

# Kafka Monitor & Services Impact& Manual Repeated work with risk& Runbook(decentralization

Kafka Monitor(alerts), when alerts are received

How to quickly evaluate the impact of the online service & notify the service owner

How to locate where the issue happens, which component has been influenced, the upstream, downstream, or the connect/mirror maker?

Problems	Potential Solution
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Alerts noise, service impact, who will be impacted in these streams?

Top Component of Team:OPS				
Component	Triggered Email	Task Num	Triggered Task Num	Acked Task Num
System	<div><div></div></div> 115	16	3	
Network	<div><div></div></div> 11	84	4	1
Kafka	<div><div></div></div> 1186	883	50	12
K8S	<div><div></div></div> 1113	73	14	
FOC	<div><div></div></div> 11	38	4	
DB	<div><div></div></div> 585	76	17	7
AWS	<div><div></div></div> 223	3	1	1
Aerospike	<div><div></div></div> 9	26	2	

PQM Monitor / Alerts Summary Details				
Team	OPS	severity	CRIT + WARN	owner
All	Tabs	Component:Kafka		
Top Tasks for (CRIT + WARN Level)				
Task	Owner	Team	Triggered Email	
FAIL_PRD_Kafka-SRE_Kafka_NONE_fw_dp_kafka_connect_aim_log_s3_backup_topic_fw_dp_aim_core_b...	yuyang	OPS	<div><div></div></div> 987	
FAIL_PRD_Kafka-SRE_Kafka_NONE_fw_dp_kafka_connect_aim_log_s3_backup_topic_fw_dp_aim_core_b...	yuyang	OPS	<div><div></div></div> 364	
FAIL_PRD_Kafka-SRE_Kafka_USE1-S3AIMBACKUP_Connect_Kafka Connect Task Number Mismatch	yuyang	OPS	<div><div></div></div> 62	
FAIL_PRD_Kafka-SRE_Kafka_AWS-S3BACKUP_Connect_Kafka Connect Task Number Mismatch	yuyang	OPS	<div><div></div></div> 51	
WARN_COMMONPRD_Kafka-SRE_Kafka_AWS_PRD_Kafka-Common-LocalKafka-ORE_Disk Bandwidth util...	yuyang	OPS	<div><div></div></div> 40	
FAIL_PRD_Kafka-SRE_Kafka_NONE_fw_dp_kafka_connect_usw2_center_fod_topic_fw_ads_fod_in_pushe...	yuyang	OPS	<div><div></div></div> 23	
FAIL_PRD_Kafka-SRE_Kafka_NONE_fw_dp_kafka_connect_usw2_center_fod_topic_fw_ads_fod_in_pushe...	yuyang	OPS	<div><div></div></div> 19	
FAIL_PRD_Kafka-SRE_Kafka_target_cluster_name_MM-USW2-FC_Kafka MirrorMaker huge latency	yuyang	OPS	<div><div></div></div> 17	
FAIL_PRD_Kafka-SRE_Kafka_NONE_fw_dp_kafka_connect_usw2_center_Dr_Strange_topic_fw_ads_deliv...	yuyang	OPS	<div><div></div></div> 17	
FAIL_PRD_Kafka-SRE_Kafka_NONE_fw_dp_kafka_connect_usw2_center_Dr_Strange_topic_fw_ads_deliv...	yuyang	OPS	<div><div></div></div> 16	
FAIL_PRD_Kafka-SRE_Kafka_USE1-RAWLOG_Kafka not all replicas in-sync	yuyang	OPS	<div><div></div></div> 11	
FAIL_SSPR_Kafka-SRE_Kafka_AWS_PRD_Kafka-ELK-GlobalKafka-VIR_EC2 disk usage	yuyang	OPS	<div><div></div></div> 10	
FAIL_PRD_Kafka-SRE_Kafka_NONE_fw_dp_kafka_connect_usw2_center_Dr_MirrorMaker_Kafka consu...	yuyang	OPS	<div><div></div></div> 10	
FAIL_PRD_Kafka-SRE_Kafka_USE2-LOCAL_Kafka not all replicas in-sync	yuyang	OPS	<div><div></div></div> 8	
FAIL_PRD_Kafka-SRE_Kafka_NONE_connect-sink_kafka_global-s3_dp_delayed_impression_topic_fw_dp...	yuyang	OPS	<div><div></div></div> 8	
WARN_PRD_Kafka-SRE_Kafka_AWS_PRD_Kafka-MatchedLog-GlobalKafka-VIR_EC2 CPU load	yuyang	OPS	<div><div></div></div> 7	
FAIL_PRD_Kafka-SRE_Kafka_USW2-CENTER_Connect_Kafka Connect huge latency	yuyang	OPS	<div><div></div></div> 6	
FAIL_PRD_Kafka-SRE_Kafka_AWS_PRD_Kafka-RawLog-GlobalKafka-VIR_KafkaBroker port	yuyang	OPS	<div><div></div></div> 6	
WARN_ADSPRD_Kafka-SRE_Kafka_AWS_PRD_Kafka-RawLog-LocalKafka-OHI-ADS_Disk Bandwidth utiliz...	yuyang	OPS	<div><div></div></div> 5	

```
#!/bin/bash
set -e

# Kafka cluster name
KAFKA_CLUSTER=prod-kafka

# Kafka broker list
KAFKA_BROKERS=$(cat /dev/urandom | tr -dc 'a-z0-9' | fold -n 100 | xargs | sha256sum | fold -n 100 | xargs | tr ' ' '\n')

# Kafka topic name
KAFKA_TOPIC=ads-logs

# Kafka log retention
KAFKA_RETENTION=720

# Kafka log cleanup
KAFKA_CLEANUP=$(cat /dev/urandom | tr -dc 'a-z0-9' | fold -n 100 | xargs | sha256sum | fold -n 100 | xargs | tr ' ' '\n')

# Kafka log retention
KAFKA_RETENTION=720

# Kafka log cleanup
KAFKA_CLEANUP=$(cat /dev/urandom | tr -dc 'a-z0-9' | fold -n 100 | xargs | sha256sum | fold -n 100 | xargs | tr ' ' '\n')

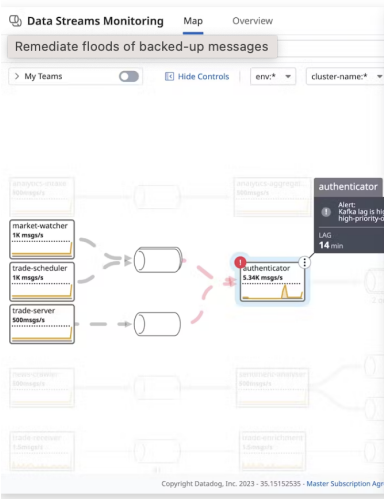
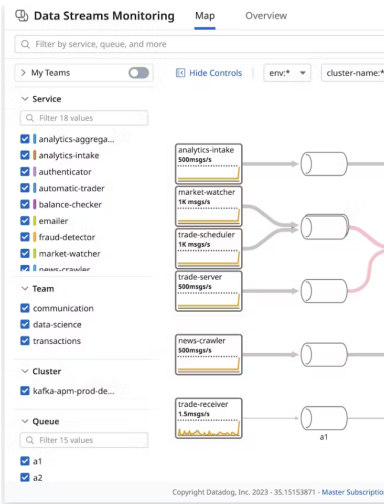
# Kafka log retention
KAFKA_RETENTION=720

# Kafka log cleanup
KAFKA_CLEANUP=$(cat /dev/urandom | tr -dc 'a-z0-9' | fold -n 100 | xargs | sha256sum | fold -n 100 | xargs | tr ' ' '\n')
```

Manual Repeated work with risk/ Standardization

- Aggregate the alerts
- PQM | FOC stream monitor

Datadog example <https://www.datadoghq.com>



- Ad hoc cmd in FOC with peer review, 1 volume,

e.g. 2023 ADS Local Clusters Rebalanc

EBS Encryption Plan

- Risk control and user-friendly with new

Runbook(decentralization)/ Standardization	<ul style="list-style-type: none"><li>• Share Knowledge with dev, sre.</li><li>• Knowledge updated</li><li>• collect every piece of chunk together, t</li></ul>
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Notes:

Runbook for daily operation/alert handling

0. What kind of work should we hand over? 50%-50%, should Bj keep the priority of the so-called important work?

- 1. Throttle, e.g. bootstrapping && reassigning
- 2. Scale-out Kafka cluster(use the automation tool left by the data team dev)

after adding more hosts in the cluster, Kafka SRE needs to reassign topics for the cluster and needs to do the throttle.

the throttle needs to be calculated according to the current online traffic value in that no impact on the existing traffic. the throttle value could be treated as a x value, f(x).

Now , we do it manually every time with cmd.

[2023 ADS Local Clusters Rebalance](#)

Alert

Overview

<https://pqm.fwmrm.net/d/rVpkUpOGk/alerts-summary-details?orgId=1&var-team=OPS&var-severity=CRIT&var-severity=WARN&var-owner=All&var-tags=Component:Kafka>

<https://pqm.fwmrm.net/d/rVpkUpOGk/alerts-summary-details?from=now-7d&to=now&var-team=OPS&var-severity=CRIT&var-severity=WARN&var-owner=All&var-tags=Component:Kafka&viewPanel=1544&orgId=1>

Opsgenie (After aggregated)

<https://freewheel.app.opsgenie.com/reports/main>

PQM( Before aggregated)

<input type="checkbox"/>	#53364	<span>P4</span> [WARN][PRD][OPS][Kafka]Alert for FAIL_PRD_Kafka-	chenlei	CLOSED
	x89	SRE_Kafka_NONE_fw_dp_kafka_connect_aim_log_s3_backup_topic_fw_dp_aim_core_binlog_K		
		T3_OPS_MRM_SRE_Engineers		2024-1-10 上午11:40 (GMT+08:00)