/5/18 12:00:00.000 PM to 2/6/18 12:35:10.000 PM)
No Event Sampling
Job
Smart Mode
Events (32)
Patterns
Statistics
Visualization
Format Timeline
Zoom Out
Zoom to Selection
Deselect
1 hour per column
List
Format
20 Per Page
Prev
1
2
Next
Hide Fields
All Fields
SELECTED FIELDS
a host 4
a source 4
a sourcetype 1
Time
Event
2/6/18
12:33:41.000 PM
Tue Feb 06 2018 20:33:41 www2 sshd[1961]: Failed password for invalid user list from 175.44.1.122 port 4130 ssh 2
host = www2
source = /opt/log/www2/secure.log
sourcetype = linux_secure
tag = authentication
tag = error
tag = failure
tag = os
tag = remote
tag = unix