

Creating In-Report Normalized Metrics for Anomaly Detection

Problem: Analyzing metric changes over time

Search (e60)	
Month ↑	185,306,842
Page: 1/1 Rows: 25 1-12 of 12	
1. Feb 2021 (Jan 31-Feb 27)	14,804,610
2. Mar 2021 (Feb 28-Apr 3)	17,497,410
3. Apr 2021 (Apr 4-May 1)	13,796,081
4. May 2021 (May 2-May 29)	13,632,485
5. Jun 2021 (May 30-Jul 3)	15,525,267
6. Jul 2021 (Jul 4-Jul 31)	10,787,985
7. Aug 2021 (Aug 1-Aug 28)	10,867,788
8. Sep 2021 (Aug 29-Oct 2)	14,403,215
9. Oct 2021 (Oct 3-Oct 30)	11,640,537
10. Nov 2021 (Oct 31-Nov 27)	23,108,710
11. Dec 2021 (Nov 28-Jan 1)	26,296,925
12. Jan 2022 (Jan 2-Jan 29)	12,945,787

Step 1: Select your metric of interest and normalizing metric

- Put your metrics in a freeform table
 - Key metric on the left and normalizing metric on the right
- Use a time dimension for the rows
- Select both metrics
- Right click
 - Select “create metric from selection”

Search (e60)		Visits	
Month ↑		185,306,842	Search
Page: 1/1 Rows: 25 1-12 of 12			
1. Feb 2021 (Jan 31-Feb 27)		14,804,610	Create metric from selection >
2. Mar 2021 (Feb 28-Apr 3)		17,497,410	Copy selection to clipboard
3. Apr 2021 (Apr 4-May 1)		13,796,081	Download item as CSV (Month)
4. May 2021 (May 2-May 29)		13,632,485	Add time period column >
5. Jun 2021 (May 30-Jul 3)		15,525,267	Download selection as CSV
6. Jul 2021 (Jul 4-Jul 31)		10,787,985	Create alert from selection
7. Aug 2021 (Aug 1-Aug 28)		10,867,788	Visualize >
8. Sep 2021 (Aug 29-Oct 2)		14,403,215	
9. Oct 2021 (Oct 3-Oct 30)		11,640,537	
10. Nov 2021 (Oct 31-Nov 27)		23,108,710	
11. Dec 2021 (Nov 28-Jan 1)		26,296,925	44,689,519
12. Jan 2022 (Jan 2-Jan 29)		12,945,787	22,212,194

Step 1: Select your metric of interest and normalizing metric

- Put your metrics in a freeform table
 - Key metric on the left and normalizing metric on the right
- Use a time dimension for the rows
- Select both metrics
- Right click
 - Select “create metric from selection”
- Select divide

Search (e60)		Visits	
Month ↑	185,306,842	Search	
Page: 1/1 Rows: 25 1-12 of 12		< Create metric from selection	
1. Feb 2021 (Jan 31-Feb 27)	14,804,610	Divide	
2. Mar 2021 (Feb 28-Apr 3)	17,497,410	Subtract	
3. Apr 2021 (Apr 4-May 1)	13,796,081	Add	
4. May 2021 (May 2-May 29)	13,632,485	Multiply	
5. Jun 2021 (May 30-Jul 3)	15,525,267	Percent Change	
6. Jul 2021 (Jul 4-Jul 31)	10,787,985	Open in Calculated Metric Builder	
7. Aug 2021 (Aug 1-Aug 28)	10,867,788		
8. Sep 2021 (Aug 29-Oct 2)	14,403,215		
9. Oct 2021 (Oct 3-Oct 30)	11,640,537		
10. Nov 2021 (Oct 31-Nov 27)	23,108,710		
11. Dec 2021 (Nov 28-Jan 1)	26,296,925		
12. Jan 2022 (Jan 2-Jan 29)	12,945,787		

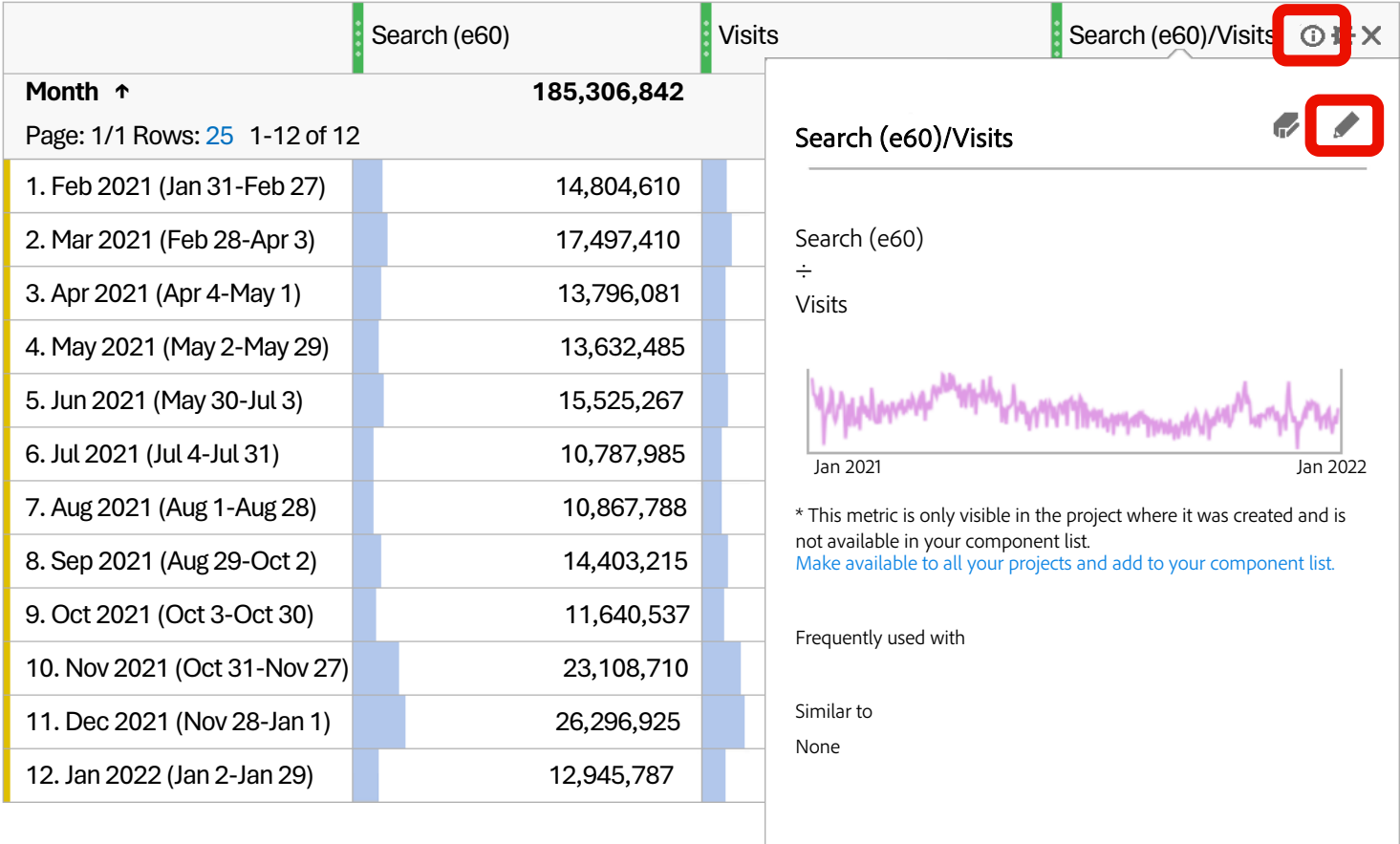
Step 2: A new calculated metric is created

- This metric is a whole number by default
- As a ‘report only’ metric it will not appear in your component list and is only available in this project

	Search (e60)	Visits	Search (e60)/Visits ⓘ ⚙️ ✕
Month ↑	185,306,842	311,521,548	1
Page: 1/1 Rows: 25 1-12 of 12			
1. Feb 2021 (Jan 31-Feb 27)	14,804,610	24,572,106	1
2. Mar 2021 (Feb 28-Apr 3)	17,497,410	29,604,856	1
3. Apr 2021 (Apr 4-May 1)	13,796,081	21,815,863	1
4. May 2021 (May 2-May 29)	13,632,485	21,286,264	1
5. Jun 2021 (May 30-Jul 3)	15,525,267	24,905,948	1
6. Jul 2021 (Jul 4-Jul 31)	10,787,985	18,973,526	1
7. Aug 2021 (Aug 1-Aug 28)	10,867,788	19,763,895	1
8. Sep 2021 (Aug 29-Oct 2)	14,403,215	25,106,623	1
9. Oct 2021 (Oct 3-Oct 30)	11,640,537	21,082,065	1
10. Nov 2021 (Oct 31-Nov 27)	23,108,710	37,508,689	1
11. Dec 2021 (Nov 28-Jan 1)	26,296,925	44,689,519	1
12. Jan 2022 (Jan 2-Jan 29)	12,945,787	22,212,194	1

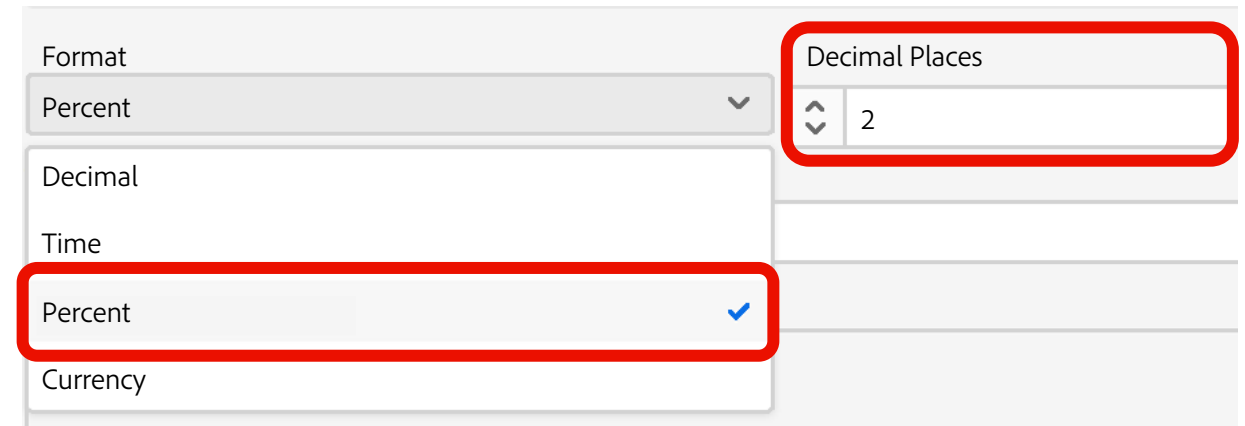
Step 2: A new calculated metric is created

- This metric is a whole number by default
- As a ‘report only’ metric it will not appear in your component list and is only available in this project
- Click the ‘info’ icon on the new metric, then the ‘pencil’ icon to edit



Step 2: A new calculated metric is created

- This metric is a whole number by default
- As a 'report only' metric it will not appear in your component list and is only available in this project
- Click the 'info' icon on the new metric, then the 'pencil' icon to edit
- Change the format to percent and select your number of decimal places
- Optional: Rename the metric before saving



The screenshot shows a configuration panel for a metric. On the left, a 'Format' dropdown menu is open, displaying options: 'Decimal', 'Time', 'Percent' (which is selected and highlighted with a blue checkmark), and 'Currency'. On the right, a 'Decimal Places' input field is shown, containing the value '2'. Both the 'Percent' option in the dropdown and the 'Decimal Places' input field are highlighted with red rectangular boxes.

Step 3: Relative metric can now be seen as a percentage

- This accounts for increases/decreases in overall traffic

	Search (e60)	Visits	Search (e60)/Visits	
Month ↑	185,306,842	311,521,548	59.48%	
Page: 1/1 Rows: 25 1-12 of 12				
1. Feb 2021 (Jan 31-Feb 27)	14,804,610	24,572,106	60.25%	
2. Mar 2021 (Feb 28-Apr 3)	17,497,410	29,604,856	59.10%	
3. Apr 2021 (Apr 4-May 1)	13,796,081	21,815,863	63.24%	
4. May 2021 (May 2-May 29)	13,632,485	21,286,264	64.04%	
5. Jun 2021 (May 30-Jul 3)	15,525,267	24,905,948	62.34%	
6. Jul 2021 (Jul 4-Jul 31)	10,787,985	18,973,526	56.86%	
7. Aug 2021 (Aug 1-Aug 28)	10,867,788	19,763,895	54.99%	
8. Sep 2021 (Aug 29-Oct 2)	14,403,215	25,106,623	57.37%	
9. Oct 2021 (Oct 3-Oct 30)	11,640,537	21,082,065	55.22%	
10. Nov 2021 (Oct 31-Nov 27)	23,108,710	37,508,689	61.61%	
11. Dec 2021 (Nov 28-Jan 1)	26,296,925	44,689,519	58.84%	
12. Jan 2022 (Jan 2-Jan 29)	12,945,787	22,212,194	58.28%	

Step 3: Relative metric can now be seen as a percentage

- This accounts for increases/decreases in overall traffic
- Click settings and turn on ‘show anomalies’ to quickly see any unusual spikes/drops
- Change background to ‘conditional formatting’ to make it easier to visualize changes

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Column settings

☒ Show anomalies

☒ Wrap header text

☐ Interpret zero as no value

☒ Background

☐ Bar graph

☒ Conditional formatting

☐ Use percent limit

☒ Auto-generated

☐ Custom

Upper limit

95.47

%

Midpoint

75.35

%

Lower limit

54.99

%

Conditional formatting palette

Table cell preview

95.47%

Data settings

Use non-default attribution model

0.48%

0.25%

9.10%

3.24%

34.04%

2.34%

56.86%

54.99%

57.37%

55.22%

61.61%

58.84%

58.28%

Step 4: Interpret insights

- Raw search metric would indicate search performed the best in November and December
- Relative metric shows that the greatest proportion of visits with searches actually happened in April and May
- Creating this as a project only metric prevents it from cluttering your components list

	Search (e60)	Visits	Search (e60)/Visits
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Take it a step further: Automate alerts to track significant changes

- Automate receiving alerts for changes to this metric
- Right click on the new metric and select 'create alert from selection'

Search (e60)		Visits	Search (e60)/Visits	
Month ↑		185,306,842	Search	
Page: 1/1 Rows: 25 1-12 of 12				
1. Feb 2021 (Jan 31-Feb 27)		14,804,610	Copy selection to clipboard Download items as CSV (Month) Add time period column > Download Selection as CSV Create alert from selection Visualize > Reset column widths Delete selected	
2. Mar 2021 (Feb 28-Apr 3)		17,497,410		
3. Apr 2021 (Apr 4-May 1)		13,796,081		
4. May 2021 (May 2-May 29)		13,632,485		
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Step 5: Create an alert

- Automate receiving alerts for changes to this metric
- Right click on the new metric and select 'create alert from selection'
- Use 'anomaly exists' to pick between 95%, 99%, or 99.9% thresholds

The screenshot shows the 'Create an alert' interface in Adobe Analytics. On the left, there are input fields for 'Title' (placeholder: 'Enter a title for this alert'), 'Description (optional)' (placeholder: 'Enter a description for this alert'), 'Time granularity' (set to 'Daily'), 'Recipients' (placeholder: 'Enter names, emails, or mobile num'), and 'Expiration date' (set to '1/ 19/ 2025, 1:30 PM' with a calendar icon). On the right, a 'PREVIEW' section shows a timeline from '30 days ago' to 'Today' with a single blue dot indicating a trigger at approximately 15 days ago, with the text 'This alert would have triggered 1 time over the last 30 days.' Below these sections, the 'Send an alert when' section is expanded, showing a list of metrics. The first metric is 'Search (e60) / Visits'. The second metric is 'anomaly exists' with a dropdown arrow, followed by '95% threshold' with a dropdown arrow. This second metric is highlighted with a red rectangular box. To the right of the metrics is a green circle with the number '1' and a close 'X' icon.