Lab Exercise 14: Using the Common Information Model (CIM) Add-On

Description

In this lab exercise, you normalize your data to the Splunk Common Information Model (CIM) using the CIM add-on.

Steps

Scenario: **The Buttercup Games sales team wants to correlate sales data across multiple data sources, but not all source types use the same field names. To ensure that all data is reported correctly, the IT team has installed the CIM app to use as a standard for field names.**

Task 1: Examine your data.

1. Return to the Search & Reporting app.
2. Search for all action types related to online transactions over the **last 4 hours**.

   ```
   index=web sourcetype=access_combined action=*
   ```
3. Examine the values of the following fields. These fields are required for your dashboard:
   - host
   - action
   - clientip
   - status
   - useragent
4. In a separate browser tab or window, examine the Web data model in the CIM Reference Tables from the following link:
   https://docs.splunk.com/Documentation/CIM/latest/User/Howtousethesereferencetables
5. In the browser you opened in step 4, select **Web** from the data model list on the left.
6. Examine the **Fields for Web event datasets** table. Based on the fields in `access_combined`, which fields in the data model match the fields needed for your dashboard?

Field name in source type	Field in Data Model
host	dest
action	action
clientip	src
status	status
useragent	http_user_agent

7. Using the `datamodel` command, are the fields in your data populated in the Web data model?

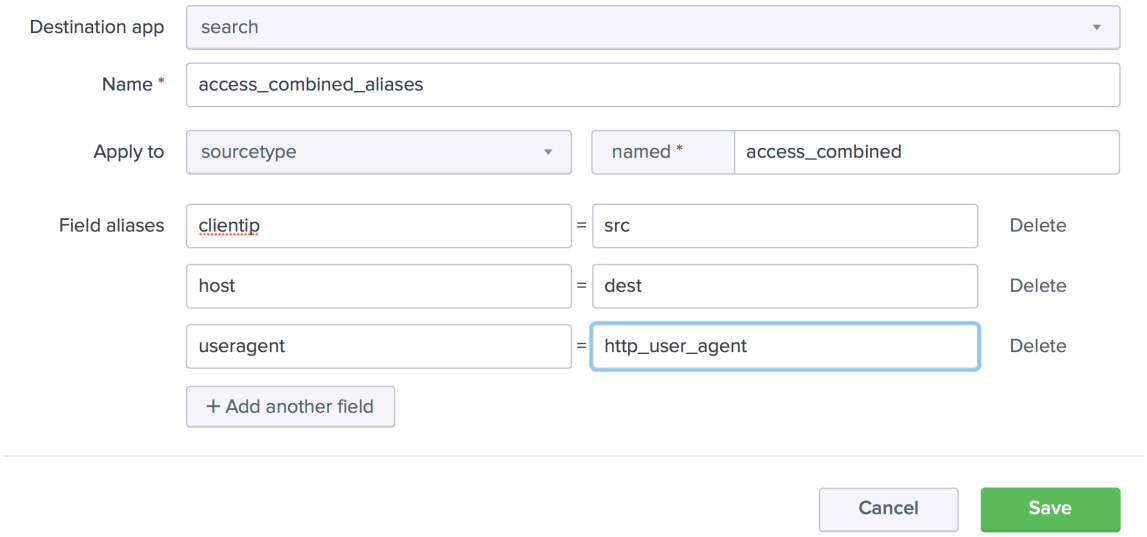
   | datamodel Web Web search | fields Web*

   Hint: Refer to the example on the **`datamodel` Command – Example** slide and then check which fields are included in your result.

Field in Your Data	Matching Attribute	Data Model Field Populated?
host	dest	No
action	action	Yes
clientip	src	No
status	status	Yes
useragent	http_user_agent	No

Task 2: Create field aliases for the fields that aren't populated in the data model.

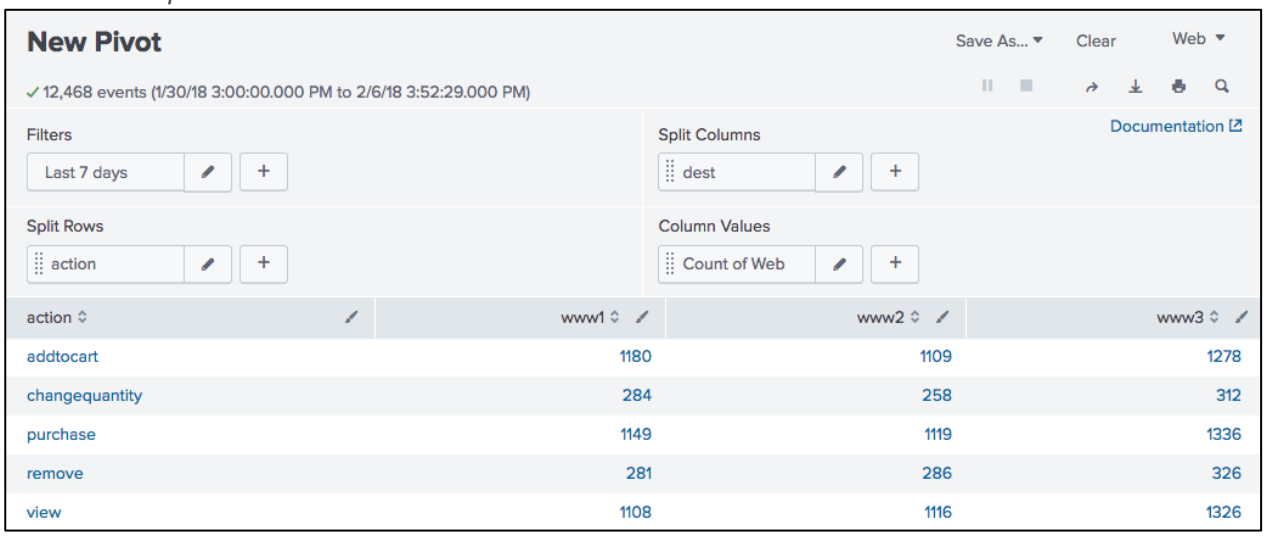
8. Create field aliases for the needed attributes that didn't populate.
   a) Navigate to Settings > Fields > Field aliases.
   b) Click New Field Alias.
   c) Verify Destination app is: **search**
   d) In the Name box, type: `sa`
   e) From the Apply dropdown, make sure **sourcetype** is selected.
   f) In the **named** field, type: `access_combined`
   g) In the **Field aliases** left box, type: `clientip`
   h) In the **Field aliases** right box, type: `src`
   i) Click Add another field.
   j) Repeat the previous steps for the remaining fields and field aliases:
   k) host = dest
   l) useragent = http_user_agent
   m) Make sure your page looks identical to the example shown, and then click **Save**.



Task 5: Validate your data against the CIM Web data model.

9. Return to the Search & Reporting app.
10. Navigate to Settings > Data models.
11. Using the **Web** data model, select **Pivot**.
12. Select the **Web** dataset object.
13. Filter on the Last 7 days and Split Rows by action and Split Columns by dest.

Results Example:



14. Change your pivot to **Split Rows** by **src**. Then change Split Columns by **status**. Are you able to split on all the expected fields in the Web data model?

NOTE: If your data model fields are not populating, delete the field alias and create it again. Be careful to avoid typos.