

Write a Message to a Kafka Topic

You can use the Apache Kafka Producer adapter to write a message to a Kafka topic. The Apache Kafka documentation speaks of events that contain a message, or of records in more technical parts of the documentation. This documentation summarizes all under the term "message".

Write a Message

Using the **produce** operation of the Apache Kafka adapter, you can write a message to a Kafka topic.

Attribute	Type	Direction	Description
producerRecord	ProducerRecord	in	Provide the message and the target for the adapter to send the message to a Kafka topic.
recordMetadata	RecordMetadata	out	Returns some meta data about the processing the Kafka broker has done.

producerRecord is a complex structure that defines the message and target. The **topic** you want to write the message to is the only mandatory parameter.

Attribute	Type	Mandatory	Description
topic	String	✓	Specify the topic the message should be sent to.
partition	Integer	✗	Specify the partition the message should be sent to.
key	Blob	✗	Specify a key the message should be filed to.
id	Integer	✗	Will be generated. We recommend not to set one manually.
headers	Array of MessageHeader	✗	Specify headers if you want to provide additional information on the message content for e.g. routing or filtering use cases.
value	Blob	✗	Specify the actual message content. Only payload of type Blob is supported.

The Kafka Producer returns some meta data about the processing of the message.

Attribute	Type	Mandatory	Description	Allowed Values / Examples	
topic	String	✓	Kafka topic the message has been sent to.		
partition	Integer	✓	Topic partition the message has been sent to.		
offset	Integer	✗	Offset of the message within the partition.		
recordId	Integer	✗	The message ID as provided with the call, or as generated if it has not been specified.		
keySize	Integer	✓	Actual size of the key in bytes.		
valueSize	Integer	✓	Actual size of the value in bytes.		
timestamp	DateTime	✗	A processing timestamp (UTC). See timestampType for what the timestamp refers to.		
timestampType	TimestampType	✓	Indicates what the timestamp refers to.	NotAvailable	Timestamp is unknown.
				Create Time	Timestamp relates to message creation time as set by a Kafka broker.
				LogAppendTime	Timestamp relates to the time a message was appended to a Kafka log.
persistedStatus	PersistedStatus	✓	Status of the message.	NotPersisted	Message was never transmitted to the broker, or failed with an error indicating it was not written to the log.
				Persisted	Message was written to the log and acknowledged by the broker.
				PossiblyPersisted	Message was transmitted to broker, but no acknowledgement was received.

Transaction Handling

The xUML Runtime handles Apache Kafka Producer calls like is specified in the [Runtime transaction concept](#). All producer calls within a session are wrapped into a dedicated transaction with a random unique transaction ID. These transactions can be rolled back until they have been committed. You cannot set a custom transaction ID (transactional.id), therefore there will be no fencing.

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Related Pages:

- [xUML Runtime Architecture and Transaction Concept](#)

Related Documentation:

- [Apache Kafka Documentation](#)