

Kafka Authorizations (ACLs)

When implementing a custom Authorizer, one has to map authorization requests coming from Kafka to a different backend system.

The following table lists all the authorization combinations that can come from Kafka as of 2.0:

	Topic	Group	Cluster (singleton)	TransactionalId	DelegationToken	
Produce	Write					
Produce (Idempotent)	Write		IdempotentWrite			
Produce (Transactional)	Write			Write		
Fetch (Follower)	Read		ClusterAction			
Fetch (Consumer)	Read					
ListOffsets	Describe					
Metadata	Describe					
LeaderAndIsr			ClusterAction			
StopReplica			ClusterAction			
UpdateMetadata			ClusterAction			
ControlledShutdown			ClusterAction			
OffsetCommit	Read	Read				
OffsetFetch	Describe	Describe				
FindCoordinator (Group)		Describe				
FindCoordinator (Transaction)				Describe		
JoinGroup		Read				
Heartbeat		Read				
LeaveGroup		Read				
SyncGroup		Read				
DescribeGroups		Describe				
ListGroups			Describe			
SaslHandshake						
ApiVersions						
CreateTopics	Create (Added in 2.0)		Create			From 2.0 onwards, CREATE permission on Topic OR CREATE permission on Cluster is required.
DeleteTopics	Delete					
DeleteRecords	Delete					
InitProducerId (Idempotent)			IdempotentWrite			
InitProducerId (Transaction)				Write		
OffsetsForLeaderEpoch			ClusterAction			
AddPartitionsToTxn	Write			Write		
AddOffsetsToTxn		Read		Write		
EndTxn				Write		
WriteTxnMarkers			ClusterAction			
TxnOffsetCommit	Read	Read		Write		

DescribeAcls			Describe			
CreateAcls			Alter			
DeleteAcls			Alter			
DescribeConfigs (Broker)			DescribeConfigs			
DescribeConfigs (Topic)	DescribeConfigs					
AlterConfigs (Broker)			AlterConfigs			
AlterConfigs (Topic)	AlterConfigs					
AlterReplicaLogDirs			Alter			
DescribeLogDirs			Describe			
SaslAuthenticate						
CreatePartitions	Alter					
CreateDelegationToken						
RenewDelegationToken						
ExpireDelegationToken						
DescribeDelegationTokens					Describe	
DeleteGroups		Delete				

The following table lists all the authorization combinations that can come from Kafka as of 1.1.0:

	Topic	Group	Cluster (singleton)	TransactionalId	DelegationToken
Produce	Write				
Produce (Idempotent)	Write		IdempotentWrite		
Produce (Transactional)	Write			Write	
Fetch (Follower)	Read		ClusterAction		
Fetch (Consumer)	Read				
ListOffsets	Describe				
Metadata	Describe				
LeaderAndIsr			ClusterAction		
StopReplica			ClusterAction		
UpdateMetadata			ClusterAction		
ControlledShutdown			ClusterAction		
OffsetCommit	Read	Read			
OffsetFetch	Describe	Describe			
FindCoordinator (Group)		Describe			
FindCoordinator (Transaction)				Describe	
JoinGroup		Read			
Heartbeat		Read			
LeaveGroup		Read			
SyncGroup		Read			
DescribeGroups		Describe			
ListGroups			Describe		
SaslHandshake					
ApiVersions					
CreateTopics			Create		
DeleteTopics	Delete				
DeleteRecords	Delete				

InitProducerId (Idempotent)			IdempotentWrite		
InitProducerId (Transaction)				Write	
OffsetsForLeaderEpoch			ClusterAction		
AddPartitionsToTxn	Write			Write	
AddOffsetsToTxn		Read		Write	
EndTxn				Write	
WriteTxnMarkers			ClusterAction		
TxnOffsetCommit	Read	Read		Write	
DescribeAcls			Describe		
CreateAcls			Alter		
DeleteAcls			Alter		
DescribeConfigs (Broker)			DescribeConfigs		
DescribeConfigs (Topic)	DescribeConfigs				
AlterConfigs (Broker)			AlterConfigs		
AlterConfigs (Topic)	AlterConfigs				
AlterReplicaLogDirs			Alter		
DescribeLogDirs			Describe		
SaslAuthenticate					
CreatePartitions	Alter				
CreateDelegationToken					
RenewDelegationToken					
ExpireDelegationToken					
DescribeDelegationTokens					Describe
DeleteGroups		Delete			