Kafka REST API SwaggerUI

Table of Contents

1.	Overview	. 1
	1.1. Version information	. 1
	1.2. Contact information	. 1
	1.3. URI scheme	. 1
	1.4. Tags	. 1
2.	Chapter of manual content 1	. 2
	2.1. Sub chapter	. 2
3.	Chapter of manual content 2	. 3
4.	Resources	. 4
	4.1. Collector-controller	. 4
	4.1.1. Fetch all JMX metric data	. 4
	4.1.2. Fetch JMX metric data with query filter. You can get the query filter template through the	4
	API /jmx/v2/filters.	
	4.1.3. List the query filter templates with the filterKey. If filterKey is set to empty, it will return al	l 5
	the templates.	
	4.2. Kafka-controller	. 6
	4.2.1. List brokers in this cluster	. 6
	4.2.2. Get the message from the offset of the partition in the topic, decoder is not supported yet .	. 7
	4.2.3. Delete old Consumer Group	. 7
	4.2.4. getLastCommitTimestamp	. 8
	4.2.5. Reset consumer group offset, earliest/latest can be used	. 9
	4.2.6. List all consumer groups from zk and kafka	10
	4.2.7. Describe consumer groups, showing lag and offset, may be slow if multi topic are listened	11
	4.2.8. Get the topics involved of the specify consumer group	12
	4.2.9. Describe consumer groups by topic, showing lag and offset	12
	4.2.10. Check the cluster health	13
	4.2.11. Add a partition to the topic	14
	4.2.12. Check the partition reassignment process	14
	4.2.13. Execute the partition reassignment	15
	4.2.14. Generate plan for the partition reassignment	16
	4.2.15. List topics	17
	4.2.16. Create a topic	17
	4.2.17. Describe a topic by fetching the metadata and config	18
	4.2.18. Delete a topic (you should enable topic deletion	19
	4.2.19. Create topic configs	19
	4.2.20 Get tonic configs	20

	4.2.21. Update topic configs	. 21
	4.2.22. Delete topic configs	. 22
	4.2.23. Get topic config by key	. 22
	4.2.24. Delete a topic config by key	. 23
	4.2.25. Create a topic config by key	. 24
	4.2.26. Update a topic config by key	. 25
	4.2.27. Tell if a topic exists	. 26
	4.2.28. Write a message to the topic, for testing purpose	. 26
	4.2.29. List topics Brief	. 27
	4.3. User-controller	. 27
	4.3.1. Add user	. 28
	4.3.2. Get user list	. 28
	4.3.3. Modify user information	. 29
	4.3.4. Delete user	. 29
	4.4. Zookeeper-controller	. 30
	4.4.1. Get the connection state of zookeeper	. 30
	4.4.2. Get the environment information of zookeeper	. 31
	4.4.3. List a zookeeper path	. 31
	4.4.4. Get the service state of zookeeper	. 32
5.	Definitions	. 34
	5.1. AddPartition	. 34
	5.2. BrokerInfo	. 34
	5.3. ConsumerGroupDesc	. 34
	5.4. GeneralResponse	. 35
	5.5. HashMap«string,object»	. 35
	5.6. HealthCheckResult	. 35
	5.7. HostAndPort	. 36
	5.8. JMXConfiguration	. 36
	5.9. JMXFilter	. 36
	5.10. JMXMetricData	. 37
	5.11. JMXMetricDataV1	. 37
	5.12. JMXQuery	. 37
	5.13. Map«int,long»	. 38
	5.14. Pattern	. 38
	5.15. ReassignWrapper	. 38
	5.16. TopicAndPartition	. 38
	5.17. TopicBrief	. 38
	5.18. TopicDetail	. 39

5.19. TopicMeta	. 39
5.20. TopicPartitionInfo	. 39
5.21. User	. 40
5.22. ZkServerClient	. 40
5.23. ZkServerEnvironment	. 41
5.24. ZkServerStat	. 41

Chapter 1. Overview

Kafka REST API SwaggerUI

1.1. Version information

Version : 0.1.0

1.2. Contact information

Contact: gnuhpc

Contact Email: gnuhpc@gmail.com

1.3. URI scheme

Host: localhost:8080

BasePath:/

1.4. Tags

• collector-controller: Rest API for Collecting JMX Metric Data

• kafka-controller : Kafka Controller

• user-controller: Security User Management Controller.

• zookeeper-controller: Zookeeper Controller

Chapter 2. Chapter of manual content 1

This is some dummy text

2.1. Sub chapter

Dummy text of sub chapter

Chapter 3. Chapter of manual content 2

This is some dummy text

Chapter 4. Resources

4.1. Collector-controller

Rest API for Collecting JMX Metric Data

4.1.1. Fetch all JMX metric data

GET /jmx/v1

Parameters

Туре	Name	Description	Schema
Query	jmxurl optional	Parameter jmxurl should be a comma-separated list of {IP:Port} or set to 'default'	string

Responses

HTTP Code	Description	Schema
200	OK	< JMXMetricDataV1 > array
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.1.2. Fetch JMX metric data with query filter. You can get the query filter template through the API /jmx/v2/filters.

POST /jmx/v2

Parameters

Туре	Name	Description	Schema
Query	jmxurl optional	Parameter jmxurl should be a comma-separated list of {IP:Port} or set to 'default'	string
Body	jmxQuery required	jmxQuery	JMXQuery

Responses

HTTP Code	Description	Schema
200	OK	< JMXMetricData > array
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.1.3. List the query filter templates with the filterKey. If filterKey is set to empty, it will return all the templates.

GET /jmx/v2/filters

Parameters

Туре	Name	Description	Schema
Query	filterKey required	filterKey	string

HTTP Code	Description	Schema
200	OK	< string, object > map
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

application/json

Produces

• /

4.2. Kafka-controller

Kafka Controller

4.2.1. List brokers in this cluster

GET /kafka/brokers

Responses

HTTP Code	Description	Schema
200	OK	< BrokerInfo > array
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.2.2. Get the message from the offset of the partition in the topic, decoder is not supported yet

GET /kafka/consumer/{topic}/{partition}/{offset}

Parameters

Туре	Name	Description	Schema
Path	offset required	offset	integer(int64)
Path	partition required	partition	integer(int32)
Path	topic required	topic	string
Query	decoder optional	decoder	string

Responses

HTTP Code	Description	Schema
200	OK	string
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.2.3. Delete old Consumer Group

DELETE /kafka/consumergroup/{consumergroup}

Parameters

Type	Name	Description	Schema
Path	consumergro up required	consumergroup	string

Responses

HTTP Code	Description	Schema
200	OK	GeneralResponse
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content

Consumes

• application/json

Produces

• /

${\bf 4.2.4.}~ get Last Commit Time stamp$

GET /kafka/consumergroup/{consumergroup}/{type}/topic/{topic}/lastcommittime

Parameters

Type	Name	Description	Schema
Path	consumergro up required	consumergroup	string
Path	topic required	topic	string
Path	type required	type	enum (NEW, OLD)

HTTP Code	Description	Schema
200	OK	< string, < string, integer(int64) > map > map
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

• application/json

Produces

• /

4.2.5. Reset consumer group offset, earliest/latest can be used

PUT /kafka/consumergroup/{consumergroup}/{type}/topic/{topic}/{partition}/{offset}

Parameters

Type	Name	Description	Schema
Path	consumergro up required	consumergroup	string
Path	offset required	offset	string
Path	partition required	partition	integer(int32)
Path	topic required	topic	string
Path	type required	type	enum (NEW, OLD)

HTTP Code	Description	Schema
200	OK	GeneralResponse
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

application/json

Produces

• /

4.2.6. List all consumer groups from zk and kafka

GET /kafka/consumergroups

Parameters

Туре	Name	Description	Schema
Query	topic optional	topic	string
Query	type optional	type	enum (NEW, OLD)

HTTP Code	Description	Schema
200	OK	< string, < string > array > map
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

application/json

Produces

• /

4.2.7. Describe consumer groups, showing lag and offset, may be slow if multi topic are listened

GET /kafka/consumergroups/{consumerGroup}/{type}

Parameters

Туре	Name	Description	Schema
Path	consumerGro up required	consumerGroup	string
Path	type required	type	enum (NEW, OLD)

Responses

HTTP Code	Description	Schema
200	OK	< string, < ConsumerGroupDe sc > array > map
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.2.8. Get the topics involved of the specify consumer group

GET /kafka/consumergroups/{consumerGroup}/{type}/topic

Parameters

Туре	Name	Description	Schema
Path	consumerGro up required	consumerGroup	string
Path	type required	type	enum (NEW, OLD)

Responses

HTTP Code	Description	Schema
200	OK	< string > array
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.2.9. Describe consumer groups by topic, showing lag and offset

 ${\tt GET\ /kafka/consumergroups/\{consumerGroup\}/\{type\}/topic/\{topic\}}$

Parameters

Туре	Name	Description	Schema
Path	consumerGro up required	consumerGroup	string

Туре	Name	Description	Schema
Path	topic required	topic	string
Path	type required	type	enum (NEW, OLD)

Responses

HTTP Code	Description	Schema
200	OK	<pre></pre>
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.2.10. Check the cluster health.

GET /kafka/health

HTTP Code	Description	Schema
200	OK	HealthCheckResult
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

application/json

Produces

• /

4.2.11. Add a partition to the topic

POST /kafka/partitions/add

Parameters

Туре	Name	Description	Schema
Body	addPartition required	addPartition	AddPartition

Responses

HTTP Code	Description	Schema
200	OK	TopicMeta
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

_ /

4.2.12. Check the partition reassignment process

PUT /kafka/partitions/reassign/check

Parameters

Туре	Name	Description	Schema
Body	reassignStr required	reassignStr	string

Responses

HTTP Code	Description	Schema
-1	Reassignment Failed	No Content
0	Reassignment In Progress	No Content
1	Reassignment Completed	No Content
200	OK	< string, integer(int32) > map
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.2.13. Execute the partition reassignment

PUT /kafka/partitions/reassign/execute

Parameters

Туре	Name	Description	Schema
Body	reassignStr required	reassignStr	string

Responses

HTTP Code	Description	Schema
200	OK	< string, integer(int32) > map
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.2.14. Generate plan for the partition reassignment

POST /kafka/partitions/reassign/generate

Parameters

Туре	Name	Description	Schema
Body	reassignWrap per required	reassignWrapper	ReassignWrapper

HTTP Code	Description	Schema
200	OK	< string > array
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

application/json

Produces

• /

4.2.15. List topics

GET /kafka/topics

Responses

HTTP Code	Description	Schema
200	OK	< string > array
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.2.16. Create a topic

POST /kafka/topics/create

Parameters

Туре	Name	Description	Schema
Query	reassignStr optional	reassignStr	string
Body	topic required	topic	TopicDetail

Responses

HTTP Code	Description	Schema
201	Created	TopicMeta
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.2.17. Describe a topic by fetching the metadata and config

GET /kafka/topics/{topic}

Parameters

Туре	Name	Description	Schema
Path	topic required	topic	string

Responses

HTTP Code	Description	Schema
200	OK	TopicMeta
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.2.18. Delete a topic (you should enable topic deletion

DELETE /kafka/topics/{topic}

Parameters

Туре	Name	Description	Schema
Path	topic required	topic	string

Responses

HTTP Code	Description	Schema
200	OK	GeneralResponse
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content

Consumes

• application/json

Produces

• /

4.2.19. Create topic configs

POST /kafka/topics/{topic}/conf

Parameters

Туре	Name	Description	Schema
Path	topic required	topic	string

Туре	Name	Description	Schema
Body	prop required	prop	< string, object > map

Responses

HTTP Code	Description	Schema
200	OK	< string, object > map
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.2.20. Get topic configs

GET /kafka/topics/{topic}/conf

Parameters

Туре	Name	Description	Schema
Path	topic required	topic	string

HTTP Code	Description	Schema
200	OK	< string, object > map
401	Unauthorized	No Content

HTTP Code	Description	Schema
403	Forbidden	No Content
404	Not Found	No Content

application/json

Produces

• /

4.2.21. Update topic configs

PUT /kafka/topics/{topic}/conf

Parameters

Туре	Name	Description	Schema
Path	topic required	topic	string
Body	prop required	prop	< string, object > map

Responses

HTTP Code	Description	Schema
200	OK	< string, object > map
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.2.22. Delete topic configs

DELETE /kafka/topics/{topic}/conf

Parameters

Туре	Name	Description	Schema
Path	topic required	topic	string
Body	delProps required	delProps	< string > array

Responses

HTTP Code	Description	Schema
200	OK	< string, object > map
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content

Consumes

• application/json

Produces

• /

4.2.23. Get topic config by key

GET /kafka/topics/{topic}/conf/{key}

Parameters

Туре	Name	Description	Schema
Path	key required	key	string
Path	topic required	topic	string

Responses

HTTP Code	Description	Schema
200	OK	< string, object > map
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.2.24. Delete a topic config by key

DELETE /kafka/topics/{topic}/conf/{key}

Parameters

Туре	Name	Description	Schema
Path	key required	key	string
Path	topic required	topic	string

HTTP Code	Description	Schema
200	OK	boolean
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content

application/json

Produces

• /

4.2.25. Create a topic config by key

POST /kafka/topics/{topic}/conf/{key}={value}

Parameters

Туре	Name	Description	Schema
Path	key required	key	string
Path	topic required	topic	string
Path	value required	value	string

HTTP Code	Description	Schema
200	OK	< string, object > map
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

application/json

Produces

• /

4.2.26. Update a topic config by key

PUT /kafka/topics/{topic}/conf/{key}={value}

Parameters

Type	Name	Description	Schema
Path	key required	key	string
Path	topic required	topic	string
Path	value required	value	string

Responses

HTTP Code	Description	Schema
200	OK	< string, object > map
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.2.27. Tell if a topic exists

GET /kafka/topics/{topic}/exist

Parameters

Туре	Name	Description	Schema
Path	topic required	topic	string

Responses

HTTP Code	Description	Schema
200	OK	boolean
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.2.28. Write a message to the topic, for testing purpose

POST /kafka/topics/{topic}/write

Parameters

Туре	Name	Description	Schema
Path	topic required	topic	string
Body	message required	message	string

Responses

HTTP Code	Description	Schema
201	Created	GeneralResponse
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• text/plain

Produces

• /

4.2.29. List topics Brief

GET /kafka/topicsbrief

Responses

HTTP Code	Description	Schema
200	OK	< TopicBrief > array
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.3. User-controller

Security User Management Controller.

4.3.1. Add user.

POST /users

Parameters

Туре	Name	Description	Schema
Body	user required	user	User

Responses

HTTP Code	Description	Schema
200	OK	GeneralResponse
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.3.2. Get user list.

GET /users

HTTP Code	Description	Schema
200	OK	< string > array
401	Unauthorized	No Content
403	Forbidden	No Content

HTTP Code	Description	Schema
404	Not Found	No Content

application/json

Produces

• /

4.3.3. Modify user information.

PUT /users

Parameters

Туре	Name	Description	Schema
Body	user required	user	User

Responses

HTTP Code	Description	Schema
200	OK	GeneralResponse
201	Created	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

• application/json

Produces

• /

4.3.4. Delete user.

DELETE /users/{username}

Parameters

Туре	Name	Description	Schema
Path	username required	username	string

Responses

HTTP Code	Description	Schema
200	OK	GeneralResponse
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content

Consumes

• application/json

Produces

• /

4.4. Zookeeper-controller

Zookeeper Controller

4.4.1. Get the connection state of zookeeper

GET /zk/connstate

HTTP Code	Description	Schema
200	OK	string
401	Unauthorized	No Content

HTTP Code	Description	Schema
403	Forbidden	No Content
404	Not Found	No Content

application/json

Produces

• /

4.4.2. Get the environment information of zookeeper

GET /zk/env

Responses

HTTP Code	Description	Schema
200	OK	< string, ZkServerEnvironm ent > map
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.4.3. List a zookeeper path

GET /zk/ls/{path}

Parameters

Туре	Name	Description	Schema
Path	path required	path	string

Responses

HTTP Code	Description	Schema
200	OK	< string > array
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

4.4.4. Get the service state of zookeeper

GET /zk/stat

Responses

HTTP Code	Description	Schema
200	OK	< string, ZkServerStat > map
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

application/json

Produces

• /

Chapter 5. Definitions

5.1. AddPartition

Name	Schema
numPartitionsAdded optional	integer(int32)
replicaAssignment optional	string
topic optional	string

5.2. BrokerInfo

Name	Schema
endPoints optional	< string > array
host optional	string
id optional	integer(int32)
jmxPort optional	integer(int32)
port optional	integer(int32)
rack optional	string
securityProtocol optional	object
startTime optional	string(date-time)
version optional	integer(int32)

5.3. ConsumerGroupDesc

Name	Schema
consumerId optional	string
currentOffset optional	integer(int64)
groupName optional	string
host optional	string
lag optional	integer(int64)
logEndOffset optional	integer(int64)
partitionId optional	integer(int32)
state optional	enum (RUNNING, PENDING)
topic optional	string
type optional	enum (NEW, OLD)

5.4. GeneralResponse

Name	Schema
msg optional	string
state optional	enum (success, failure)

5.5. HashMap«string,object»

Type: < string, object > map

5.6. HealthCheckResult

Name	Description	Schema
msg optional		string
status optional		string
timestamp optional	Example: "yyyy-MM-dd HH:mm:ss"	string

5.7. HostAndPort

Name	Schema
hostText optional	string
port optional	integer(int32)

5.8. JMXConfiguration

Name	Schema
exclude optional	JMXFilter
include optional	JMXFilter

5.9. JMXFilter

Name	Schema
attribute optional	object
beanNames optional	< string > array
beanRegexes optional	< Pattern > array
domain optional	string
domainRegex optional	Pattern

Name	Schema
emptyBeanName optional	boolean
filter optional	< string, object > map

5.10. JMXMetricData

Name	Description	Schema
collected optional		boolean
host optional		string
metrics optional		<pre> < HashMap«string,obje ct» > array</pre>
msg optional		string
timestamp optional	Example: "yyyy-MM-dd HH:mm:ss"	string

5.11. JMXMetricDataV1

Name	Description	Schema
collected optional		boolean
host optional		string
mbeanInfo optional		object
msg optional		string
timestamp optional	Example: "yyyy-MM-dd HH:mm:ss"	string

5.12. JMXQuery

Name	Schema
filters optional	< JMXConfiguration > array

5.13. Map«int,long»

Type: < string, integer(int64) > map

5.14. Pattern

Name	Schema
cursor optional	integer(int32)

5.15. ReassignWrapper

Name	Schema
brokers optional	< integer(int32) > array
topics optional	< string > array

5.16. TopicAndPartition

Type: object

5.17. TopicBrief

Name	Schema
isrRate optional	number(double)
numPartition optional	integer(int32)
topic optional	string

5.18. TopicDetail

Name	Schema
factor optional	integer(int32)
name optional	string
partitions optional	integer(int32)
prop optional	< string, object > map

5.19. TopicMeta

Name	Schema
partitionCount optional	integer(int32)
replicationFactor optional	integer(int32)
topicCustomConfigs optional	< string, object > map
topicName optional	string
topicPartitionInfos optional	< TopicPartitionInfo > array

5.20. TopicPartitionInfo

Name	Schema
endOffset optional	integer(int64)
in_sync optional	boolean
isr optional	< string > array
leader optional	string

Name	Schema
messageAvailable optional	integer(int64)
partitionId optional	integer(int32)
replicas optional	< string > array
startOffset optional	integer(int64)

5.21. User

Name	Schema
password optional	string
role optional	string
username optional	string

5.22. ZkServerClient

Name	Schema
host optional	string
ops optional	integer(int32)
port optional	integer(int32)
queued optional	integer(int32)
received optional	integer(int32)
sent optional	integer(int32)

5.23. ZkServerEnvironment

Name	Schema
attributes optional	< string, string > map

5.24. ZkServerStat

Name	Schema
avgLatency optional	integer(int32)
buildDate optional	string
clients optional	< ZkServerClient > array
connections optional	integer(int32)
maxLatency optional	integer(int32)
minLatency optional	integer(int32)
mode optional	enum (Leader, Follower, Observer)
nodes optional	integer(int32)
outstanding optional	integer(int32)
received optional	integer(int32)
sent optional	integer(int32)
version optional	string
zxId optional	string