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## Lab Exercises

Lab typographical conventions:

[sourcetype=db\_audit] OR [cs\_mime\_type] indicates either a source type or the name of a field.

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 11 – Using Pivot

**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**.

### Description

In this lab, you will be building a report using the Pivot interface.

### Steps

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**Scenario :** The CFO loved the simple dashboard you created, but would like to add a report of where our customers are coming from. She would like to know what items users added to the shopping cart, and where those users originated from.

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#### Task 1: Use a non-transforming command with instant Pivot.

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1. 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.)

**NOTE:** For this course, you will be searching across all time using the main index. This is NOT a best practice in a production environment, but needed for these labs due to the nature of the limited dataset.

2. Enter in a search that returns all web application events for all time.
3. Click on the **Visualization** tab to see three icons: Pivot, Quick Reports, and Search Command.

*Example:*

**i** Your search isn't generating any statistic or visualization results. Here are some possible ways to get results.



#### Pivot

Build tables and visualizations using multiple fields and metrics without writing searches.



#### Quick Reports

Click on any field in the events tab for a list of quick reports like 'Top Referrers' and 'Top Referrers by time'.




#### Search Commands

Use a transforming search command, like timechart or stats, to summarize the data.

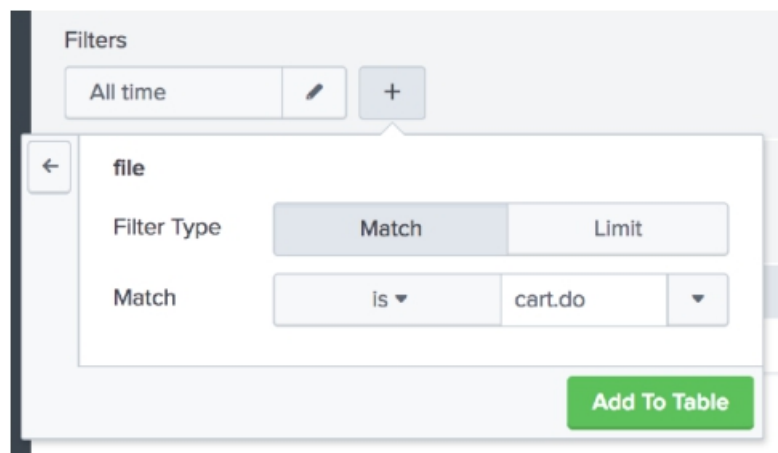
4. Click on the **Pivot** icon.
5. In the modal window, select to show **All Fields** and click **OK**.



### Task 2: Build a report using the Pivot interface.

6. Under **Filters**, click  to open the filter selector, and select **file** from the **Fields list**.

7. Select **cart.do** from the match menu and click **Add To Table**.

*Example:*



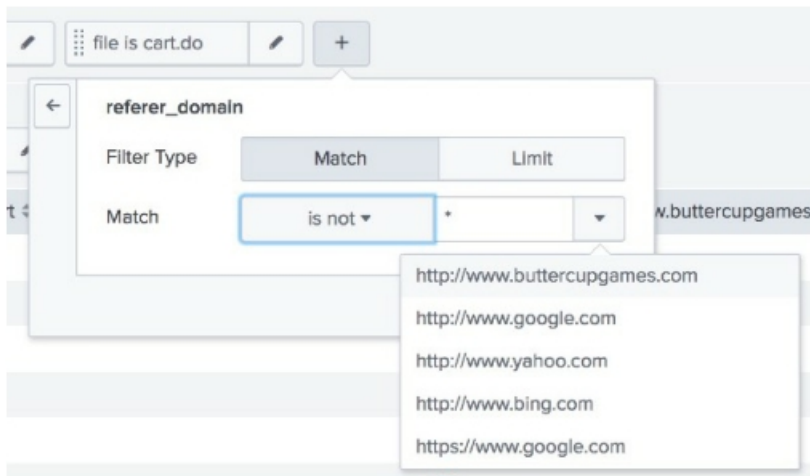
8. Under **Split Rows**, click , to open the split rows selector, and then click **productID**.
9. For the **Label**, enter Product Added To Cart.
10. Keep other settings at their default values, and click **Add To Table**.
11. Under **Split Columns**, click , to open the split columns selector, and then click **referrer\_domain**.
12. Keep other settings at their default values, and click **Add To Table**.
13. Notice that a large amount of the web traffic is coming from the buttercupgames.com domain. We will want to filter these out.

*Example Results:*

| Product Added To Cart | http://www.bing.com | http://www.buttercupgames.com | http://www.google.com | http://www.yahoo.com |
|-----------------------|---------------------|-------------------------------|-----------------------|----------------------|
| BS-AG-G09             | 23                  | 1421                          | 56                    | 36                   |
| CU-PG-G06             | 17                  | 1452                          | 58                    | 35                   |
| DB-SG-G01             | 26                  | 2367                          | 100                   | 46                   |
| DC-SG-G02             | 15                  | 2269                          | 92                    | 34                   |
| FI-AG-G08             | 12                  | 1603                          | 50                    | 25                   |
| FS-SG-G03             | 21                  | 1967                          | 85                    | 25                   |

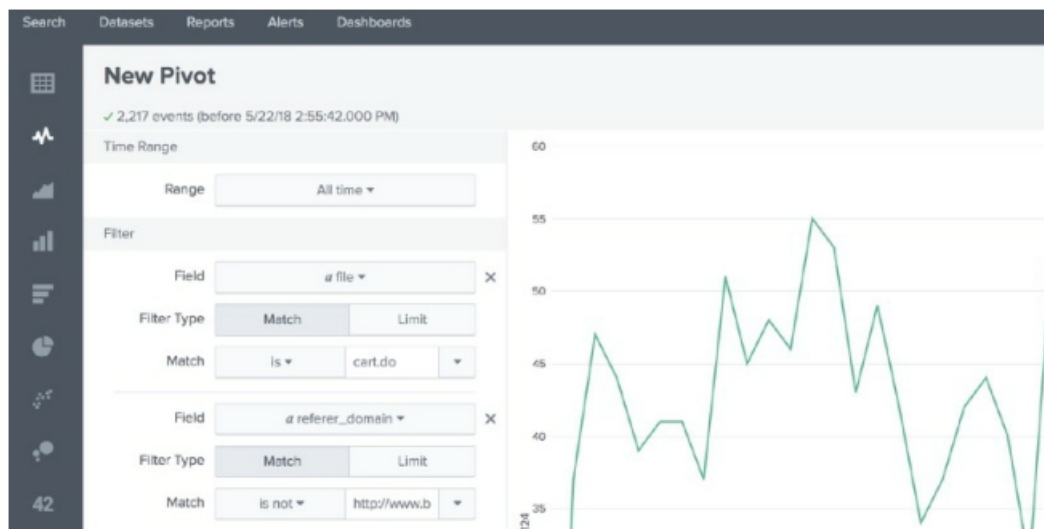
14. Under **Filters**, click **+** to open the filter selector, and select **referrer\_domain** from the **Fields** list.
15. Select **is not** and <http://www.buttercupgames.com> from the match menu.

Example:



16. Click **Add To Table**.
17. Use the black sidebar to select the **Line Chart** visualization.

Example:

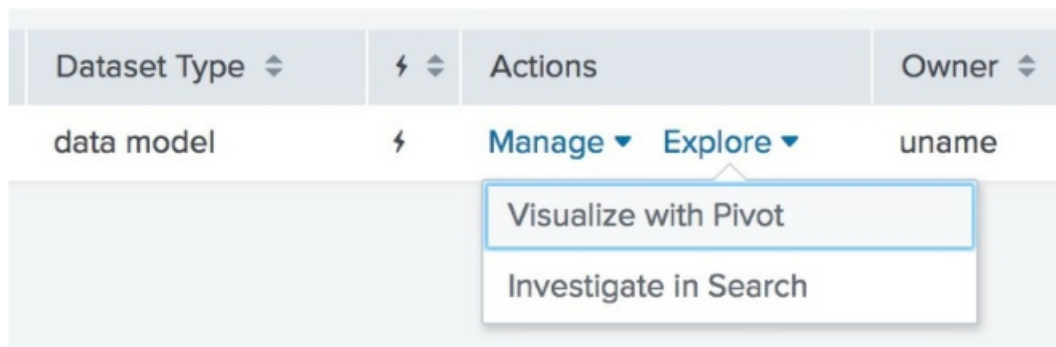


**Task 3: Add a panel to a dashboard from a pivot, and create a Data Model.**

18. Use the **Save As** menu to select **Dashboard Panel**.

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19. Notice that there are form fields for **Model Title** and **Model ID** . Pivot reports require a data model. Since you used Instant Pivot from the **Visualization** tab, there is currently not a data model for this report. Saving the report will create a new data model from the original search.
  20. Save the dashboard with these values:
    - Dashboard: *Existing*
    - Dashboard Title: *Sales Dashboard*
    - Panel Title: *Sales By Referral Domain*
    - Model Title: *Web Application Dataset*
    - Model ID: *web\_app\_ds*
  21. Click **View Dashboard** to view the dashboard.
  22. Click the **Datasets** menu option on the bar at the top of the screen.
  23. Click **Yours** on the filter toolbar to show only your Datasets.
  24. Select **Explore** from the actions menu and click **Visualize with Pivot**.

*Example:*



25. Use the **Filter** and **Split** tools to explore your data in the pivot interface.

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## 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 11 – Using Pivot with Solutions

**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.

### Description

In this lab, you will be building a report using the Pivot interface.

### Steps

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**Scenario :** The CFO loved the simple dashboard you created, but would like to add a report of where our customers are coming from. She would like to know what items users added to the shopping cart, and where those users originated from.

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#### Task 1: Use a non-transforming command with instant Pivot.

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1. 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.)

**NOTE:** For this course, you will be searching across all time using the main index. This is NOT a best practice in a production environment, but needed for these labs due to the nature of the limited dataset.

2. Enter in a search that returns all web application events for all time.  
(**index=main sourcetype=access\_combined\_wcookie**)
3. Click on the **Visualization** tab to see three icons: Pivot, Quick Reports, and Search Command.

Example:

 Your search isn't generating any statistic or visualization results. Here are some possible ways to get results.



#### Pivot

Build tables and visualizations using multiple fields and metrics without writing searches.



#### Quick Reports

Click on any field in the events tab for a list of quick reports like 'Top Referrers' and 'Top Referrers by time'.



#### Search Commands [?](#)

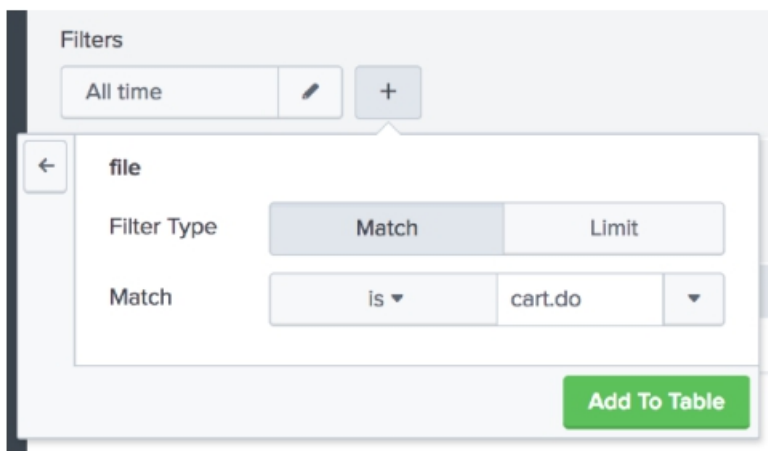
Use a transforming search command, like timechart or stats, to summarize the data.



4. Click on the **Pivot** icon.
5. In the modal window, select to show **All Fields** and click **OK**.

### Task 2: Build a report using the Pivot interface.

6. Under **Filters**, click  to open the filter selector, and select **file** from the **Fields list**.  
Select **cart.do** from the match menu and click **Add To Table**.

Example:



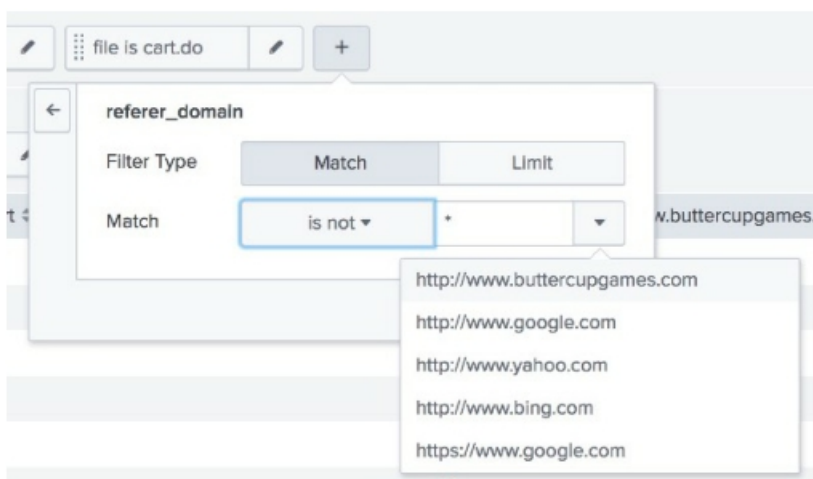
8. Under **Split Rows**, click , to open the split rows selector, and then click **productID**.
9. For the **Label**, enter Product Added To Cart.
10. Keep other settings at their default values, and click **Add To Table**.
11. Under **Split Columns**, click , to open the split columns selector, and then click **referrer\_domain**.
12. Keep other settings at their default values, and click **Add To Table**.
13. Notice that a large amount of the web traffic is coming from the buttercupgames.com domain. We will want to filter these out.

Example Results:

| Product Added To Cart | http://www.bing.com | http://www.buttercupgames.com | http://www.google.com | http://www.yahoo.com |
|-----------------------|---------------------|-------------------------------|-----------------------|----------------------|
| BS-AG-G09             | 23                  | 1421                          | 56                    | 36                   |
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| FS-SG-G03             | 21                  | 1967                          | 85                    | 25                   |

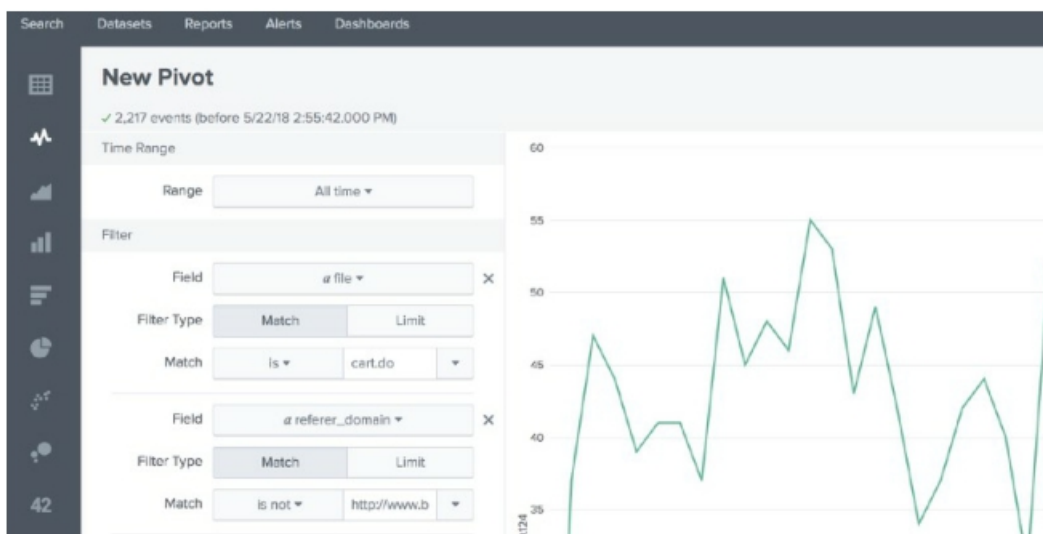
14. Under **Filters**, click **+** to open the filter selector, and select **referrer\_domain** from the **Fields** list.
15. Select **is not** and **http://www.buttercupgames.com** from the match menu.

Example:



16. Click **Add To Table**.
17. Use the black sidebar to select the **Line Chart** visualization.

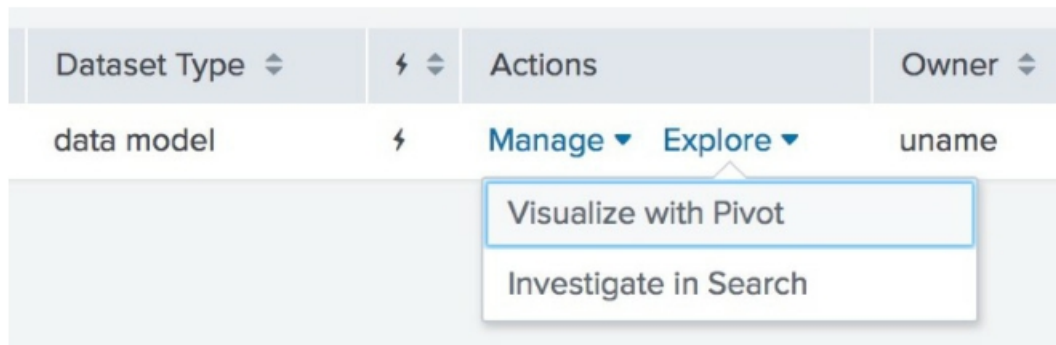
Example:



**Task 3: Add a panel to a dashboard from a pivot, and create a Data Model.**

18. Use the **Save As** menu to select **Dashboard Panel**.

19. Notice that there are form fields for **Model Title** and **Model ID** . Pivot reports require a data model. Since you used Instant Pivot from the **Visualization** tab, there is currently not a data model for this report. Saving the report will create a new data model from the original search.
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