Cloudera Runtime 7.2.17

Monitoring Kafka Clusters Using Streams Messaging Manager

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Monitoring Kafka clusters

The overview page provides you with tools to see a snapshot of the Kafka cluster you are monitoring. After you select the Kafka cluster to monitor, you can see the total number of producers, brokers, topics, and consumer groups in that cluster. You can also monitor producer and consumer metrics.

Configure Apache Kafka for SMM

After you have installed and configured Apache Kafka, you must set one configuration parameter to enable Kafka and SMM to communicate.

- 1. Select Kafka from your cluster drop-down, and then select the Configuration tab.
- 2. Ensure that the Enable Producer Metrics check box is selected.

Viewing cluster overview information

You can use the Overview tab to review information about your Kafka cluster. This page gives you information about total number of producers, brokers, topics, and consumer groups. It also provides more detailed metrics about producers and consumers.

Review the Producers, Brokers, Topics, and Consumer Groups information at the top of your page to understand how many of each are contained in your Kafka cluster.



You can click the drop-down arrow in any of the boxes to view a list of Kafka resource. Select one or more Kafka resource to filter your view to just those resource. You can also search for a specific resource. You can click clear at any time to return to the full overview.

Overview

Producers 57	٩
Search	Q
🗆 Name	
geo-critical-event-collector-i2	
minifi-eu-i1	
geo-critical-event-collector-i4	
fuel-apps	
🗆 minifi-eu-i3	
supply-chain-apps	
🗆 and oritical quant collector i7	

You can select the time period you want to view the metrics for, on the top-right corner of the page. If Cloudera Manager is configured as a metrics backend, the metrics (for example, topic > partition > producermetrics) which are used for time periods larger than 6 hours are calculated asynchronously, and take time to refresh.

🕽 30 minutes 🗸

Monitoring Kafka producers

By monitoring Kafka producers, you can track the active and inactive producers in your cluster. You can also change the period of time after which a producer is considered inactive.

Understanding producer naming conventions

The producers you interact with in Streams Messaging Manager (SMM) are named based on the client.id property you added when creating Kafka producers.

Active vs. passive producers

On the Overview page, producers are referred to as active or passive. Producers are active when they are producing messages over a designated time period.

On the Producers page, passive producers are referred to as inactive.

You can set the period of time after which a producer is considered inactive in the Streams Messaging Manager Configs screen.

- 1. Select Streams Messaging Manager from the services pane.
- 2. Click Configs and select Advanced streams-messaging-manager-common from the Advanced tab.
- **3.** Update inactive.producer.timeout.ms to change the period of time after which a producer is considered inactive. This value is specified in milliseconds.

STREAMS MESSAGING MANAGER CONFIG ADVANCED

Advanced streams-messaging-manager-common

AMS's Kafka Application Id	kafka_broker	•	C
AMS's protocol	{{ams_timeline_metrics_protocol}}	•	C
ams.timeline.metrics.truststore. password	{{ams_metric_truststore_password}}	•	C
ams.timeline.metrics.truststore.path	{{ams_metric_truststore_path}}	•	C
ams.timeline.metrics.truststore.type	{{ams_metric_truststore_type}}	•	C
consumer.group.refresh.interval.ms	300000	0	C
inactive.group.timeout.ms	1800000	•	C
inactive.producer.timeout.ms	1800000	0	C

Identifying a producer state

There are two ways to identify whether a producer is active or passive.

From the Producer pane in the Overview page, use the Active, Passive, and All tabs to view only active producers, only passive producers, or all of them. This allows you to see the total number of active and passive producers.



From the Producers page, each producer is listed with the status visible.



Monitoring Kafka topics

By monitoring Kafka topics, you can track the total number of topics in your cluster and details about the topics. You can also monitor Grafana metrics for the topics in your cluster.

Viewing the total number of topics in your cluster

You can see the total number of topics in your Kafka cluster on the Overview page.

1)	Overview						Cluster: St	MMDemo	v ≜v
) B		Producers 57	•	Brokers 5	•	Topics 28	•	Consumer Groups 18	•	Clear
BBB OX		TOPICS (28) BROKERS (5)							ט 30 n	ninutes 🗸

Detailed information about topics

The Topics page contains a number of useful details about your Kafka topics. This page helps you answer the following questions:

- How can I see if the replicas in this topic are in sync?
- How do I see this topic's retention rate?
- How can I see the replication factor for this topic?
- How do I see the producers and consumers that are connected to this topic?
- How do I find the total number of messages going into this topic, over a specified time range?

To access this detailed topic information:

- 1. From the left navigation pane, click Topics.
- **2.** Identify the topic about which you want information. You can either scroll through the list of topics, or use the Search bar at the top left of the page.
- 3. Click the green hexagon at the left of the topic to view details.

C	gateway-we	est-raw-ser	isors		59MB	5KB	0.3m	1		<u></u> 🖗 🖗 Q		^
	Producers (3)		Replic	cation Factor: (2)	InSync Replicas: 6 Of	6 Total messages: 268	,184 Retention	Period: 7 days		Consumer Gro	ups (1)
	minifi-truck-w3	MESSAGES 62k	\$ 0	0B in	0B out				1003			
	minifi-truck-w2	72k	O P1	59MB in	5KB out				1004	nifi-truck-sense	ors C	LAG D.4m
	minifi-truck-w1	87k	O P2	0B in	0B out				1005			

Viewing topic messages using Data Explorer

Data Explorer is a simple Kafka consumer within SMM. It enables you to view the content of a Kafka topic. You can select any Kafka topic and any partition within that topic, and view messages from the selected partition.

You can reach Data Explorer in two ways. One way is from the **Topics** page, and the other is from the **Overview** page. In both pages, you need to either click the magnifier icon, or navigate to the **Topic Details** page and then select the Data Explorer tab. The following steps describe the process:

- **1.** Log in to the SMM UI.
- 2. From the left navigation pane, click Topics.

3. Identify the topic for which you want the message information. You can either scroll through the list of topics, or use the Search bar to find a topic.

4. Click the Data Explorer icon for that topic.

1	Торі	cs							Cluste	r: KAFKA-1 🛔 🗸
4 2 11		^{Bytes In} 1 MB	^{Bytes Out} 873 KB	Produced Per Sec 2	Fetched Per Sec 1,735	In Sync Replicas 887	Out Of Sync O	Under Replicated	Offline Partit	ions
	То	pics (37)					Search	Q .	O 30 minute	s ▼ Add New
€+ +)	ø	connect-configs		0B	6 KB	0	0	*5 ∓	Data Explore	• •
11 Č	Ø	smm-app-smm-produ	ucer-table-30s-repartition	0B	0B	0	1		Q	• ·
▲	Ø	smm-app-smm-produ	ucer-table-15m-changelo	g OB	0B	0	0		۹	• •



	Bytes Out	Produced Pr	er Sec	Fetched Per Sec	In Sync Replicas	Out Of Sync	Under Replicated	_	Offl
	Data Explore	r						×	0
	ISOLATION LEV	VEL: read_uncommitted -			DESERIALIZER:	Keys: String -	Values: String	. D	03
	Partition 0	FROM OFFSET	o		9	18	RECORD LIMIT		۹
produ	Offset ≑	Timestamp	Kev	Value		10			۹
produ	12	Sun, Jun 11 2023, 23:38:02	session-key	{"key":"+5IrdqAtdHSym	0CqVYD3L8L6fYCsMocoYQ2KY3	60Z0A=","algorithm":"HmacS	HA256","creation-timestamp":-	16	Q
-	13	Mon, Jun 12 2023, 00:38:02	session-key	{"key":"VXbrh6eST0H6	PAMxgH/JI6FISoyKvCXN8QOCB2	mmuB0=","algorithm":"Hmac	SHA256","creation-timestamp"	:1	
	14	Mon, Jun 12 2023, 01:38:02 Mon, Jun 12 2023, 02:38:02	session-key session-key	{"key":"8siE5SldCzAmF {"key":"LkB2gLmWdeV;	RfcJsSBvtuhgDcLu9j2ql4nFaj/A/1sz	s=","algorithm":"HmacSHA25 AJqU=","algorithm":"HmacSH	6","creation-timestamp":16865	2€ 6E	۹
s-conr	16	Mon, Jun 12 2023, 03:38:02	session-key	{"key":"Lgb07oFBEDID	LD/V3CESCnCxGxoKJZvvXvHB+z	yQaeo=","algorithm":"HmacSl	HA256","creation-timestamp":1	61	Q
	17	Mon, Jun 12 2023, 04:38:02	session-key	{"key":"G5h7ZMuVJq4"	T6gUC4qV2rIaZn35dAD2od7+/xS3	3TgUA=","algorithm":"HmacS	HA256","creation-timestamp":1	6	
	18	Mon, Jun 12 2023, 05:38:02	session-key	{"key":"4JMRsP+jH3ZK	wMaZ/vVOCkpPITG9X1d4T0lc9Ci	ncEj4=","algorithm":"HmacSH	A256", creation-timestamp":1	58	Q
	20	Mon, Jun 12 2023, 07:38:02	session-key	{"key":"XT/aTvad5Au/+	-4vigfQWfkpQZloLlQvlx1W7XTCT\	/WQ=","algorithm":"HmacSH	A256","creation-timestamp":16	86	
produ	21	Mon, Jun 12 2023, 08:38:02	session-key	{"key":"x0b8MBqTCsV7	7dD2HwZul7besVENiZ3LQjJv4V2Z	ZJxHY=","algorithm":"HmacSI	HA256","creation-timestamp":1	68	۹

Alternatively, you can click the Profile icon for that topic.

1	Topics							C	luster: KAFKA	c1 ≜×
*	^{Bytes In} 1 MB	^{Bytes Out} 873 KB	Produced Per Sec 2	Fetched Per Sec 1,735	In Sync Replicas 887	Out Of Sync O	Under Replicated	Offline F O	Partitions	
	Topics (37)					Search	c	ງ © 30 m	inutes 🗸 🖌	dd New
~	NAME \$		DATA IN \$	DATA OUT \$	MESSAG	SES IN ≑ CONS	SUMER GROUPS \$			
•	connect-configs		0B	6 KB	0	0		۹	Profile	~
11	_smm-app-smm-	producer-table-30s-repartitio	on OB	0B	0	1		۹		~
⊾ ⊾	_smm-app-smm-	oroducer-table-15m-change	log OB	0B	0	0		٩		~

Then go to the Data Explorer tab.

1	Topics / connect-c	onfigs				Cluster: KAFKA-1
ති	METRICS ASSIGN	MENT DATA EXPLORER CC	NFIGS LATENCY			
a	ISOLATION LEVEL	read_uncommitted -		DESERIALIZER:	Keys: String 👻	Values: String
•	Partition 0	FROM OFFS	ET		0	RECORD LIMIT
+D)	Offset ≑	Timestamp	Key	9 Value	10	27
=	12	Sun, Jun 11 2023, 23:38:02	session-key	{"key":"+5IrdqAtdHSym0CqVYD3L8L6fYCsMocoYQ2KY360ZOA=","algorithm":"HmacSHA25t	5","creation-timestamp":1686519482280}	
8	13	Mon, Jun 12 2023, 00:38:02	session-key	{"key":"VXbrh6eST0H6PAMxgH/JI6FISoyKvCXN8Q0CB2mmuB0=","algorithm":"HmacSHA25	56","creation-timestamp":1686523082281}	
▲	14	Mon, Jun 12 2023, 01:38:02	session-key	$\label{eq:constraint} $$ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $	ation-timestamp":1686526682282}	
	15	Mon, Jun 12 2023, 02:38:02	session-key	{"key":"LkB2gLmWdeVzUFXVx7e7A0rhUhcl418tKXz6y+1AJqU=","algorithm":"HmacSHA256	","creation-timestamp":1686530282283}	
	16	Mon, Jun 12 2023, 03:38:02	session-key	{'key':"Lgb07oFBEDIDLD/V3CESCnCxGxoKJZvvXvHB+zyQaeo=","algorithm":"HmacSHA256	","creation-timestamp":1686533882283}	
	17	Mon, Jun 12 2023, 04:38:02	session-key	{"key":"G5h7ZMuVJq4T6gUC4qV2rlaZn35dAD2od7+/xS3TgUA=","algorithm":"HmacSHA256	","creation-timestamp":1686537482283}	
	18	Mon, Jun 12 2023, 05:38:02	session-key	{"key":"4JMRsP+jH3ZKvMaZ/vV0CkpPITG9X1d4T0Ic9CncEj4=","algorithm":"HmacSHA256"	"creation-timestamp":1686541082283}	
	19	Mon, Jun 12 2023, 06:38:02	session-key	{"key":"SKzJuaLT96SI8L3WAJ8ClMiJdiY0gBnSsmyhq1V6BBw=","algorithm":"HmacSHA256"	"creation-timestamp":1686544682284}	
	20	Mon, Jun 12 2023, 07:38:02	session-key	{"key":"XT/aTvad5Au/+4vigfQWfkpQZloLlQvlx1W7XTCTVWQ=","algorithm":"HmacSHA256","	creation-timestamp':1686548282284}	
	21	Mon, Jun 12 2023, 08:38:02	session-key	{"key":"x0b8MBqTCsV7dD2HwZul7besVENiZ3LQjJv4V2ZJxHY=","algorithm":"HmacSHA256	", creation-timestamp": 1686551882284}	
						(1 to 10) of 15 < 1 2 >

- 5. Select any of the following modes in the Isolation Level option:
 - read_committed
 - read_uncommitted

The isolation level specifies whether uncommitted transactional messages should be read. By default, it is set to read_uncommitted.

6. Select the deserializer types for the Keys and Values options.

For example, if you select Avro, SMM uses the schema that can be found in Schema Registry to deserialize the messages.

7. Select a Partition.

The Kafka topic must have partitions to select from.

8. Select a value for the From Offset field.

You can also use the selection bar to select an offset value. The maximum value is the offset of the last message.

Click \mathfrak{O} to refresh the partition offset range and to fetch the latest messages.

9. Select a Record Limit.

The record limit value is the number of messages that are fetched starting from the message offset number selected in the From Offset field.

10. To see long messages, click show more beside a message.

The message opens in a dialog or a new tab based on the size of the message.

11. Click the Schema Registry icon to go to the related page in the Schema Registry UI.

1	Topics / connect-	configs					Cluster: KAFKA-1
Ð	METRICS ASSIG	INMENT DATA EXPLORER CON	FIGS LATENCY				
	ISOLATION LEVE	L: read_uncommitted -			DESERIALIZER:	Keys: String -	Values: String
		FROM OFFSET					RECI Schema Registry
۲	Partition 0	• 12	0 C		9	о 18	27
*)							
=	Offset \$	Timestamp	Key	Value			
	12	Sun, Jun 11 2023, 23:38:02	session-key	{"key":"+5IrdqAtdHSym0CqVYD3L8L6fYCsN	locoYQ2KY360ZOA=","algorithm":"HmacSH	HA256","creation-timestamp":1686519482	280}

11

Increasing topic partition

You can increase the number of partitions of a topic



Warning: Increasing the partition numbers can impact the use of keys on messages. The data that is already written is not redistributed using the new partition, but remains on the partition on which it was located.

The following steps describe the process:

- **1.** Log in to the SMM UI.
- **2.** From the left navigation pane, click Topics.
- **3.** Identify the topic for which you want to increase the topic partition number. You can either scroll through the list of topics, or use the Search bar to find a topic.
- 4. Click the Profile icon for that topic.
- **5.** Go to the Configs tab.

1	Topics / connect-configs										Clus	ter: KAFKA-1
1 2a	METRICS ASSIGNMENT	DATA EXPLORER CONFIG	SS LATENCY									
=	TOPIC NAME				PARTITIONS							
-	connect-configs				3		\$	Name 🗢	Value	IsDefault	IsSensitive	IsReadOnl
8								cleanup.policy	compact	false	false	false
(a)	Availability							compression.type	producer	true	false	false
								delete.retention.hours	168	false	false	false
*								delete.retention.ms	604800000	false	false	false
64		\mathbf{Y}						file.delete.delay.ms	60000	true	false	false
								flush.messages	9223372036854775807	true	false	false
-	MAXIMUM	HIGH	MODERATE	LOW		CUSTOM		flush.ms	9223372036854775807	true	false	false
	REPLICATION FACTOR 3 MIN INSYNC REPLICA 2	REPLICATION FACTOR 3 MIN INSYNC REPLICA 1	REPLICATION FACTOR 2 MIN INSYNC REPLICA 1	REPLICATION FACTOR 1 MIN INSYNC REPLICA 1				follower.replication.throttled.replicas		true	false	false
	Limits							index.interval.bytes	4096	true	false	false
	CLEANUP.POLICY							leader.replication.throttled.replicas		true	false	false
	compact		~					max.compaction.lag.ms	9223372036854775807	true	false	false
						advanced Sa	ave	max.message.bytes	1000000	false	false	false
								message.downconversion.enable	true	true	false	false

- 6. Enter the partition number in Partitions or increase it using the arrows.
- 7. Click Save.

A dialog appears to ensure the increment.

- 8. Click Yes.
- 9. Refresh the page to see the change.

Getting current state of the topic partitions (Tech Preview)

The experimental Assignment tab, on the topic details page, shows the current state of the topic. It shows some topiclevel statistics and the replica assignment of all partitions. If rack awareness is used in the Kafka cluster, the replica assignment is shown in a rack-based view. If the rack IDs follow the format of multi-level rack IDs, the rack IDs are rendered as a hierarchy. For more information on rack awareness, see *Kafka rack awareness*.

To go to the Assignment tab, click the Profile icon for a topic from the Overview or Topics page, and then click the Assignment tab. You can view the following statistics there:

• Number of offline partitions

Shows the number of offline partitions in the topic. A partition is offline if it does not have a leader. Partitions can become offline if all their in-sync replicas are offline.

• Number of under-min-ISR partitions

Shows the number of under-min-ISR partitions in the topic. A partition is in an under-min-ISR state if the number of in-sync replicas is lower than the value set in the min.insync.replicas property of the topic. The minimum in-sync replicas configuration defines how many replicas must acknowledge a produced message before the produce request is considered successful.

• Number of under-replicated partitions

Shows the number of under-replicated partitions in the topic. A partition is under-replicated if it has at least one out-of-sync replica.

• Number of unevenly distributed partitions

This appears if rack awareness is being used.



Important: This statistics is based on standard rack awareness, and does not respect the multi-level rack IDs. This means that a partition might be shown as evenly distributed while in terms of multi-level rack awareness it should be considered unevenly distributed.

Shows the number of unevenly distributed partitions in the topic. A partition is unevenly distributed if the difference between the maximum and minimum number of replicas in a rack is greater than one. This typically suggests that the partition does not meet expected durability guarantees or that it causes uneven load on the cluster. If a partition is unevenly distributed, try reassigning them. In most cases, unevenly distributed partitions become evenly distributed across the racks after reassignment.

• Number of unused racks

This appears if rack awareness is being used.

Shows the number of racks which are currently not used by this topic. A rack is unused if the topic has no replicas residing in that rack. This typically suggests that the partition does not meet expected durability guarantees because it is not using all available racks (physical locations) to store replicas of the data. This is expected and does not cause issues for non-critical topics that have an intentionally low replication factor.

In the replica assignment table, replicas are shown with different colors:

- Leader replicas are green
- In-sync replicas are blue
- Out-of-sync replicas are red

In addition, offline partitions and out-of-sync partitions are red. Under-replicated partitions, unevenly distributed racks, and unused racks are orange. When a specific partition or rack has one of these issues, a warning sign appears next to it.

Leader and in-sync replicas also act as links to the corresponding broker details page.

In the table header and in the first column, warning icons are shown if the specific column or row is affected by one of the issues listed in the topic statistics.

The following image shows the Assignment tab without racks:

٠	🗣 STREAMS MESSA	NG M × +	~ - o ×
←		O 🗅 localhost 3000/#/topics/topics/topics/title=assignment	S III o 🤹 😄 =
O ¢	loudera - My Applica	🕫 Inbox - durban@cloud 📱 Cloudera, Inc Calend 💿 System Dashboard - C 💿 Streams Messaging - F 💿 Streams Messaging 🎂 My Drive - Google Drive 🖶 My Reviews - Gerrit C	>> 🗅 Other Bookmarks
1	Topics / topic-1		Cluster: KAFKA-1
6	METRICS ASSIG	IMENT DATA EXPLORER CONFIGS LATENCY	
111 111 111	Shows the current Number of offline Number of under-	ate of the topic partitions. If rack awareness is enabled for Kafka (rack IDs are specified for the brokers), replicas are sorted based on their physical location (DC and/or rack) giving you a rack-based view of the replica assignment. antitions: 1 0 Number of under-min-ISR (Min ISR: 2) partitions: 1 0 uplicated partitions: 1 0	Leader In-sync Out-of-sync
-1	P0 🛕		
_	P1		
-	P2 🛕		
6;	P3 📐		
▲			

The following image shows the Assignment tab with racks:

۵	🕸 STREAMS MESSA	GING M/× +							~ - • ×
÷		O D localhost:3000/#/topics/topic-1?tab=a:	ssignment					☆	© IN o @ ⊇ ≡
o c	loudera - My Applica	🍽 Inbox - durban@cloud 🔲 Cloudera, Inc Calend	🐐 System Dashboard - C 👌	Streams Messaging - F	Streams Messaging	📥 My Drive - Google Driv	e 🛛 🖶 My Reviews · Gerrit C		> C Other Bookmarks
1	Topics / topic-1								Cluster: KAFKA-1
-	METRICS ASSI	SNMENT DATA EXPLORER CONFIGS LATENCY							
81	Shows the current Number of offline Number of under	state of the topic partitions. If rack awareness is enabled for Kafk partitions: (A1) (Number of under-min-ISR (Min ISR: 2) par replicated partitions: (A1) (Number of unevenly distributed	a (rack IDs are specified for the b titions: (▲1) ③ partitions: (0) ③ Number of t	brokers), replicas are sorted base unused racks: 0 ⑦	ed on their physical location	(DC and/or rack) giving you a	rack-based view of the replica as	signment.	ader Out-of-sync
۲		/rack1			/rack2			/rack3	
•9	P0 🛕	0			1			2	
=	P1	0			1			2	
6	P2 📐	0			1			2	
▲	P3 🛕	0			1			2	

The following image shows the Assignment tab with racks, but with one broker metadata unknown, which adds an extra Unknown column to the table:

•	😵 STREAMS MESSAGING 🛛											
		O D localhost:3000/#/topics/topic-1?tab=a						☆	© l⊪			∍≡
O Cl	loudera - My Applica 附 Ir	box - durban@cloud 🔲 Cloudera, Inc Calend	👷 System Dashboard - C	👷 Streams Messaging - F	Streams Messaging	🝐 My Drive - Google Driv	e 🛛 🔒 My Reviews · Gerrit C		»		ther Boo	okmarks
1	Topics / topic-1									C	Cluster: K	AFKA-1
•	** STREAMS MESSAGING MX ** +											
	STREAMS MESSAGING Mix +											
۲	Image: Control of the callbook: 3000/#/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/topics/t											
۲	P0 🛕	2			0			1				
=	P1	2			0			1				
64	P2 🔼	2			0			1				
A	P3 🛕	2			0			1				

Related Information Kafka rack awareness

Monitoring Kafka brokers

By monitoring Kafka brokers, you can track various details about brokers including the host where the broker is located, disk space used by the broker, throughput, messages coming in, partitions, and replicas.

Detailed broker information

The Brokers page contains a number of useful details about your Kafka brokers. This page helps you answer the following questions:

- On what host is my broker located?
- Is my broker running out of disk space?

To access detailed broker information:

- 1. From the left navigation pane, click Brokers.
- 2. Identify the broker about which you want information. You can either scroll through the list of brokers, or use the Search bar at the top left of the page.
- 3. Click the green hexagon at the left of the broker to view details.

•	Brokers						Cluster	: Cluster 1
æ	Brokers (3)				Search	٩	ී 0 30 mi	inutes 🗸
	NAME \$	THROUGHPUT \$	MESSAGES IN \$	PARTITIONS \$	REPLICAS \$			
0)))	9 Ihunyady-ns155-1.lhunyady-ns155.root.hwx.site:9092	0B	0	30	93			^
•	FREE MEMORY FREE DISK CPU IDLE 3	0.21 LOAD AVERAGE 1.54	DISK I/O 2947277.00					
70	smm-app-smm-producer-t P0 08 in	0B o	ut					
R;	Cfile-sink-2 P0 OB In	0B o	ut					
4	Consumer_offsets P2 OB in	0B o	ut					
	Consumer_offsets P5 OB In	0B o	ut					
	Consumer_offsets P8 08 In	0B o	ut					
	Consumer_offsets P11 OB In	0B o	ut					
	Smm_alert_notifications P0 OB in	0B o	ut					
	Consumer_offsets P14 OB In	0B o	ut					
	Consumer_offsets P17 OB In	0B o	ut					
	Smm_consumer_metrics P0 OB in	0B o	ut					

Viewing additional details about the broker host

You can view additional details about the broker host from Cloudera Manager. To access this information perform the following steps:

- 1. From the left navigation pane, click Brokers.
- 2. Identify the broker about which you want information. You can either scroll through the list of brokers, or use the Search bar at the top left of the page.
- 3. Click the Profile icon on the right side of the broker view.

	Br	okers (3)				Search	Q	C	Ø 30 minute	es 🕶
		NAME \$	THROUGHPUT \$	MESSAGES IN \$	PARTITIONS \$	REPLICAS \$				
•	Ø	9 Ihunyady-ns155-1.lhunyady-ns155.root.hvvx.site:9092	0B	0	30	93	L		Profile	~
€: ▲	0	11 Ihunyady-ns 155-2.lhunyady-ns 155.root.hwx.site.9092	0B	0	35	92				~
	ø	13 Ihunyady-ns 155 3.lhunyady-ns 155.root.hwx.site 9092	0B	0	37	94				~

4. Click the Cloudera Manager icon on the right side of the header.

1	Brokers / 9		Cluster: Cluster 1
Ð	METRICS CONFIGS		د المراجع
•	Producers (3)	InSync Replicas: 93 Of 93 Total Messages: 0 Retention Period: 604,800,000 MILLISECONDS	Cloudera Manager Consumer Groups (1)
•		Contraction of the second of t	
*)		consumer_offseP2 08 m 0B out	
-64		Consumer_offseP5 08 in 08 out	

You can track additional details about the broker host in the Metrics and Configs tabs.

Monitoring Kafka consumers

By monitoring Kafka consumer groups, you can track active and passive consumer groups, or all consumer groups, which use the default internal __consumer_offsets topic to store the consumed offset information. You can track additional details about consumer groups. You can also track details including number of consumers and consumer instances included in a group and consumer group lag in the consumer group profile.

Streams Messaging Manager (SMM) displays consumer groups that have offsets stored in Kafka's internal topic __co nsumer_offsets, which is also the default store if the auto.commit.enable property is set to true for consumers. SMM does not display consumer groups that have offsets stored anywhere else other than this default store.

Viewing summary information about consumer groups

The Overview page gives you summary information about consumer groups on the right side of the page. You can use the Active, Passive, and All tabs to view consumer groups only in the Active or Passives, or all of the consumer groups, which use the default internal __consumer_offsets topic to store the consumed offset information. Use the Lag tab to sort consumer groups based on ascending or descending amounts of lag.

Overview							Cluster: SMMDemo 👻 🛔 👻
Producers 84	Brokers 5	-		Topics 28	•	Consu	mer Groups 18
Overview Cluster: SMMDemo Producers Brokers Topics Consumer Groups 10PICS (23) BROKERS (5) 28 18 0 Producers (84) NAME DATA IN DATA OUT MESSAGES IN CONSUMER GROUPS Consumer Groups (18) Active(ci) PASSIVE (23) ALL Syndicate-transmission 139MB 77MB 0.6m 0 © QQ III v Interformer Groups (18) MESSAGES syndicate-speed-even 0B 0B 0 © QQ III v Interformer Groups (18) geo-critical-event-coll 4.1m syndicate-speed-even 0B 0B 0 © QQ III v Interformer Groups (18) geo-critical-event-coll 4.1m syndicate-speed-even 0B 0B 0 © QQ III v Interformer Groups (18) geo-critical-event-coll 4.1m syndicate-speed-even 0B 0B 0 © QQ III v Interformer Groups (28) Interformer Groups (28) geo-critical-event-coll 4.1m syndicate-speed-even 0B 0B 0 © QQ III v Interformer Groups (28) geo-critical-event-c	🖱 a month 🚽						
Producers (84)	NAME	DATA IN	DATA OUT	MESSAGES IN	CONSUMER GROUPS		Consumer Groups (18)
ACTIVE (61) PASSIVE (23) ALL	syndicate-transmission	139MB	77MB	0.6m	0	<mark>⁄5</mark> @Q≣ ~	ACTIVE (3) PASSIVE (15) ALL
minifi-eu-i1 8.2m							Cluster: SMMDemo
geo-critical-event-coll 4.1m	syndicate-speed-even	0B	0B	0	0	<mark>©</mark> @Q≣ ∨	supply-chain-micro-s 9.2m
geo-critical-event-coll 4m							audit-micro-service 5m
fuel-apps 3.4m	syndicate-speed-even	0B	0B	0	0	<u>⇔</u> ©080	adjudication-micro-se 4.1m
supply-chain-apps 2.3m					-		load-optimizer-micro 4.1m
geo-critical-event-coll 1.8m							energy-micro-service 2.4m
geo-critical-event-coll 1.6m	syndicate-oil	166MB	0B	0.8m	0	<u></u> ©Q□ ∨	compliance-micro-ser 1.7m

Viewing details about a consumer group

To access detailed consumer group information:

- 1. From the left navigation pane, click Consumer Group.
- **2.** Identify the consumer group about which you want information. You can either scroll through the list of consumer groups, or use the Search bar at the top left of the page.
- 3. Click the green hexagon at the left of the consumer group to view details.

nifi-truck-sen	sors-west	2	^
Partitions (3)	State: Stable		
v1004 gatew	ay-west-r P0 OB in	0B out	
文 1005 gatew	ay-west-r P1 81MB in	29KB out	
文 1001 gatew	ay-west-r P2 OB in	0B out	

Viewing the consumer group profile

The Consumer Group profile displays detailed information about each consumer group, including:

- The number of consumers included in the group.
- The number of consumer instances in the group.
- Details about consumer group lag.

To access the Consumer Group profile:

- 1. From the Consumer Group page, select the consumer group for which you want to view the profile.
- 2. Click the profile icon in the upper right of the Consumer Group tile.

METRICS				🖱 a month 🗸
Producers (3) Partitions (3)	State: Stable		Consumers	(2)
MESSAGES minifi-truck-w3 90k	ewa P0 0B in 0B out		7	LAG
minifi-truck-w2 0.1m	ewa P1 81MB in 29KB out		consumer-1	7
minifi-truck-w1 0.1m	ewa P2 OB in OB out		J	
	Instance	Tonic Partition	Lag Host Offse	t Log ends
Summary Total Lag 8	consumer-1-29fa6e77-78dd-428a-b030-eef8753e2d5f	gateway-west-raw-sensors 0	1 /10.0.28.39 -1	0
	consumer-1-6b0e4ffc-6f4c-4eee-ad06-81d055e7ed53	gateway-west-raw-sensors 1	6 /10.0.28.45 1636	812 1636818
	consumer-3-68359916-35f8-4007-b292-c48e72c1bbb3	gateway-west-raw-sensors 2	1 /10.0.28.33 -1	0
Committed Offsets	Committed Offsets Rate Lag		Lag Rate	

Resetting consumer offset

To reset the offset of a consumer group, perform the following steps:

- 1. From the left navigation pane, click Consumer Group.
- 2. Choose the consumer group for which you want to reset the offset, and click the Profile icon.

1	Consumer Groups		Cluster: KAFKA-1
£	Consumer Groups (4)		Search Q 3
	NAME \$	LAG \$	
0)))	smm-app	0	• · ·
•	ev test1 INACTIVE ®	0	Profile
6;	Topics (2) State: Empty		
▲	♥test2		
	€test1		



Note: Resetting offsets is only possible for those groups whose state is Empty or Dead. Attempting to reset offset of any other group results in an error.

3. In the Metrics page, click Actions Reset offset .

The Reset offsets for consumer group dialog appears.

Het	Consumer Groups / test1				-	Clust	er: KAFKA-1
42		Reset offsets for consumer group "test	1"	×			
æ	METRICS	Topics	Re	eset mode		ී @ 30 minutes - A	CTIONS -
8	Producers (1) To	All topics Filter	T	urrent		Consumers (1)	
(0))	perf-producer-client 0	test2	· _			test1	
•	0	test1	~				
••)	Summary				Offset		
8	Consumer Group Lag				90	90	
▲					120	120	
					90	90	
					90	90	
					90	90	
				Apply Cancel		1 - 5 of 20	< >
	Com	mitted Offsets					
	Lag						

4. Select the topic and partition(s) you want to reset.

You can use the arrow beside each topic to display the partitions of that topic, and select partition(s) as required. You can also select all topics and all related partitions by selecting the All topics option. You can use the Filter option to find a specific topic.

Reset offsets for con	sumer group "test1"			×
Topics			Reset mode	
All topics	Filter	T	current	~
🖃 test2		ê		
0				
0 1				
2				
☑ 3				
4				
☑ 5				
6				
7				
8				
				Apply Cancel

5. Select the reset option from the Reset mode.

The available options are as shown in the following image:

Reset offsets for consumer group "test1	п		×
Topics		Reset mode	
All topics Filter	T	current	~
☑ test2	~	current	
test1	~	latest	
		earliest	
		offset	
		date & time	
		Apply	ncel

6. Click Apply.

Monitoring log size information

The SMM UI shows log size related information about brokers, topics, and partitions. Furthermore, warning messages appear when log directory related errors happen.

The feature uses a cache mechanism. The following cache attributes are set by default. You can modify these attributes in the SMM configuration page of the Cloudera Manager UI:

Kafka Logdir Cache Expiration ms

Sets cache expiration time.

Kafka Logdir Cache Maximum Size

Sets maximum cache size.

Kafka Logdir Call Timeout ms

Sets timeout of the Kafka query.

The following image shows the properties in Cloudera Manager:

			The Derivariant from 2022-San-JM DT-TR		
CLOUDERA Manager	Cluster 1		COEP Deputyment noni 2022/sep/06/01.18		
Search	오 🕸 STREAMS_MES	SAGING_MANAGER-1	ions •		Sep 8, 1:08 PM UTC
單 Clusters	Status Instances Configuration	Commands Charts Library Audits Streams	s Messaging Manager Web UI 🗭 🛛 Quick Links 👻		
型 Hosts					
🐼 Diagnostics	Q logdit			Filters Role Groups	History & Rollback
😰 Audits					
Charts	Filters			Sho	w All Descriptions
Replication	~ SCOPE	Kafka Logdir Cache Expiration ms	Streams Messaging Manager Rest Admin Server Default Group		٥
Administration	STREAMS_MESSAGING_MAN 0	O [®] kafka.logdir.cache.expiration.ms	55 second(s) ~		
Data Services New	Streams Messaging Manager 0	Kafka Logdir Cache Maximum Size	Streams Messaging Manager Rest Admin Server Default Group		٥
	~ CATEGORY	kafka.logdir.cache.maximum.size 📽 kafka.logdir.cache.maximum.size	1000		
	Main 3	Kafka Logdir Call Timeout ms	Streams Messaging Manager Rest Admin Server Default Group		٥
	Database 0	kafka.logdir.call.timeout.ms	30 second(s) ~		
	Logs 0 Monitoring 0				1 - 3 of 3
	Performance 0 Resource Management 0				
	Security 0 Stacks Collection 0				
	V STATUS				
	A Warning 0				
	B ^P Edited 0				
	C Include Overrides 0				

Log size details for topics

On the Overview page of the SMM UI, the Topics tab contains a sortable column called Current Log Size which shows the data with the measure unit. This log size is calculated by the leader partitions; so, the follower partitions are not included. The column contains a tooltip which is a question-mark symbol. The topic related log-size improvements or information are also available on the Topics page.

Overview										Cluster:
Producers 11	•	Brokers 3	-		Topics 34	•			Consumer Groups 3	•
TOPICS (34) BROKERS (3)										ී @ 30 min
Producers (11)	NAME ¢	DATA IN ©	DATA OUT ©	MESSAGES IN 0	CONSUMER GROUPS ©	CURRENT LOG SIZE © @	< <u> </u>		Consumer Grou	ıps (3)
ACTIVE (8) PASSIVE (3) ALL MESSAGES ©	_consumer_offsets	14 KB	14 KB	105	0	Current log-size of the leader replicas' I	he topic. Su log-sizes. No	m of on-	ACTIVE (1)	PASSIVE (2) AI
producer-1 30							iot oountou.		srm-service-stat	us
srm-service-status-aed1a848-f13d-414 30	_CruiseControlMetrics	657 KB	657 KB	62k	0	1 MB	۹		~	
service-discovery-heartbeat-primary 720										
KafkaCruiseControlSampleStoreProdu 10k		00.1/D	25			54.1/0		_		
ClouderaConnectMetricsReporter 240	Samples 5	28 KB	OB	90	U	51 KB	ų		~	
srm-service-status-c5f96c69-5576-434 300										
CruiseControlMetricsReporter 62k	KafkaCruiseControlPartitionMetri	169 KB	0B	9.6k	0	313 KB	٩		v	
connector-producer-MirrorHeartbeatC 1.8k	coampies									

The Topics tab on the Overview page represents topics and you can select one of them. In this case the topic's leader partitions are viewable and here you can find the leader partition log-size. If you click a partition, a pop-up window appears, where log-size information is displayed.

Het.								
63	Producers 11		Brokers 3		-			- Clear
=								
8	Producers (11)		DATA IN 0 DATA OUT 0				Consumer Groups (
•	ACTIVE (8) PASSIVE (3) ALL MESSAGES #	consumer_offsets	P0 Lineage is shown only for the recently		47 KB	۹	ACTIVE (1)	
		Omine Cantaell Antoine	DATA IN 669 KB					
=			DATA OUT 669 KB	62K				
8			PROFILE FILTER EXPLORE					
		14 P0 bytes in: 669 KB	bytes out: 669 KB log-size: 1 MB					
	CruiseControlMetricsReporter 62k		ALL PARTITIONS					
		Samples	ning 28 KB 0B	90	51 KB	۹		

If you click Profile for a topic, log-size of replica-leaders appears, hosted by the broker.

1	Topics /consumer_offsets							Cluster: KAFKA-1
ŵ	METRICS DATA EXPLORER CONFIGS LATE	ENCY						C Ø 30 minutes ▼ ACTIONS ▼
60	Producers (0)	Replication	n Factor: (3) P0	InSync Replicas: 150 Of 1	50 Messages in last 30 minutes: 105 Retention P bytes out: 08	Period: 168 hrs	56 53	Consumer Groups (0)
		•16	P1	bytes in: OB	bytes out: 0B	log-size: 0B	18 14	
=		218	P2	bytes in: 0B	bytes out: 0B	log-size: 0B	76 74	
₽;		14	P3	bytes in: 0B	bytes out: 0B	log-size: 0B	76 78	

Log size details for brokers

On the Overview page, the Brokers tab contains two sortable columns called Log Size and Remaining Storage. The log-size is calculated for all the partitions including the follower partitions. The remaining storage column contains the available capacity in all of the configured log directories. The broker related log-size improvements or information are also available on the Brokers page.

1	Overview												Cluster: KAFKA-1
	Producers 11		•	Brokers 3	-			Topics 34	-			Cor	nsumer Groups 3
=	TOPICS (34) BROKERS (3)												⊃ © 30 minutes -
=	Producers (11)		NAME ©	THROUGHPUT ©	MESSAGES IN 0	PARTITIONS ©	REPLICAS ©	LOG SIZE 0	REMAINING STORAGE ©	_			Consumer Groups (3)
	ACTIVE (9) PASSIVE (2) ALL MESSAGES (0	18 egyedt-smm-3.egyedt-smm.root.hwx.site:9092	458 KB	5.6k	106	296	1 MB	217 GB			~	AGTIVE (1) PASSIVE (2) ALL
*)	producer-1 30												srm-service-status 6
=	srm-service-status-aed1aB48-f13d-414 30	0	16	189 KB	3.9k	110	296	1 MB	217 GB			~	
~	service-discovery-heartbeat-primary 720	T.	egyeursinin2.egyeursinin.toor.tiwa.site.9052										
64	KafkaCruiseControlSampleStoreProdu 9.7k												
▲	ClouderaConnectMetricsReporter 240		14 egyedt-smm-1.egyedt-smm.root.hwx.site.9092	1 MB	66k	105	292	3 MB	209 GB	L	-	~	
	srm-service-status-c5f96c69-5576-434 300												
	CruiseControlMetricsReporter 63k												
	connector-producer-MirrorHeartbeatC 1.8k												
	producer-3 2												

If you click the arrow icon for a broker, the details of that broker are displayed. The Leader Partition Log-Size shows the sum of leader partitions' log-size. The All Partitions Log-Size field's value is equal to the sortable column's value called Log Size (naming is different to make the sortable column names as short as possible). The Remaining Storage sortable column and field is the same (value and name).

1	Overview									Clust	ar: KAFKA-1
æ	Producers 11	•	Brokers 3	•		Topics 34	•	Cor	nsumer Groups 3	-	Clear
•	TOPICS (34) BROKERS (3)									ଅ Ø 30	minutes -
8	Producers (11)	NAME ©	THROUGHPUT \$	MESSAGES IN © P	ARTITIONS © REPLICAS	¢ LOG SIZE ¢	REMAINING STORAGE \$		Consumer Groups (3)	
٠	ACTIVE (9) PASSIVE (2) ALL MESSAGES \$	egyedt-smm-3.egyedt-smm.root.hwx.site:9092	458 KB	5.6k 1	06 296	1 MB	217 GB	^	ACTIVE (1)	PASSIVE (2)	ALL LAG ¢
•)	producer-1 30								srm-service-status		6
≓	srm-service-status-aed1a848-f13d-414 30	FREE MEMORY FREE DISK		LE 30.37 LOAD AVERAG	E 1.65 DISK I/O 1135001.	60 LEADER PARTITIONS	LOG-SIZE 780 KB				
e .	service-discovery-heartbeat-primary 720	ALL PARTITIONS LOG-SIZE 1 MB REMAININ	G STORAGE 217 GB	-							
64	KafkaCruiseControlSampleStoreProdu 9.7k	srm-service-status-con P0	es in: OB	bytes out:	08	log-size: 0B					
▲	ClouderaConnectMetricsReporter 240										
	srm-service-status-c5f96c69-5576-434 300	srm-service-cluster-me P5	es in: OB	bytes out:	08	log-size: 0B					
	CruiseControlMetricsReporter 63k	srm-service-status-con P9	es in: 0B	twtes out:	08	log-size: 0B					
	connector-producer-MirrorHeartbeatC 1.8k			0,100,001							
	producer-3 2	srm-service-status-con P3	es in: 6 KB	bytes out:	08	log-size: 15 KB					

If you click a specific partition, a pop-up window appears where log-size information is displayed.

He	Overview							
	Producers 11	•		•				• Clear
	Producers (11)						Consumer Groups	
	ACTIVE (0) PASSIVE (2) ALL MESSAGES () producer-1 30	egyedt-smm-3.egyedt-smm.root.hwx.site:9092	458 KB 5.	6k 106	296 1 MB		ACTIVE (1) srm-service-status	
				7 Topic: srm-service-statu	18- 60 LEADER PARTITIONS			
				store-changelog - P3	nes-			
		srm-service-status-con P0		Lineage is shown only for the re active clients!	log-size: 0B			
				DATA IN 6 KB				
	srm-service-status-c5f96c69-5576-434 300	Srm-service-cluster-meP5		DATA OUT OB	log-size: 0B			
	CruiseControlMetricsReporter 63k	srm-service-status-con P9		PROFILE FILTER EXPLORE	E log-size: 0B			
	connector-producer-MirrorHeartbeatC 1.8k							
		Srm-service-status-con P3	bytes in: 6 KB	bytes out: 08	log-size: 15 KB			
		srm-service-cluster-meP2		bytes out: 08	log-size: 0B			
		esrm-service-status-con P6		bytes out: 08	log-size: 15 KB			
		KafkaCruiseControlPP17	bytes in: 6 KB	bytes out: 08	log-size: 11 KB			

If you click Profile of a broker, then the metrics details for that broker are displayed. The log-size information per partition is available. Furthermore, the sum of leader partitions' log-size, remaining storage size, and all partitions log-size details are also available. The Metrics tab on the Brokers page contains the available storage size per log directory.



Note: There is no advantage of creating more log directories on the same disk, so this should be avoided.

1	Brokers / 18						Cluster: KAFKA-1
- 45	METRICS CONFIGS						℃ Ø 30 minutes •
	Producers (9)	InSync Replicas: 295 Of 295 Tota	al Messages: 127,231 Rete	ntion Period: 604,800,000 MILLISECONDS Le	ader partitions log-size: 89 MB	Consumer Groups (3)	
8	ACTIVE (8) PASSIVE (1) ALL MESSAGES producer-1 30	Size of all logs on the broker: 95 ME Remaining storage for log directory	8 Remaining storage on all (/var/local/kafka/data3): 20:	log directories: 607 GB <u>Remaining storage for</u> 2 GB Remaining storage for log directory (/va	or log directory (/var/local/kafka/data2): 202 GB ır/local/kafka/data): 202 GB	ACTIVE (1) PA	SSIVE (2) ALL LAG 0
÷)	srm-service-status-aed1a848-f13d-414 30 service-discovery-heartbeat-primary 720	srm-service-cluster-met P5	bytes in: 0B	bytes out: 0B	log-size: 0B		
=	KafkaCruiseControlSampleStoreProdu 3.2k	srm-service-status-connP9	bytes in: 0B	bytes out: 0B	log-size: 0B		
8	ClouderaConnectMetricsReporter 0 srm-service-status-c5f96c69-5576-434 30	srm-service-status-connP3	bytes in: 6 KB	bytes out: 08	log-size: 16 KB		
A	connector-producer-MirrorHeartbeatC 1.8k	srm-service-cluster-met P2	bytes in: 0B	bytes out: 0B	log-size: 0B		
	producer-3 1	srm-service-status-connP6	bytes in: 6 KB	kytes out: 0B	log-size: 16 KB		

If there is any issue with the query on the log directory information, then a warning message appears. There can be multiple warnings if more than one broker is related. But no new warning message from a specific broker appears until the previous message disappears.

← -	→ C △ ③ localhost:3000/#/brokers							۵	* 🗟 🔯 🛎 🖈	II 🌒 (Update :
1	Brokers								Error(s) from Katka directory sizes: error	while retriev 1; error 2	ing log $ imes$
89 11	Total Bytes In 3 KB	Total Bytes Out 3 KB	Produced Per Se 1	c	Fetched Per Sec 1	Active Controllers	Unclean Electi O	ons			ing log ×
8	Brokers (2)					DEDI ICAS ±		Bearch	Q	5 0	an hour 👻
۲											
۰	xyz-1.xyz.root.hwx.site/9092		2 KB	1k	3	3	977 KB	98 KB			~
11	2 1 xyz-2.xyz.root.hwx.site:9092		4 KB	2k	4	4	2 MB	195 KB	E		~
4											

Cloudera Manager chart builder

For historical information, you can use the chart builder provided in Cloudera Manager. The following command and screenshot show Kafka log-size data from the past where the broker ID and topic name with the topic partition are specified.

SELECT counter_sum(kafka_bytes_received_by_partition_rate) WHERE serviceName
=KafkaServiceName AND kafkaBrokerId = KafkaBrokerId AND kafkaTopicName = Kaf
kaTopicName AND kafkaPartitionId = kafkapartitionId



Monitoring lineage information

Learn how you can visualize the lineage between producers and consumers.

To check which topics a producer is producing to, and which consumers consume from those topics, go to the Overview page and click on a single producer on the Producer pane. For example, click producer_1, as shown in the following image:

W.	Overview										
63	Producers 4 of 9	• Brokers 3 of 3				× ~				•	
≡										O 30 m	ninutes 👻
	Producers (4)								Consumer	Groups (2)	
•	ACTIVE (4) PASSIVE (0) ALL MESSAGES ¢ CruiseControlMatriceRenor 50k	heartbeats	172 KB		1.8k		۹	~	ACTIVE (2)	PASSIVE (0)	ALL LAG ¢
=	connector-producer-Mirror 1.8k	connect-status					Q		group_1		0
₽ ;	Producer: producer_1 MESSAGES 91 PROFILE FILTER	connect-offsets					٩	~			
	•	a_topic	21 KB	15 KB	182	2	۹	~ ~)		
	0	CruiseControlMetrics	533 KB	533 KB	50k		٩	~			

After you click producer_1, you can see that it produces to a topic called a_topic, and that both consumer groups (group_1 and group_2) consume from that topic.

141	Overview	1		1 /	U	1- /			Cluster: Cluster
- 68	Producers 4 of 9	• Brokers 3 of 3				×			mer Groups of 4
16	TOPICS (5) BROKERS (3)								⊙ 30 minutes -
•	ACTIVE (4) PASSIVE (0) ALL MESSAGES \$	heartbeats	172 KB		1.8k		۹	~	ACTIVE (2) PASSIVE (0) ALL LAG \Rightarrow
⇒	connector-producer-Mirror 1.8k	connect-status					۹	~	Consumer Groups: group_1
&	producer_2 91	connect-offsets					۵	~	PROFILE FILTER
	0	a_topic	21 KB	15 KB	182	2	۹	~ •)
	0	CruiseControlMetrics	533 KB	533 KB	50k		۹	~	

This works the other way round as well. If you click on a single consumer group, you see what topics it consumes from and which producers produce to those topics. For example, click group_1, as shown in the following image:

After you click group_1 consumer group, you can see that it consumes from the topic called a_topic, and that two producers produce to that topic (producer_1 and producer_2).

If you are interested in a more detailed view and want to check the lineage information for a single partition, you can do that as well, however, it is important to note that the lineage information is provided exclusively for the last 30 minutes. For example, click P3, as shown in the following image:

Het	Overview												luster
	Producers (4)												
° 48 ≅	ACTIVE (4) PASSIVE (0) ALL MESSAGES \$	Ç	heartbeats		172 KB		1.8k		۹		~	ACTIVE (2) PASSIVE (0)	ALL LAG \$
	connector-producer-Mirror 1.8k	Ç	connect-stat	us					۹		~	group_1 group_2	0
•)	producer_2 91	¢	connect-offs	sets					۹		~		
Д Т		0	a_topic		21 KB	15 KB	182	2	۹		^		
A													
		- 1	●16 P0		Topic Lineag	a_topic - P3	recently						
			✓18 P1		DATA I	N 4800					•		
		1	1 4 P2		DATA C	DUT 4204	RE						
		4	16 P3	5 KB in	4 KB out					18	J		
		1	✓18 P4		3 KB out	ALL PARTITION	s						

After you click P3 partition in the topic called a_topic, you can see that producer_1 and producer_2 produce to that partition, and group_1 and group_2 consume from it.

If you click the All Partitions button, you are shown the lineage information for every partition in a single topic.

W t	Overview										
8 9	Producers (4)		NAME ¢	DATA IN \$		MESSAGES IN ¢		Q	=	~	Consumer Groups (2) ACTIVE (2) PASSIVE (0) ALL LAG ©
	CruiseControlMetricsRepo 50k connector-producer-Mirror 1.8k producer_1 91	Ø	connect-status					۹		~	group_1 0 group_2 0
۲	producer_2 91	0	connect-offsets					۹		~	
11 R; A		0	a_topic Replication Factor: (2) InSync Replica	21 I Topic: a Lineage is active clie s: 10 (PROFILE	L_topic shown only for the nts! FILTER EXPLO	recently RE	2	Q		^	
			 P0 4 KB in 18 P1 4 KB in 	3 KB out 3 KB out					14		
			✔14 P2 3 KB in	2 KB out					18		
		1	●16 РЗ 5КВ in	4 KB out					18		
		7	•18 P4 5 KB in	3 KB out					- 14		

You can also access the lineage information from the experimental endpoints. You can find the endpoints at the *Streams Messaging Manager REST API Reference*.

Related Information

Streams Messaging Manager REST API Reference