
Amazon MSK

API Reference 2.0



Amazon MSK: API Reference 2.0

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Table of Contents

Amazon Managed Streaming for Apache Kafka API Reference 2.0	1
Operations	2
Resources	3
Cluster	3
URI	3
HTTP methods	3
Schemas	4
Properties	6
See also	20
Clusters	20
URI	20
HTTP methods	21
Schemas	23
Properties	27
See also	45
Document History	46
AWS glossary	47

Amazon Managed Streaming for Apache Kafka API Reference 2.0

Welcome to API Reference 2.0. This API reference describes three new Amazon MSK operations: `CreateClusterV2`, `ListClustersV2`, and `DescribeClusterV2`. We recommend that you use these operations instead of the `CreateCluster`, `ListClusters`, and `DescribeCluster` that are described in [Amazon MSK API Reference 1.0](#).

Operations

The Amazon Managed Streaming for Apache Kafka REST API includes the following operations.

- [CreateClusterV2 \(p. 22\)](#)

Creates a serverless or provisioned cluster.

- [DescribeClusterV2 \(p. 3\)](#)

Returns information about a cluster.

- [ListClustersV2 \(p. 21\)](#)

Lists all serverless and provisioned clusters.

Resources

The Amazon Managed Streaming for Apache Kafka REST API includes the following resources.

Topics

- [Cluster \(p. 3\)](#)
- [Clusters \(p. 20\)](#)

Cluster

Represents an Amazon MSK cluster.

URI

`/api/v2/clusters/clusterArn`

HTTP methods

GET

Operation ID: DescribeClusterV2

Returns information about a cluster.

Path parameters

Name	Type	Required	Description
<i>clusterArn</i>	String	True	ARN of the cluster to be described.

Responses

Status code	Response model	Description
200	DescribeClusterV2Response (HTTP)	Status Code 200: OK.
400	None	HTTP Status Code 400: Bad request due to incorrect input. Correct your request and then retry it.
401	None	HTTP Status Code 401: Unauthorized request. The provided credentials couldn't be validated.

Status code	Response model	Description
403	None	HTTP Status Code 403: Access forbidden. Correct your credentials and then retry your request.
404	None	HTTP Status Code 404: Resource not found due to incorrect input. Correct your request and then retry it.
429	None	HTTP Status Code 429: Limit exceeded. Resource limit reached.
500	None	HTTP Status Code 500: Unexpected internal server error. Retrying your request might resolve the issue.
503	None	HTTP Status Code 503: Service Unavailable. Retrying your request in some time might resolve the issue.

OPTIONS

Enable CORS by returning correct headers

Path parameters

Name	Type	Required	Description
<i>clusterArn</i>	String	True	ARN of the cluster to be described.

Responses

Status code	Response model	Description
200	None	200 response

Schemas

Response bodies

[DescribeClusterV2Response](#) schema

```
{
  "clusterInfo": {
    "clusterType": enum,
    "clusterArn": "string",
    "activeOperationArn": "string",
    "provisioned": {
```

```

"encryptionInfo": {
  "encryptionInTransit": {
    "inCluster": boolean,
    "clientBroker": enum
  },
  "encryptionAtRest": {
    "dataVolumeKMSKeyId": "string"
  }
},
"numberOfBrokerNodes": integer,
"zookeeperConnectString": "string",
"enhancedMonitoring": enum,
"zookeeperConnectStringTls": "string",
"clientAuthentication": {
  "sasl": {
    "iam": {
      "enabled": boolean
    },
    "scram": {
      "enabled": boolean
    }
  },
  "unauthenticated": {
    "enabled": boolean
  },
  "tls": {
    "certificateAuthorityArnList": [
      "string"
    ],
    "enabled": boolean
  }
},
"loggingInfo": {
  "brokerLogs": {
    "s3": {
      "bucket": "string",
      "prefix": "string",
      "enabled": boolean
    },
    "firehose": {
      "deliveryStream": "string",
      "enabled": boolean
    },
    "cloudWatchLogs": {
      "logGroup": "string",
      "enabled": boolean
    }
  }
},
"brokerNodeGroupInfo": {
  "clientSubnets": [
    "string"
  ],
  "instanceType": "string",
  "connectivityInfo": {
    "publicAccess": {
      "type": "string"
    }
  }
},
"securityGroups": [
  "string"
],
"brokerAZDistribution": enum,
"storageInfo": {
  "ebsStorageInfo": {
    "provisionedThroughput": {

```



```
        "volumeThroughput": integer,  
        "enabled": boolean  
    },  
    "volumeSize": integer  
  }  
},  
"openMonitoring": {  
  "prometheus": {  
    "nodeExporter": {  
      "enabledInBroker": boolean  
    },  
    "jmxExporter": {  
      "enabledInBroker": boolean  
    }  
  }  
},  
"currentBrokerSoftwareInfo": {  
  "configurationRevision": integer,  
  "kafkaVersion": "string",  
  "configurationArn": "string"  
},  
"creationTime": "string",  
"clusterName": "string",  
"serverless": {  
  "vpcConfigs": [  
    {  
      "securityGroupIds": [  
        "string"  
      ],  
      "subnetIds": [  
        "string"  
      ]  
    }  
  ],  
  "kafkaVersion": "string",  
  "clientAuthentication": {  
    "sasl": {  
      "iam": {  
        "enabled": boolean  
      }  
    }  
  }  
},  
"stateInfo": {  
  "code": "string",  
  "message": "string"  
},  
"state": enum,  
"currentVersion": "string",  
"tags": {  
  }  
}  
}
```

Properties

BrokerAZDistribution

The distribution of broker nodes across Availability Zones.

DEFAULT

BrokerLogs

Broker Logs details for cluster.

s3

S3 Log destination details.

Type: [S3 \(p. 17\)](#)
Required: False

firehose

Type: [Firehose \(p. 13\)](#)
Required: False

cloudWatchLogs

CloudWatch Log destination details.

Type: [CloudWatchLogs \(p. 9\)](#)
Required: False

BrokerNodeGroupInfo

Describes the setup to be used for the brokers.

clientSubnets

The list of subnets in the client VPC to connect to.

Type: Array of type string
Required: True

instanceType

The type of broker used for the cluster.

Type: string
Required: True
MinLength: 5
MaxLength: 32

connectivityInfo

Information about the cluster access configuration.

Type: [ConnectivityInfo \(p. 11\)](#)
Required: False

securityGroups

The security groups to attach to the ENIs for the broker nodes.

Type: Array of type string
Required: False

brokerAZDistribution

The distribution of broker nodes across Availability Zones.

Type: [BrokerAZDistribution \(p. 6\)](#)
Required: False

storageInfo

Data volume information.

Type: [StorageInfo \(p. 19\)](#)
Required: False

BrokerSoftwareInfo

Information about current software installed in the cluster.

configurationRevision

Revision of the configuration to use.

Type: integer
Required: False
Format: int64

kafkaVersion

The version of Apache Kafka to install and run on the cluster.

Type: string
Required: False

configurationArn

ARN of the configuration used on the cluster.

Type: string
Required: False

ClientAuthentication

Includes all client authentication information.

sasl

Details for ClientAuthentication using SASL.

Type: [Sasl \(p. 17\)](#)

Required: False

unauthenticated

Details for ClientAuthentication using no authentication.

Type: [Unauthenticated \(p. 19\)](#)

Required: False

tls

Details for ClientAuthentication using TLS.

Type: [Tls \(p. 19\)](#)

Required: False

ClientBroker

Client-broker encryption in transit setting.

TLS
TLS_PLAINTEXT
PLAINTEXT

CloudWatchLogs

CloudWatchLogs details for BrokerLogs.

logGroup

CloudWatch LogGroup where the logs will be delivered.

Type: string

Required: False

enabled

Broker logs for destination CW enabled or not.

Type: boolean

Required: True

Cluster

Returns information about a cluster.

clusterType

Type of the backend cluster.

Type: [ClusterType \(p. 11\)](#)

Required: False

clusterArn

The Amazon Resource Name (ARN) of the cluster.

Type: string
Required: False

activeOperationArn

Arn of active cluster operation.

Type: string
Required: False

provisioned

Properties of a provisioned cluster.

Type: [Provisioned \(p. 15\)](#)
Required: False

creationTime

The time when the cluster was created.

Type: string
Required: False

clusterName

The name of the cluster.

Type: string
Required: False

serverless

Properties of a serverless cluster.

Type: [Serverless \(p. 18\)](#)
Required: False

stateInfo

Includes information of the cluster state.

Type: [StateInfo \(p. 19\)](#)
Required: False

state

State of the cluster.

Type: [ClusterState \(p. 11\)](#)

Required: False

currentVersion

Current version of cluster.

Type: string

Required: False

tags

Tags attached to the cluster.

Type: object

Required: False

ClusterState

The state of an MSK cluster.

ACTIVE
CREATING
UPDATING
DELETING
FAILED
MAINTENANCE
REBOOTING_BROKER
HEALING

ClusterType

The type of backend cluster.

PROVISIONED
SERVERLESS

ConnectivityInfo

Broker access controls

publicAccess

Access control settings for brokers

Type: [PublicAccess \(p. 16\)](#)

Required: False

DescribeClusterV2Response

Returns information about a cluster.

clusterInfo

Cluster information

Type: [Cluster \(p. 9\)](#)

Required: False

EBSStorageInfo

Contains information about the EBS storage volumes that are attached to the brokers.

provisionedThroughput

EBS volume provisioned throughput information.

Type: [ProvisionedThroughput \(p. 16\)](#)

Required: False

volumeSize

The size of the EBS volumes for the data drive on each of the brokers in GiB.

Type: integer

Required: False

Minimum: 1

Maximum: 16384

EncryptionAtRest

Details for encryption at rest.

dataVolumeKMSKeyId

KMS key used for data volume encryption.

Type: string

Required: True

EncryptionInTransit

Details for encryption in transit.

inCluster

In-cluster encryption in transit setting.

Type: boolean

Required: False

clientBroker

Client-broker encryption in transit setting.

Type: [ClientBroker \(p. 9\)](#)

Required: False

EncryptionInfo

Includes all encryption related information.

encryptionInTransit

Details for encryption in transit.

Type: [EncryptionInTransit \(p. 12\)](#)

Required: False

encryptionAtRest

Details for encryption at rest.

Type: [EncryptionAtRest \(p. 12\)](#)

Required: False

EnhancedMonitoring

Controls level of cluster metrics Amazon pushes to customer's cloudwatch account.

DEFAULT
PER_BROKER
PER_TOPIC_PER_BROKER
PER_TOPIC_PER_PARTITION

Firehose

Firehose details for BrokerLogs.

deliveryStream

Firehose delivery stream where the logs will be delivered.

Type: string

Required: False

enabled

Broker logs for destination firehose enabled or not.

Type: boolean

Required: True

IAM

Details for SASL/IAM client authentication.

enabled

SASL/IAM authentication is enabled or not.

Type: boolean

Required: False

JmxExporter

JMX Exporter details.

enabledInBroker

JMX Exporter being enabled in broker.

Type: boolean

Required: True

LoggingInfo

Logging info details for the cluster.

brokerLogs

Broker Logs details.

Type: [BrokerLogs \(p. 7\)](#)

Required: True

NodeExporter

Node Exporter details.

enabledInBroker

Node Exporter being enabled in broker.

Type: boolean

Required: True

OpenMonitoring

JMX and Node monitoring for cluster.

prometheus

Prometheus details.

Type: [Prometheus \(p. 14\)](#)

Required: True

Prometheus

Prometheus details.

nodeExporter

Node Exporter details.

Type: [NodeExporter \(p. 14\)](#)
Required: False

jmxExporter

JMX Exporter details.

Type: [JmxExporter \(p. 14\)](#)
Required: False

Provisioned

Properties of a provisioned cluster.

encryptionInfo

Includes all encryption related information.

Type: [EncryptionInfo \(p. 13\)](#)
Required: False

numberOfBrokerNodes

The number of brokers to create in the cluster.

Type: integer
Required: False

zookeeperConnectString

The connection string to use to connect to zookeeper cluster on plaintext port.

Type: string
Required: False

enhancedMonitoring

This knob controls level of metrics pushed customer's cloudwatch account.

Type: [EnhancedMonitoring \(p. 13\)](#)
Required: False

zookeeperConnectStringTls

The connection string to use to connect to zookeeper cluster on Tls port.

Type: string
Required: False

clientAuthentication

Includes all client authentication information.

Type: [ClientAuthentication \(p. 8\)](#)

Required: False

loggingInfo

Logging Info details.

Type: [LoggingInfo \(p. 14\)](#)

Required: False

brokerNodeGroupInfo

Information about the brokers of the cluster.

Type: [BrokerNodeGroupInfo \(p. 7\)](#)

Required: False

openMonitoring

Open monitoring details.

Type: [OpenMonitoring \(p. 14\)](#)

Required: False

currentBrokerSoftwareInfo

Information about the version of the software that is deployed on the brokers of the cluster.

Type: [BrokerSoftwareInfo \(p. 8\)](#)

Required: False

ProvisionedThroughput

Contains information about provisioned throughput for the EBS storage volumes that are attached to the brokers.

volumeThroughput

Throughput value of the EBS volumes for the data drive on each broker in MiB per second.

Type: integer

Required: False

enabled

Whether provisioned throughput is turned on.

Type: boolean

Required: False

PublicAccess

Broker access controls

type

If public access is disabled, or if enabled the EIP provider

Type: string

Required: False

S3

S3 details for BrokerLogs.

bucket

Name of the bucket where the logs will be delivered.

Type: string

Required: False

prefix

prefix to the S3 bucket where the logs will be delivered.

Type: string

Required: False

enabled

Broker logs for destination S3 enabled or not.

Type: boolean

Required: True

Sasl

Details for client authentication using SASL.

iam

Details for ClientAuthentication using IAM.

Type: [IAM \(p. 13\)](#)

Required: False

scram

Details for SASL/SCRAM client authentication.

Type: [Scram \(p. 17\)](#)

Required: False

Scram

Details for SASL/SCRAM client authentication.

enabled

SASL/SCRAM authentication is enabled or not.

Type: boolean
Required: False

Serverless

Properties to create a serverless cluster

vpcConfigs

VPC configuration information

Type: Array of type [VpcConfig \(p. 20\)](#)
Required: True

kafkaVersion

The version of Apache Kafka for the serverless cluster.

Type: string
Required: False

clientAuthentication

Includes all client authentication related information.

Type: [ServerlessClientAuthentication \(p. 18\)](#)
Required: True

ServerlessClientAuthentication

Details for client authentication using SASL.

sasl

Details for ClientAuthentication using IAM.

Type: [ServerlessSasl \(p. 18\)](#)
Required: False

ServerlessSasl

Details for client authentication using SASL for Serverless Cluster.

iam

Details for ClientAuthentication using IAM for Serverless Cluster.

Type: [IAM \(p. 13\)](#)

Required: False

StateInfo

Includes information about the cluster state.

code

Code for cluster state.

Type: string

Required: False

message

Message for cluster state.

Type: string

Required: False

StorageInfo

Contains information about the storage volumes that are attached to the brokers.

ebsStorageInfo

EBS volume information.

Type: [EBSStorageInfo \(p. 12\)](#)

Required: False

Tls

The details of client authentication using TLS.

certificateAuthorityArnList

List of ACM CertificateAuthority ARNs.

Type: Array of type string

Required: False

enabled

Whether TLS authentication is turned on.

Type: boolean

Required: False

Unauthenticated

Details for allowing no client authentication.

enabled

Unauthenticated is enabled or not.

Type: boolean
Required: False

VpcConfig

Includes information about subnets and security groups for a VPC.

securityGroupIds

The security groups to attach to the ENIs for the broker nodes.

Type: Array of type string
Required: False

subnetIds

The list of subnets in the client VPC to connect to. Client subnets can't occupy the Availability Zone with ID use1-az3.

Type: Array of type string
Required: True

See also

For more information about using this API in one of the language-specific AWS SDKs and references, see the following:

DescribeClusterV2

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

Clusters

Represents the Amazon MSK clusters in an account.

URI

/api/v2/clusters

HTTP methods

GET

Operation ID: ListClustersV2

Lists all serverless and provisioned clusters.

Query parameters

Name	Type	Required	Description
nextToken	String	False	If the response of ListClusters is truncated, it returns a nextToken in the response. This nextToken should be sent in the subsequent request to ListClusters.
clusterNameFilter	String	False	Returns clusters starting with given name.
maxResults	String	False	Maximum number of clusters to fetch in one get request.
clusterTypeFilter	String	False	Returns clusters with the given type.

Responses

Status code	Response model	Description
200	ListClustersV2Response (p. 25)	HTTP Status Code 200: OK.
400	None	HTTP Status Code 400: Bad request due to incorrect input. Correct your request and then retry it.
401	None	HTTP Status Code 401: Unauthorized request. The provided credentials couldn't be validated.
403	None	HTTP Status Code 403: Access forbidden. Correct your credentials and then retry your request.
404	None	HTTP Status Code 404: Resource not found due to incorrect input. Correct your request and then retry it.

Status code	Response model	Description
429	None	HTTP Status Code 429: Limit exceeded. Resource limit reached.
500	None	HTTP Status Code 500: Unexpected internal server error. Retrying your request might resolve the issue.
503	None	HTTP Status Code 503: Service Unavailable. Retrying your request in some time might resolve the issue.

POST

Operation ID: CreateClusterV2

Creates a serverless or provisioned cluster.

Responses

Status code	Response model	Description
200	CreateClusterV2Response (p HTTP)	Status Code 200: OK.
400	None	HTTP Status Code 400: Bad request due to incorrect input. Correct your request and then retry it.
401	None	HTTP Status Code 401: Unauthorized request. The provided credentials couldn't be validated.
403	None	HTTP Status Code 403: Access forbidden. Correct your credentials and then retry your request.
404	None	HTTP Status Code 404: Resource not found due to incorrect input. Correct your request and then retry it.
409	None	HTTP Status Code 409: Conflict. This cluster name already exists. Retry your request with another name.
429	None	HTTP Status Code 429: Limit exceeded. Resource limit reached.
500	None	HTTP Status Code 500: Unexpected internal server error.

Status code	Response model	Description
503	None	Retrying your request might resolve the issue. HTTP Status Code 503: Service Unavailable. Retrying your request in some time might resolve the issue.

OPTIONS

Enable CORS by returning correct headers

Responses

Status code	Response model	Description
200	None	200 response

Schemas

Request bodies

POST schema

```
{
  "provisioned": {
    "encryptionInfo": {
      "encryptionInTransit": {
        "inCluster": boolean,
        "clientBroker": enum
      },
      "encryptionAtRest": {
        "dataVolumeKMSKeyId": "string"
      }
    },
    "numberOfBrokerNodes": integer,
    "configurationInfo": {
      "arn": "string",
      "revision": integer
    },
    "enhancedMonitoring": enum,
    "kafkaVersion": "string",
    "clientAuthentication": {
      "sasl": {
        "iam": {
          "enabled": boolean
        },
        "scram": {
          "enabled": boolean
        }
      },
      "unauthenticated": {
        "enabled": boolean
      }
    },
    "tls": {
      "certificateAuthorityArnList": [
```

```

        "string"
      ],
      "enabled": boolean
    }
  },
  "loggingInfo": {
    "brokerLogs": {
      "s3": {
        "bucket": "string",
        "prefix": "string",
        "enabled": boolean
      },
      "firehose": {
        "deliveryStream": "string",
        "enabled": boolean
      },
      "cloudWatchLogs": {
        "logGroup": "string",
        "enabled": boolean
      }
    }
  },
  "brokerNodeGroupInfo": {
    "clientSubnets": [
      "string"
    ],
    "instanceType": "string",
    "connectivityInfo": {
      "publicAccess": {
        "type": "string"
      }
    }
  },
  "securityGroups": [
    "string"
  ],
  "brokerAZDistribution": enum,
  "storageInfo": {
    "ebsStorageInfo": {
      "provisionedThroughput": {
        "volumeThroughput": integer,
        "enabled": boolean
      },
      "volumeSize": integer
    }
  },
  "openMonitoring": {
    "prometheus": {
      "nodeExporter": {
        "enabledInBroker": boolean
      },
      "jmxExporter": {
        "enabledInBroker": boolean
      }
    }
  },
  "clusterName": "string",
  "serverless": {
    "vpcConfigs": [
      {
        "securityGroupIds": [
          "string"
        ],
        "subnetIds": [
          "string"
        ]
      }
    ]
  }
}

```

```

    ]
  }
],
"clientAuthentication": {
  "sasl": {
    "iam": {
      "enabled": boolean
    }
  }
}
},
"tags": {
}
}

```

Response bodies

ListClustersV2Response schema

```

{
  "nextToken": "string",
  "clusterInfoList": [
    {
      "clusterType": enum,
      "clusterArn": "string",
      "activeOperationArn": "string",
      "provisioned": {
        "encryptionInfo": {
          "encryptionInTransit": {
            "inCluster": boolean,
            "clientBroker": enum
          },
          "encryptionAtRest": {
            "dataVolumeKMSKeyId": "string"
          }
        },
      },
      "numberOfBrokerNodes": integer,
      "zookeeperConnectString": "string",
      "enhancedMonitoring": enum,
      "zookeeperConnectStringTls": "string",
      "clientAuthentication": {
        "sasl": {
          "iam": {
            "enabled": boolean
          },
          "scram": {
            "enabled": boolean
          }
        },
        "unauthenticated": {
          "enabled": boolean
        },
        "tls": {
          "certificateAuthorityArnList": [
            "string"
          ],
          "enabled": boolean
        }
      }
    },
    "loggingInfo": {
      "brokerLogs": {
        "s3": {
          "bucket": "string",
          "prefix": "string",

```

```

        "enabled": boolean
    },
    "firehose": {
        "deliveryStream": "string",
        "enabled": boolean
    },
    "cloudWatchLogs": {
        "logGroup": "string",
        "enabled": boolean
    }
}
},
"brokerNodeGroupInfo": {
    "clientSubnets": [
        "string"
    ],
    "instanceType": "string",
    "connectivityInfo": {
        "publicAccess": {
            "type": "string"
        }
    },
    "securityGroups": [
        "string"
    ],
    "brokerAZDistribution": enum,
    "storageInfo": {
        "ebsStorageInfo": {
            "provisionedThroughput": {
                "volumeThroughput": integer,
                "enabled": boolean
            },
            "volumeSize": integer
        }
    },
    "openMonitoring": {
        "prometheus": {
            "nodeExporter": {
                "enabledInBroker": boolean
            },
            "jmxExporter": {
                "enabledInBroker": boolean
            }
        }
    },
    "currentBrokerSoftwareInfo": {
        "configurationRevision": integer,
        "kafkaVersion": "string",
        "configurationArn": "string"
    }
},
"creationTime": "string",
"clusterName": "string",
"serverless": {
    "vpcConfigs": [
        {
            "securityGroupIds": [
                "string"
            ],
            "subnetIds": [
                "string"
            ]
        }
    ]
},
"kafkaVersion": "string",

```

```
    "clientAuthentication": {
      "sasl": {
        "iam": {
          "enabled": boolean
        }
      }
    },
    "stateInfo": {
      "code": "string",
      "message": "string"
    },
    "state": enum,
    "currentVersion": "string",
    "tags": {
    }
  }
}
```

CreateClusterV2Response schema

```
{
  "clusterType": enum,
  "clusterArn": "string",
  "clusterName": "string",
  "state": enum
}
```

Properties

BrokerAZDistribution

The distribution of broker nodes across Availability Zones.

DEFAULT

BrokerLogs

Broker Logs details for cluster.

s3

S3 Log destination details.

Type: [S3 \(p. 41\)](#)
Required: False

firehose

Type: [Firehose \(p. 35\)](#)
Required: False

cloudWatchLogs

CloudWatch Log destination details.

Type: [CloudWatchLogs \(p. 30\)](#)

Required: False

BrokerNodeGroupInfo

Describes the setup to be used for the brokers.

clientSubnets

The list of subnets in the client VPC to connect to.

Type: Array of type string

Required: True

instanceType

The type of broker used for the cluster.

Type: string

Required: True

MinLength: 5

MaxLength: 32

connectivityInfo

Information about the cluster access configuration.

Type: [ConnectivityInfo \(p. 32\)](#)

Required: False

securityGroups

The security groups to attach to the ENIs for the broker nodes.

Type: Array of type string

Required: False

brokerAZDistribution

The distribution of broker nodes across Availability Zones.

Type: [BrokerAZDistribution \(p. 27\)](#)

Required: False

storageInfo

Data volume information.

Type: [StorageInfo \(p. 43\)](#)

Required: False

BrokerSoftwareInfo

Information about current software installed in the cluster.

configurationRevision

Revision of the configuration to use.

Type: integer
Required: False
Format: int64

kafkaVersion

The version of Apache Kafka to install and run on the cluster.

Type: string
Required: False

configurationArn

ARN of the configuration used on the cluster.

Type: string
Required: False

ClientAuthentication

Includes all client authentication information.

sasl

Details for ClientAuthentication using SASL.

Type: [Sasl \(p. 41\)](#)
Required: False

unauthenticated

Details for ClientAuthentication using no authentication.

Type: [Unauthenticated \(p. 44\)](#)
Required: False

tls

Details for ClientAuthentication using TLS.

Type: [Tls \(p. 44\)](#)
Required: False

ClientBroker

Client-broker encryption in transit setting.

TLS
TLS_PLAINTEXT
PLAINTEXT

CloudWatchLogs

CloudWatchLogs details for BrokerLogs.

logGroup

CloudWatch LogGroup where the logs will be delivered.

Type: string
Required: False

enabled

Broker logs for destination CW enabled or not.

Type: boolean
Required: True

Cluster

Returns information about a cluster.

clusterType

Type of the backend cluster.

Type: [ClusterType \(p. 32\)](#)
Required: False

clusterArn

The Amazon Resource Name (ARN) of the cluster.

Type: string
Required: False

activeOperationArn

Arn of active cluster operation.

Type: string
Required: False

provisioned

Properties of a provisioned cluster.

Type: [Provisioned \(p. 38\)](#)
Required: False

creationTime

The time when the cluster was created.

Type: string
Required: False

clusterName

The name of the cluster.

Type: string
Required: False

serverless

Properties of a serverless cluster.

Type: [Serverless \(p. 42\)](#)
Required: False

stateInfo

Includes information of the cluster state.

Type: [StateInfo \(p. 43\)](#)
Required: False

state

State of the cluster.

Type: [ClusterState \(p. 31\)](#)
Required: False

currentVersion

Current version of cluster.

Type: string
Required: False

tags

Tags attached to the cluster.

Type: object
Required: False

ClusterState

The state of an MSK cluster.

ACTIVE
CREATING
UPDATING
DELETING
FAILED
MAINTENANCE
REBOOTING_BROKER
HEALING

ClusterType

The type of backend cluster.

PROVISIONED
SERVERLESS

ConfigurationInfo

Specifies the configuration to be used on the brokers.

arn

ARN of the configuration to use.

Type: string
Required: True

revision

The revision of the configuration to use.

Type: integer
Required: True
Format: int64
Minimum: 1

ConnectivityInfo

Broker access controls

publicAccess

Access control settings for brokers

Type: [PublicAccess \(p. 41\)](#)
Required: False

CreateClusterV2Request

Creates a provisioned or serverless cluster.

provisioned

Properties required for creating a provisioned cluster.

Type: [ProvisionedRequest \(p. 39\)](#)
Required: False

clusterName

The name of the cluster.

Type: string

Required: True
MinLength: 1
MaxLength: 64

serverless

Properties required for creating a serverless cluster.

Type: [ServerlessRequest \(p. 43\)](#)
Required: False

tags

Create tags when creating the cluster.

Type: object
Required: False

CreateClusterV2Response

Returns information about the created cluster.

clusterType

Type of the backend cluster.

Type: [ClusterType \(p. 32\)](#)
Required: False

clusterArn

The Amazon Resource Name (ARN) of the cluster.

Type: string
Required: False

clusterName

Name of the cluster provided by the customer.

Type: string
Required: False

state

State of the cluster.

Type: [ClusterState \(p. 31\)](#)
Required: False

EBSStorageInfo

Contains information about the EBS storage volumes that are attached to the brokers.

provisionedThroughput

EBS volume provisioned throughput information.

Type: [ProvisionedThroughput \(p. 40\)](#)

Required: False

volumeSize

The size of the EBS volumes for the data drive on each of the brokers in GiB.

Type: integer

Required: False

Minimum: 1

Maximum: 16384

EncryptionAtRest

Details for encryption at rest.

dataVolumeKMSKeyId

KMS key used for data volume encryption.

Type: string

Required: True

EncryptionInTransit

Details for encryption in transit.

inCluster

In-cluster encryption in transit setting.

Type: boolean

Required: False

clientBroker

Client-broker encryption in transit setting.

Type: [ClientBroker \(p. 29\)](#)

Required: False

EncryptionInfo

Includes all encryption related information.

encryptionInTransit

Details for encryption in transit.

Type: [EncryptionInTransit \(p. 34\)](#)

Required: False

encryptionAtRest

Details for encryption at rest.

Type: [EncryptionAtRest \(p. 34\)](#)

Required: False

EnhancedMonitoring

Controls level of cluster metrics Amazon pushes to customer's cloudwatch account.

DEFAULT
PER_BROKER
PER_TOPIC_PER_BROKER
PER_TOPIC_PER_PARTITION

Firehose

Firehose details for BrokerLogs.

deliveryStream

Firehose delivery stream where the logs will be delivered.

Type: string

Required: False

enabled

Broker logs for destination firehose enabled or not.

Type: boolean

Required: True

IAM

Details for SASL/IAM client authentication.

enabled

SASL/IAM authentication is enabled or not.

Type: boolean

Required: False

JmxExporter

JMX Exporter details.

enabledInBroker

JMX Exporter being enabled in broker.

Type: boolean

Required: True

JmxExporterInfo

JMX Exporter details.

enabledInBroker

JMX Exporter being enabled in broker.

Type: boolean
Required: True

ListClustersV2Response

The response contains an array of cluster information and a next token if the response is truncated.

nextToken

If the response of ListClustersV2 is truncated, it returns a NextToken in the response. Pass this NextToken in a subsequent request to ListClustersV2 to get the next set of results.

Type: string
Required: False

clusterInfoList

An array of clusters.

Type: Array of type [Cluster \(p. 30\)](#)
Required: False

LoggingInfo

Logging info details for the cluster.

brokerLogs

Broker Logs details.

Type: [BrokerLogs \(p. 27\)](#)
Required: True

NodeExporter

Node Exporter details.

enabledInBroker

Node Exporter being enabled in broker.

Type: boolean
Required: True

NodeExporterInfo

Node Exporter details.

enabledInBroker

Node Exporter being enabled in broker.

Type: boolean

Required: True

OpenMonitoring

JMX and Node monitoring for cluster.

prometheus

Prometheus details.

Type: [Prometheus \(p. 37\)](#)

Required: True

OpenMonitoringInfo

JMX and Node monitoring for the cluster.

prometheus

Prometheus details.

Type: [PrometheusInfo \(p. 37\)](#)

Required: True

Prometheus

Prometheus details.

nodeExporter

Node Exporter details.

Type: [NodeExporter \(p. 36\)](#)

Required: False

jmxExporter

JMX Exporter details.

Type: [JmxExporter \(p. 35\)](#)

Required: False

PrometheusInfo

Prometheus details.

nodeExporter

Node Exporter details.

Type: [NodeExporterInfo \(p. 36\)](#)
Required: False

jmxExporter

JMX Exporter details.

Type: [JmxExporterInfo \(p. 36\)](#)
Required: False

Provisioned

Properties of a provisioned cluster.

encryptionInfo

Includes all encryption related information.

Type: [EncryptionInfo \(p. 34\)](#)
Required: False

numberOfBrokerNodes

The number of brokers to create in the cluster.

Type: integer
Required: False

zookeeperConnectString

The connection string to use to connect to zookeeper cluster on plaintext port.

Type: string
Required: False

enhancedMonitoring

This knob controls level of metrics pushed customer's cloudwatch account.

Type: [EnhancedMonitoring \(p. 35\)](#)
Required: False

zookeeperConnectStringTls

The connection string to use to connect to zookeeper cluster on Tls port.

Type: string
Required: False

clientAuthentication

Includes all client authentication information.

Type: [ClientAuthentication \(p. 29\)](#)

Required: False

loggingInfo

Logging Info details.

Type: [LoggingInfo \(p. 36\)](#)

Required: False

brokerNodeGroupInfo

Information about the brokers of the cluster.

Type: [BrokerNodeGroupInfo \(p. 28\)](#)

Required: False

openMonitoring

Open monitoring details.

Type: [OpenMonitoring \(p. 37\)](#)

Required: False

currentBrokerSoftwareInfo

Information about the version of the software that is deployed on the brokers of the cluster.

Type: [BrokerSoftwareInfo \(p. 28\)](#)

Required: False

ProvisionedRequest

Properties for creating a provisioned cluster.

encryptionInfo

Includes all encryption related information.

Type: [EncryptionInfo \(p. 34\)](#)

Required: False

numberOfBrokerNodes

The number of brokers to create in the cluster.

Type: integer

Required: False

configurationInfo

The configuration to be used on the brokers.

Type: [ConfigurationInfo \(p. 32\)](#)

Required: False

enhancedMonitoring

Specifies the monitoring level for the cluster.

Type: [EnhancedMonitoring \(p. 35\)](#)

Required: False

kafkaVersion

The version of Apache Kafka to install and run on the cluster.

Type: string

Required: False

MinLength: 1

MaxLength: 128

clientAuthentication

Includes all client authentication related information.

Type: [ClientAuthentication \(p. 29\)](#)

Required: False

loggingInfo

Logging Info details.

Type: [LoggingInfo \(p. 36\)](#)

Required: False

brokerNodeGroupInfo

Information about the brokers of the cluster.

Type: [BrokerNodeGroupInfo \(p. 28\)](#)

Required: False

openMonitoring

The open-monitoring details.

Type: [OpenMonitoringInfo \(p. 37\)](#)

Required: False

ProvisionedThroughput

Contains information about provisioned throughput for the EBS storage volumes that are attached to the brokers.

volumeThroughput

Throughput value of the EBS volumes for the data drive on each broker in MiB per second.

Type: integer

Required: False

enabled

Whether provisioned throughput is turned on.

Type: boolean

Required: False

PublicAccess

Broker access controls

type

If public access is disabled, or if enabled the EIP provider

Type: string

Required: False

S3

S3 details for BrokerLogs.

bucket

Name of the bucket where the logs will be delivered.

Type: string

Required: False

prefix

prefix to the S3 bucket where the logs will be delivered.

Type: string

Required: False

enabled

Broker logs for destination S3 enabled or not.

Type: boolean

Required: True

Sasl

Details for client authentication using SASL.

iam

Details for ClientAuthentication using IAM.

Type: [IAM \(p. 35\)](#)

Required: False

scram

Details for SASL/SCRAM client authentication.

Type: [Scram \(p. 42\)](#)

Required: False

Scram

Details for SASL/SCRAM client authentication.

enabled

SASL/SCRAM authentication is enabled or not.

Type: boolean

Required: False

Serverless

Properties to create a serverless cluster

vpcConfigs

VPC configuration information

Type: Array of type [VpcConfig \(p. 44\)](#)

Required: True

kafkaVersion

The version of Apache Kafka for the serverless cluster.

Type: string

Required: False

clientAuthentication

Includes all client authentication related information.

Type: [ServerlessClientAuthentication \(p. 42\)](#)

Required: True

ServerlessClientAuthentication

Details for client authentication using SASL.

sasl

Details for ClientAuthentication using IAM.

Type: [ServerlessSasl \(p. 43\)](#)

Required: False

ServerlessRequest

Properties for creating a serverless cluster.

vpcConfigs

VPC configuration information

Type: Array of type [VpcConfig \(p. 44\)](#)

Required: True

clientAuthentication

Includes all client authentication related information.

Type: [ServerlessClientAuthentication \(p. 42\)](#)

Required: True

ServerlessSasl

Details for client authentication using SASL for Serverless Cluster.

iam

Details for ClientAuthentication using IAM for Serverless Cluster.

Type: [IAM \(p. 35\)](#)

Required: False

StateInfo

Includes information about the cluster state.

code

Code for cluster state.

Type: string

Required: False

message

Message for cluster state.

Type: string

Required: False

StorageInfo

Contains information about the storage volumes that are attached to the brokers.

ebsStorageInfo

EBS volume information.

Type: [EBSStorageInfo \(p. 33\)](#)

Required: False

Tls

The details of client authentication using TLS.

certificateAuthorityArnList

List of ACM CertificateAuthority ARNs.

Type: Array of type string

Required: False

enabled

Whether TLS authentication is turned on.

Type: boolean

Required: False

Unauthenticated

Details for allowing no client authentication.

enabled

Unauthenticated is enabled or not.

Type: boolean

Required: False

VpcConfig

Includes information about subnets and security groups for a VPC.

securityGroupIds

The security groups to attach to the ENIs for the broker nodes.

Type: Array of type string

Required: False

subnetIds

The list of subnets in the client VPC to connect to. Client subnets can't occupy the Availability Zone with ID use1-az3.

Type: Array of type string

Required: True

See also

For more information about using this API in one of the language-specific AWS SDKs and references, see the following:

ListClustersV2

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateClusterV2

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

Document History for API Reference 2.0

The following table describes the documentation for this release of ServiceName.

- **API version:** latest
- **Latest documentation update:** Month DD, YYYY

Change	Description	Date
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AWS glossary

For the latest AWS terminology, see the [AWS glossary](#) in the *AWS General Reference*.