Report 2 – Daypart Calculator

Requirements

This report groups data by the day and hour for a given date range and outputs a single summary table for days of the week and the 24 hours within those days with data. This could be a line graph and/or individual charts for each day.
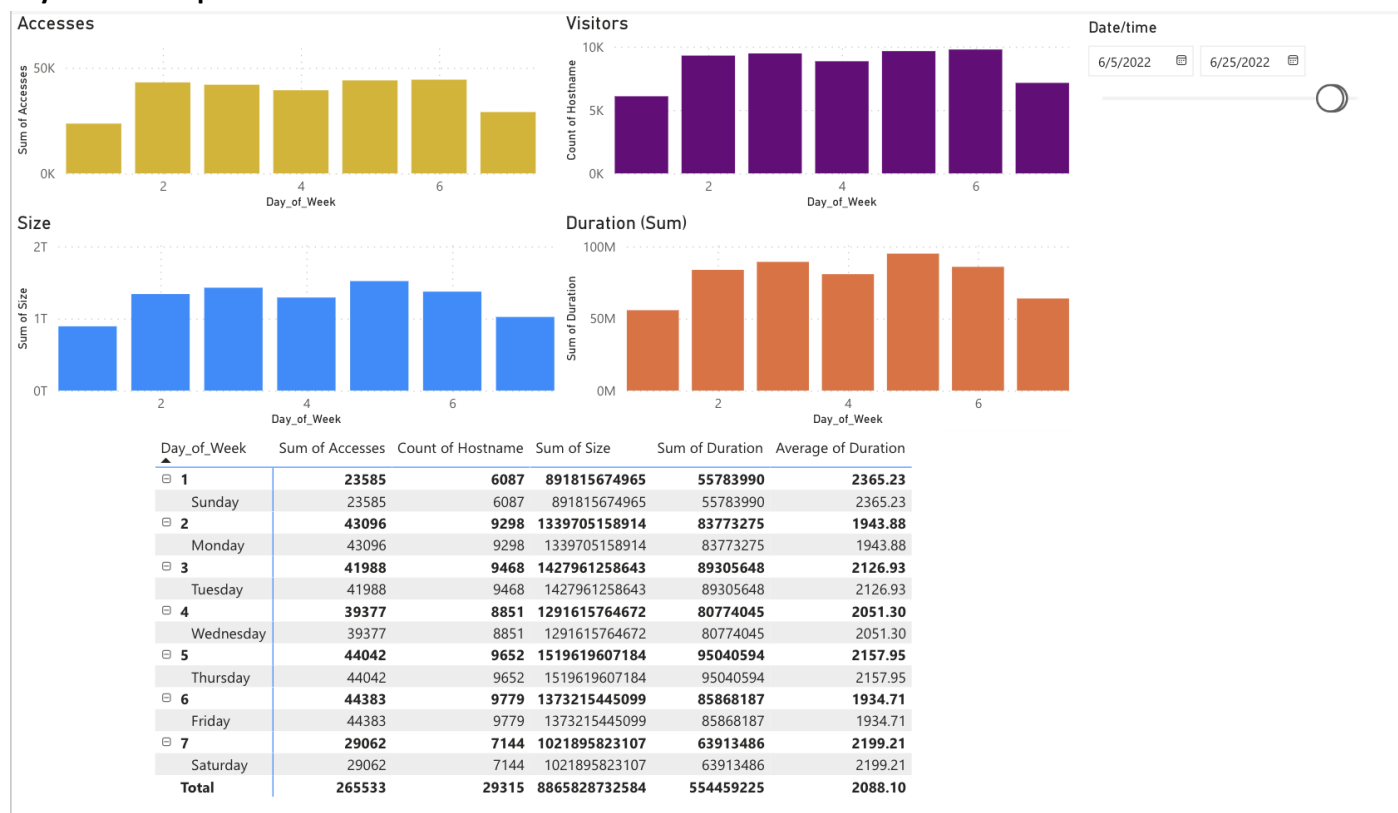
Report outputs should consist of a table with these columns:

- Visitors – tally of unique hostnames accessing the stream in a given date range and interval
- Average duration – the average of time spent listening divided by the number of Accesses in a given date range and interval
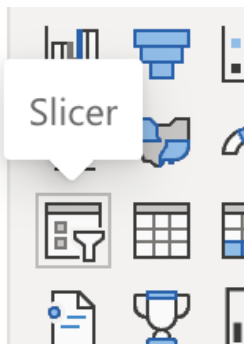
Report filtering criteria are:

- Date Range: Begin and end date – where begin date <= access date < end date. We will only be looking at whole days so begin date is midnight of the date and the end date is midnight of the next day. So with begin date = 2020-09-01 and end date = 2020-09-30 we include all records with: Access Date/time between 2020-09-01 00:00:00 and 2020-10-01 00:00:00 or 2020-09-01 00:00:00 <= Date/time < 2020-10-01 00:00:00
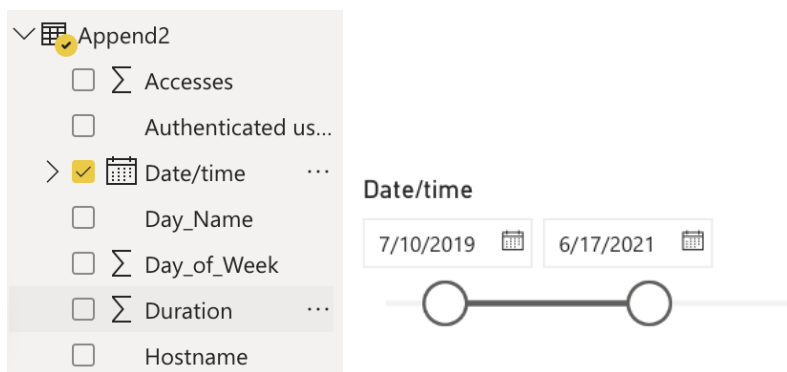
Day of Week Report

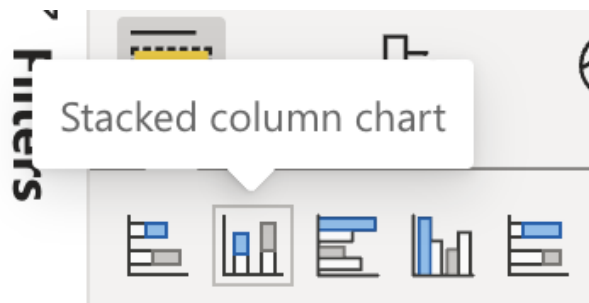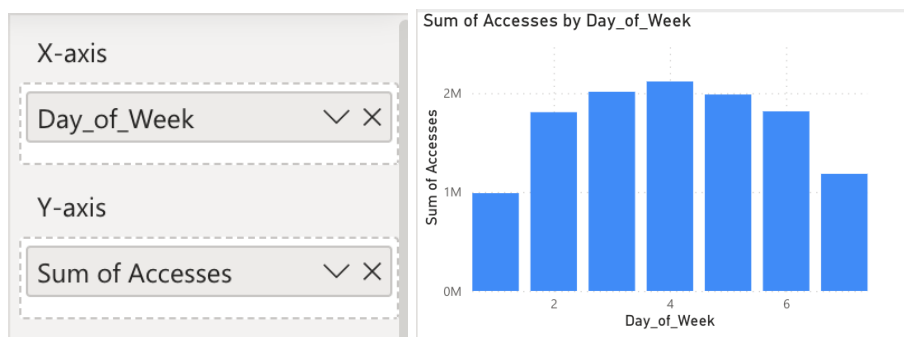| Day_of_Week	Sum of Accesses	Count of Hostname	Sum of Size	Sum of Duration	Average of Duration
⊟ 1	23585	6087	891815674965	55783990	2365.23
Sunday	23585	6087	891815674965	55783990	2365.23
⊟ 2	43096	9298	1339705158914	83773275	1943.88
Monday	43096	9298	1339705158914	83773275	1943.88
⊟ 3	41988	9468	1427961258643	89305648	2126.93
Tuesday	41988	9468	1427961258643	89305648	2126.93
⊟ 4	39377	8851	1291615764672	80774045	2051.30
Wednesday	39377	8851	1291615764672	80774045	2051.30
⊟ 5	44042	9652	1519619607184	95040594	2157.95
Thursday	44042	9652	1519619607184	95040594	2157.95
⊟ 6	44383	9779	1373215445099	85868187	1934.71
Friday	44383	9779	1373215445099	85868187	1934.71
⊟ 7	29062	7144	1021895823107	63913486	2199.21
Saturday	29062	7144	1021895823107	63913486	2199.21
Total	**265533**	**29315**	**8865828732584**	**554459225**	**2088.10**

1. Select Slicer
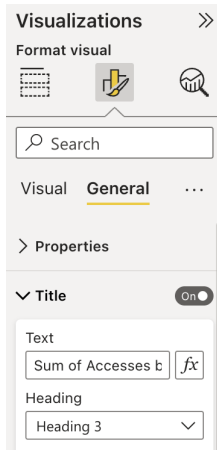

2. Select Date/Time field to add it to the slicer
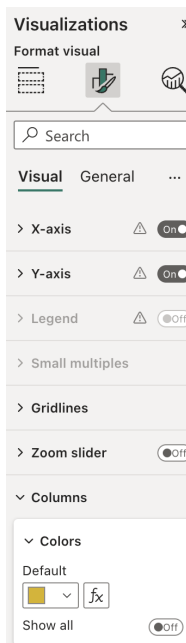

3. Now add Stacked Column Chart

4. Add the fields Day_of_Week and Sum of Accesses to make bar graph for accesses

5. Change Title Names - Click format visual on the visualization tabs, and fields will pop up to change the title and axis titles.
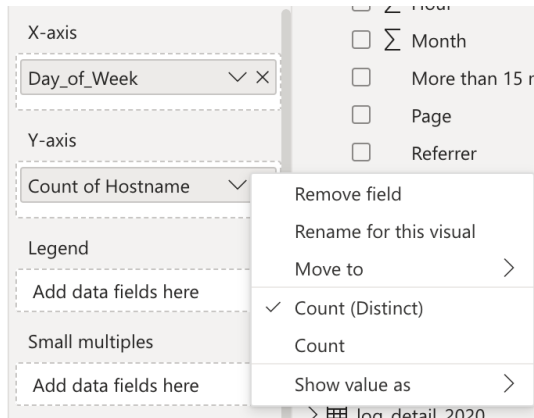

6. Change Colors - Under the Visualizations tab select format visualizations, then select columns, and then change color there.

7. Visitors Bar Graph
   - Create a Stacked Column Chart, the same as above
   - Select Day_of_week for the x-axis
   - Select Count_of_Hostname for the y-axis, then click the arrow next to Count_of_Hostname and then choose the option for count(distinct)

8. Size Bar Graph
   - Follow the same steps above, except select Sum Of Size for the y-axis
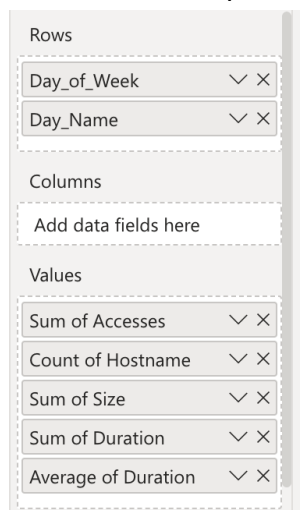9. Duration Bar Graph
   - Follow the same steps above, except select Sum Of Duration for the y-axis
10. Creating the table
    - Select Matrix Option
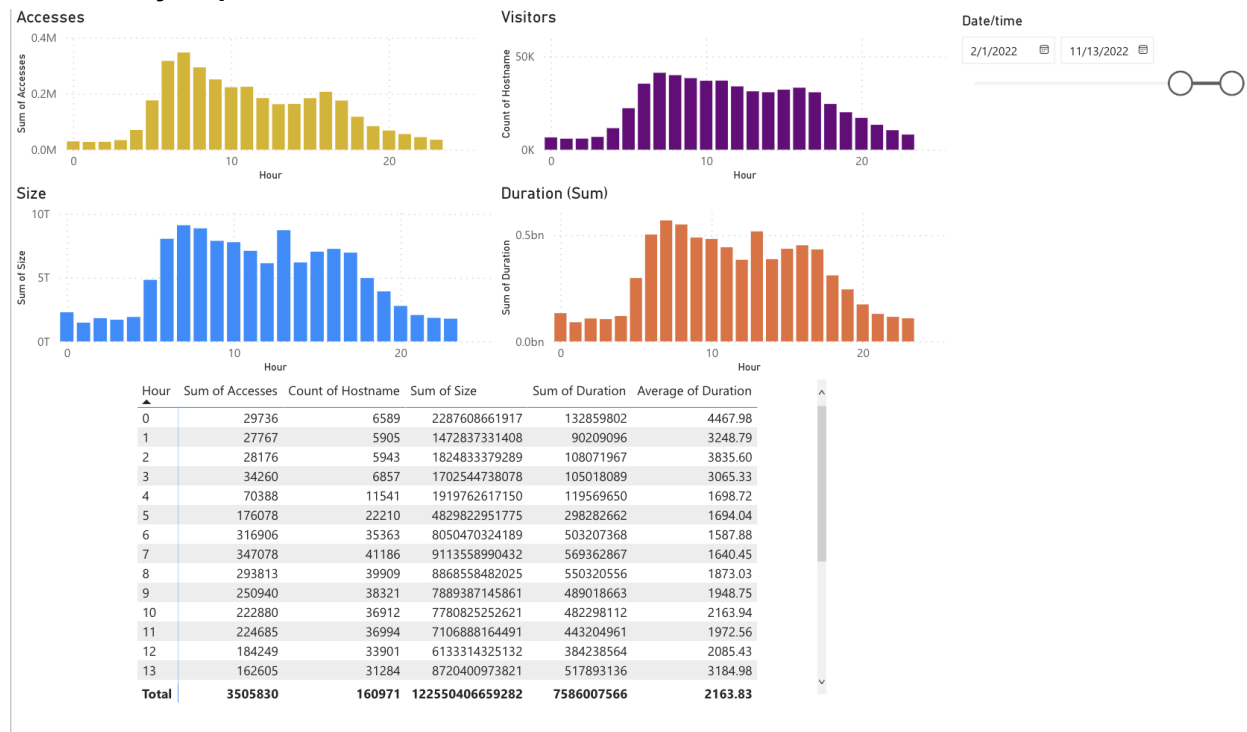

    - Add the field names as shown below
        - Make to click the drop down for count of Hostname and select the " count distinct" option

    - Final table should appear like the one below

Hour of Day Report

To Create this report, add a new page to the original report. Then you can recreate in one of two ways.

1. Copy all of the reports individually onto the new page and simply change the X-axis to be Append2 Hour instead of Day of Week.

2. Individually recreate each report following the same steps listed above, but using hour in place of Day of Week.