**Understand how** visitors use your documentation with Matomo web analytics

Martijn Visser

@MartijnVisser82

Apachecon North America 2022 IMMEROK **IMMEROK IMMEROK IMMEROK IMMEROK IMMEROK IMMEROK IMMEROK IMMEROK** IMMEROK **IMMEROK IMMEROK IMMEROK** IMMEROK **IMMEROK IMMEROK IMMEROK IMMEROK IMMEROK IMMEROK IMMEROK IMMEROK** IMMEROK IMMEROK



### About me

### **Open source**

- Flink committer
- Member of the project management committee (PMC)
- Volunteer on the Apache privacy committee

### Career

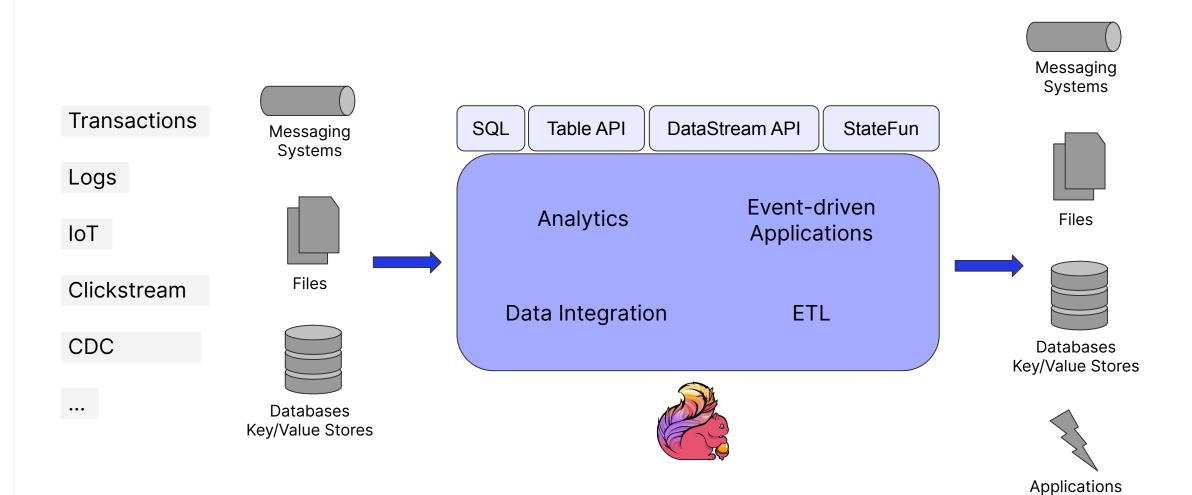
- Product Lead Streaming & Engagement @ ING
- Product Manager SDK & SQL team @ Ververica
- Product Manager @ Immerok



@MartijnVisser82 martijnvisser@apache.org



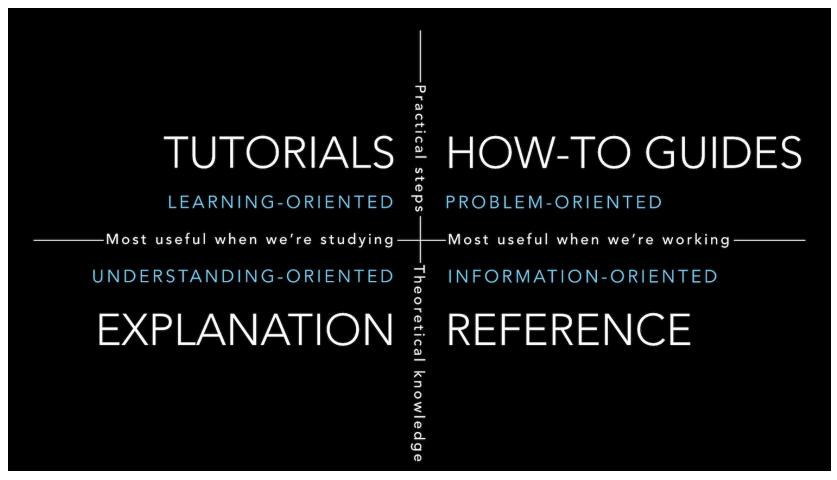
### What is Apache Flink used for?



3



### **Communities create documentation with a purpose**



[1] <u>https://documentation.divio.com/</u>



### How do you know that your documentation works as intended?







### But: ASF projects should not use Google Analytics at all

### **Project Websites**

#### **Can I use Google Analytics?**

The Apache Software Foundation discourages the use of Google Analytics.

Court decisions around Google Analytics have changed several times in the past years and made its use uncertain. Several countries in the EU declared <u>Google Analytics cannot be used compliant to the GDPR</u>.

To avoid legal risks, ASF projects shall not use Google Analytics at all.

[1] https://privacy.apache.org/faq/committers.html

#### O C K K K K K K

### How can we get answers to questions like:

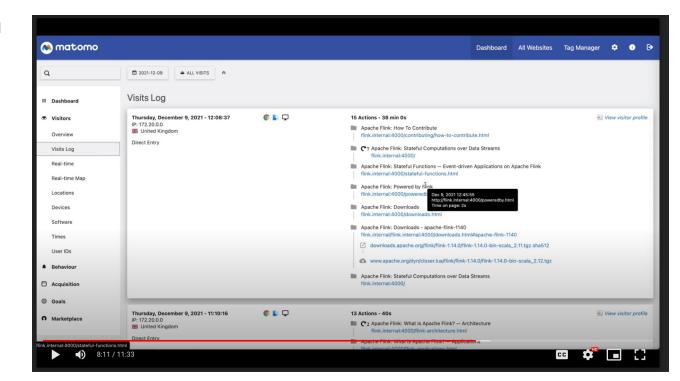
- 1. Are the readers looking at our Java APIs or our Python APIs documentation?
- 2. Can the readers of our documentation find what they are looking for?
- 3. Is our content engaging?
- 4. What is the last page they see before leaving the documentation?
- 5. What are users downloading via our documentation?

### Matomo: A privacy friendly alternative to Google Analytics

- 1. Discussion Flink Dev mailing list
- 2. Discussion on Privacy mailing list
  - a. Privacy impact

OK OK

- b. Self-hosted vs SaaS solution
- c. Make data available for everyone
- 3. Created local demonstration
- 4. Agreed to setup Matomo and implement it for Flink
- 5. If successful, we could share it with other ASF projects





### What can you do with Matomo?

- You can see it yourself at <u>https://analytics.apache.org</u>



### Example 1: Are readers looking at the Java APIs or the Python APIs?

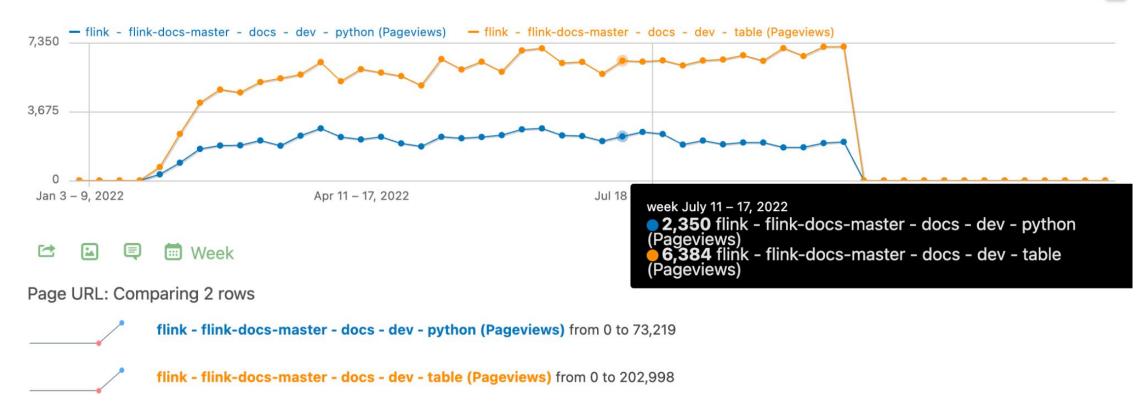
Pages						
PAGE URL	PAGEV	EWS PAGEVIEWS	BOUNCE RATE	AVG. TIME ON PAGE	EXIT RATE	AVG. PAGE LOAD TIME
⊟ flink	205	189 167,504	43%	00:01:45	32%	3.94s
flink-docs-release-1.15	75	630 62,068	43%	00:01:46	27%	3.32s
⊟ docs	36	849 30,888	48%	00:01:59	31%	3.18s
□ dev	14	580 12,030	47%	00:01:56	29%	2.79s
+ table	6	627 5,481	49%	00:01:53	30%	3.78s
🕀 datastream	5	247 4,350	47%	00:02:07	32%	2.07s
python	E 🛈 🛩 1	275 1,045	41%	00:01:41	20%	3.03s
⊕ configuration	Open Row Evolu See how the met	tion ics for this row changed over ti	me 38%	00:01:44	19%	1.18s
🗄 dataset		181 151	36%	00:02:02	24%	3.9s



### Example 1: Are these results changing over a period of time?

#### Evolution of multiple rows

×



» Pick another row to compare

Available metrics



### Example 2: Can readers find what they are looking for?

#### Site Search Keywords

KEYWORD	▼ SEARCHES	SEARCH RESULTS PAGES	% SEARCH EXITS
sink	41	1.2	2%
checkpoint	36	1.1	6%
sql	35	1.2	6%
join	33	1.4	3%
window	33	1.2	3%
cdc	31	1.3	23%
kafka	30	1.1	3%
yarn	29	1.1	3%
state	27	1.4	4%
watermark	25	1.5	4%

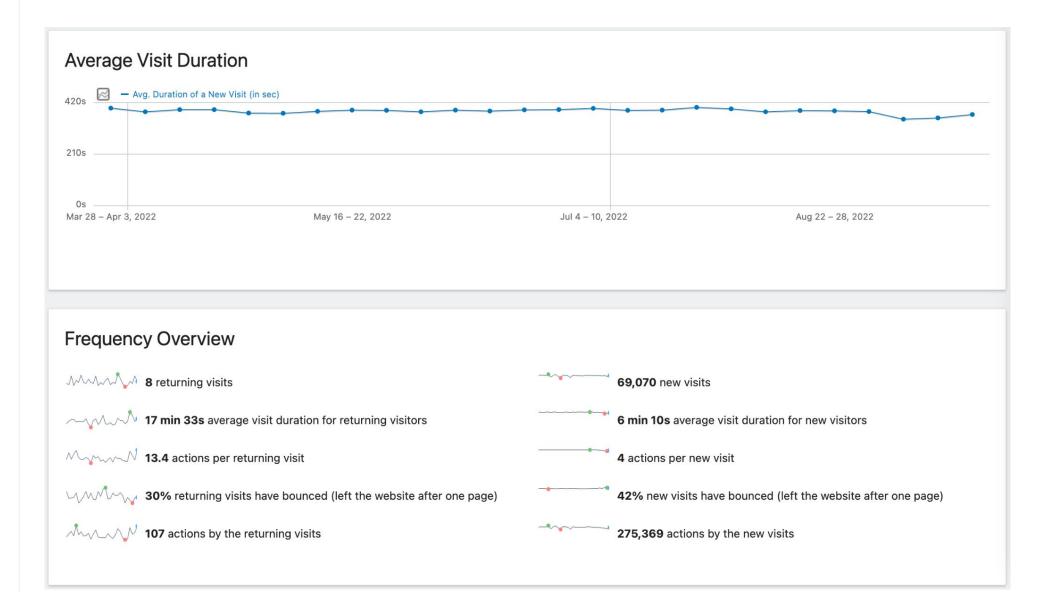
1-10 of 500 Next >

#### Pages Following a Site Search

DESTINATION PAGE	CLICKED IN SEARCH RESULTS	PAGEVIEWS	AVG. PAGE LOAD TIME
Ilink/flink-docs-release-1.15/docs/d	. 68	782	2.61s
Ilink/flink-docs-release-1.15/docs/d	. 37	326	1.78s
IInk/flink-docs-master/docs/deploy	. 36	908	2.33s
Ilink/flink-docs-release-1.15/docs/d	. 35	268	2.49s
Iink/flink-docs-stable/index	30	2,791	1.91s
Ilink/flink-docs-release-1.15/docs/c	. 30	622	4.46s
Ilink/flink-docs-release-1.15/docs/d	. 30	346	1.72s
Ilink/flink-docs-release-1.15/index	28	4,774	3.77s
Tink/flink-docs-release-1.15/docs/d	. 25	227	1.69s
Ilink/flink-docs-release-1.15/docs/d	. 24	199	1.5s
Ilink/flink-docs-release-1.15/zh/index	23	1,112	1.53s
Iink/flink-docs-release-1.15/docs/d	. 21	242	18.39s

#### 000 KKKK

### Example 3: Is our content engaging?





### **Example 4: What is the last page they see before leaving?**

Exit pages					
EXIT PAGE URL		▼ EXITS	UNIQUE PAGEVIEWS	EXIT RATE	AVG. PAGE LOAD TIME
🕀 flink		1,798,109	5,794,107	31%	3.18s
Index		161,627	478,285	34%	4.07s
⊕ zh		80,559	282,847	28%	2.77s
		55,574	109,345	51%	1.74s
+ news		49,604	97,233	51%	6.09s
Z /flink-architecture.html		34,787	80,693	43%	2.21s
		22,355	46,800	48%	3.4s
		14,189	26,317	54%	4.98s
features		9,274	14,310	65%	6.69s
□ 2018		6,369	9,412	68%	8.5s
□ 03		5,345	7,458	72%	8.41s
□ 01		5,345	7,458	72%	8.41s
/end-to-end-exactly-once-apache-flink.html	× 🗆 🖻 🛈 ~	5,300	7,393	72%	8.23s



### Example 5: What are users downloading via our documentation?

#### Downloads 🛈 🖒 🖓

DOWNLOAD URL	UNIQUE DOWNLOADS	DOWNLOADS
□ www.apache.org	73,462	86,016
/dyn/closer.lua/flink/flink-1.15.0/flink-1.15.0-bin-scala_2.12.tgz	7,044	8,591
/dyn/closer.lua/flink/flink-1.14.4/flink-1.14.4-bin-scala_2.11.tgz	5,771	6,886
/dyn/closer.lua/flink/flink-1.13.6/flink-1.13.6-bin-scala_2.12.tgz	5,452	6,285
/dyn/closer.lua/flink/flink-1.13.6/flink-1.13.6-bin-scala_2.11.tgz	5,345	6,165

#### **Conversions Overview**

- $^{\circ}$  Your best converting countries are: China 🏙 , United States 🌉 and Hong Kong SAR China 🛍
- 。Your top converting keywords are: flink , flink官网 and flink 下载
- Your best converting websites referrers are: nightlies.apache.org , link.csdn.net and blog.csdn.net
- Your best converting entry page is: flink
- $\circ\,$  Returning visitors conversion rate is 3.04% , New visitors conversion rate is 2.3%

#### Show Visits Log segmented by this Goal

## 

### Take away for using web analytics in your ASF project

- 1. Determine its goal
- 2. Implement
- 3. Analyze and conclude
- 4. Improve



### Apache Flink was the first ASF project to start with Matomo



### There are now 31 Apache Software Foundation projects onboarded

OK OK



### Reach out if you want to be onboarded

- Via #privacy-matomo in the ASF Slack
- Via privacy@apache.org

IMMEROK IMMEROK OK IMMEROK **IMMEROK** OK IMMEROK IMMEROK OK IMMEROK IMMEROK OK IMMEROK IMMEROK IMMEROK

# Thanks

Martijn Visser @MartijnVisser82 martijnvisser@apache.org