



webMethods Kafka Adapter Service

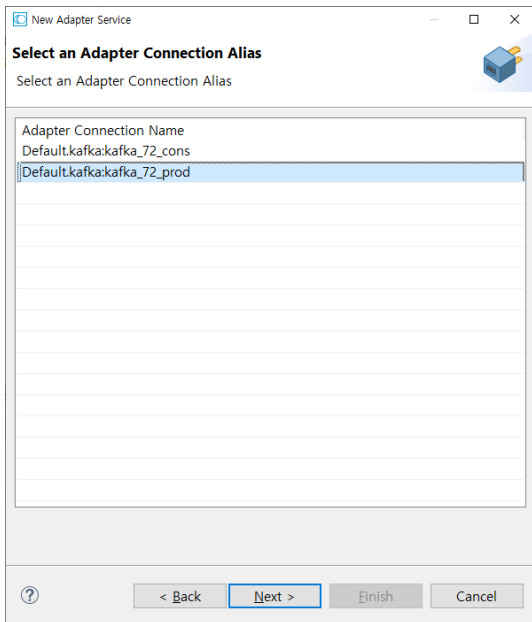
References

- [Kafka Adapter Documentation](#)

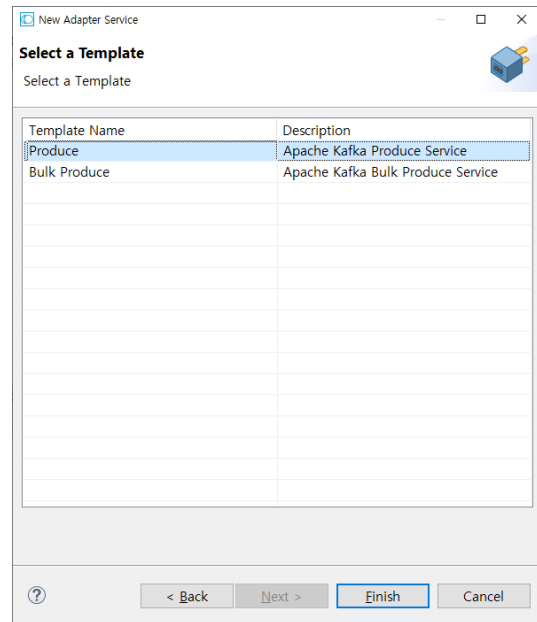
※ Produce Adapter Service 생성 (메시지 전송)

Adapter Service 명 입력

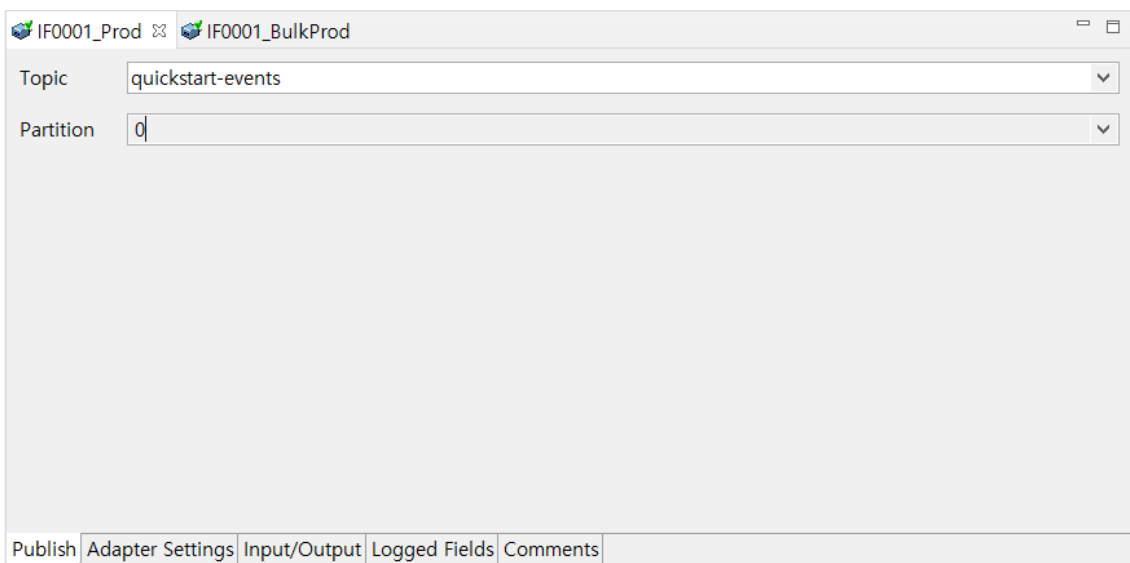
Adapter Type 선택 > Kafka



미리 생성 한 Connection 선택 (Producer Connection)



Produce / Bulk Produce 선택 후 생성



Produce - 단 건 메시지 전송 생성 예시

IF0001_Prod IF0001_BulkProd

Topic: quickstart-events

Partition: 0

Maximum Message Size: 100

Bulk Publish Adapter Settings Input/Output Logged Fields Comments

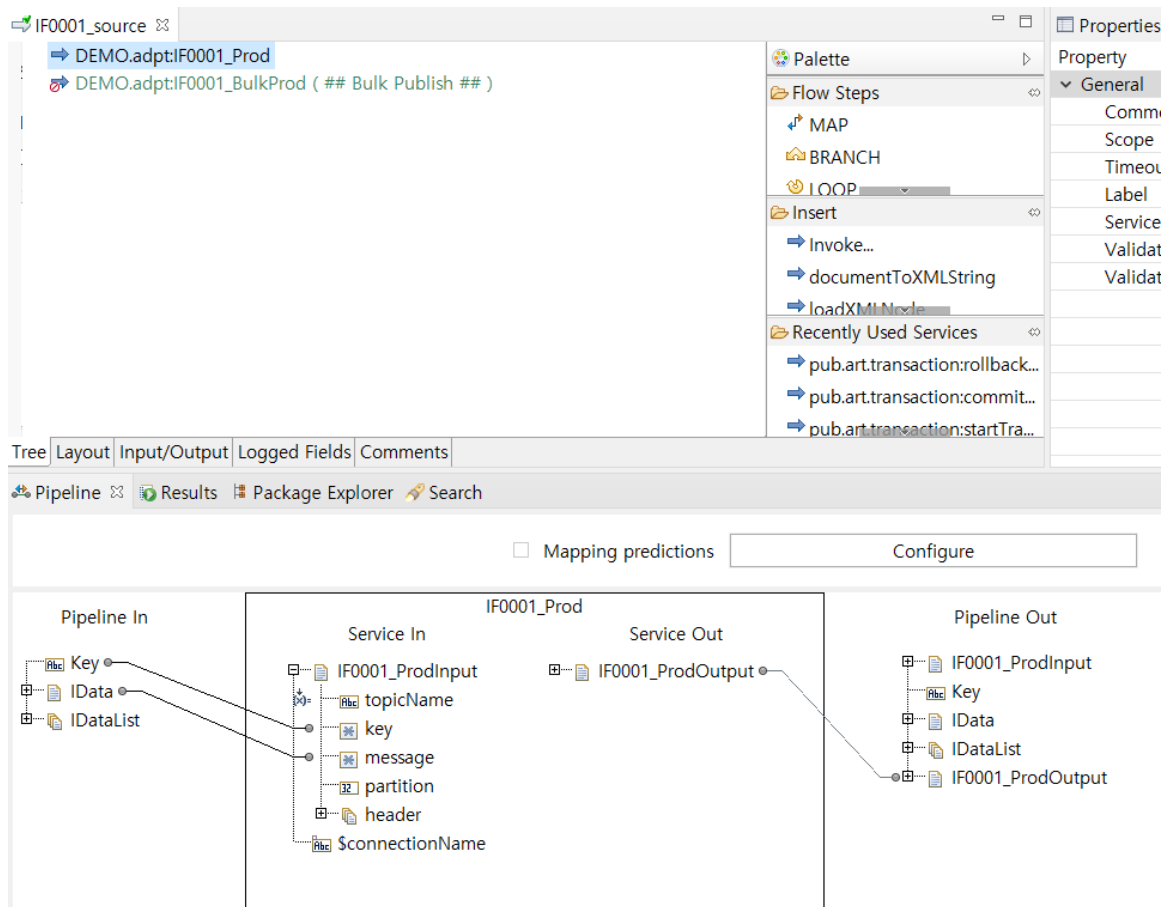
Bulk Produce - 다 건(List) 메시지 전송 생성 예시

Maximum Message Size - Publish 할 최대 메시지 갯수를 설정 (default = 100)

Connection 에서 생성한 Serializer 에 따라 Key 와 Message 에 맞는 타입을 연결하여 사용한다.

Acknowledgments	0
Request Timeout(ms)	0
Value Serializer Class	com.wm.adapter.wmkafka.idata.IDataSerializer
Key Serializer Class	org.apache.kafka.common.serialization.StringSerializer
Partitioner Class	
Compression Type	

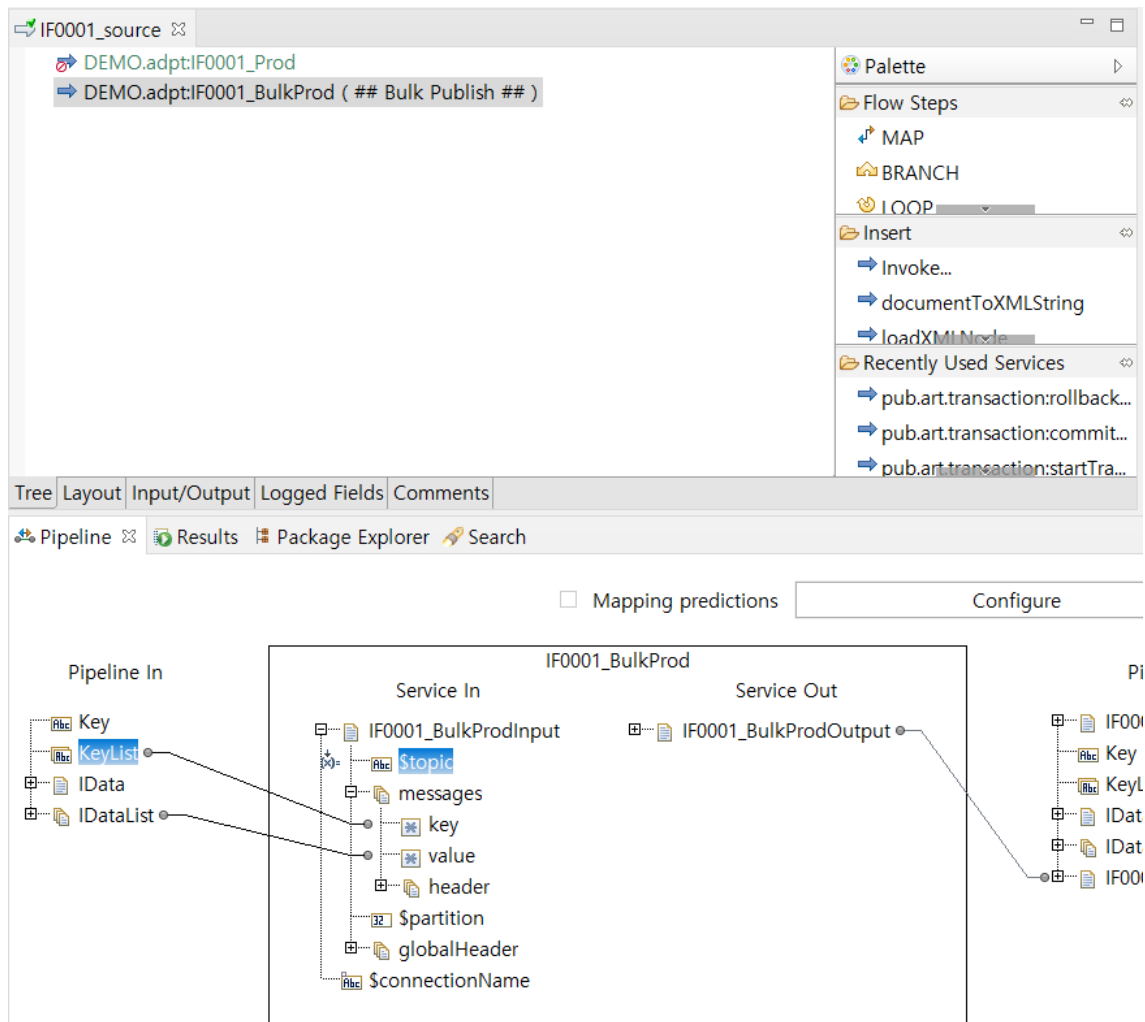
→ Key Serializer - String / Value - IData Serializer 로 커넥션이 설정 되었을 경우 개발 예시



Produce Adapter Service 예시

topicName - Kafka에 구성 된 Topic 명을 입력한다. (ex. quickstart-events)

key 값에는 String 매핑 / message 에는 IData 타입 매핑



Bulk Produce Adapter Service 생성 예시

Produce 와 마찬가지로 같은 타입을 매핑 시킨다.

Key 에는 String List 타입 매핑, value 값에는 IData List 타입 매핑

※ Consume Adapter Service 생성 (메시지 전송)

→ Produce Adapter Service 와 마찬가지로 동일하게 생성, Consumer Connection 을 사용한다.

New Adapter Service

Create a New Adapter Service

This wizard is used to create a new Adapter service.

Select the parent namespace

ServerIS68_2

URL192.168.101.68:5555PackageDEMO

NamespaceDEMO.adpt

DEMODO

adpt

srcv

Kafka

WmAdmin

WmART

WmARTExtDC

WmCloud

WmFlatFile

WmISExtDC

Element nameIF0001_Con

< Back

Next >

Finish

Cancel

New Adapter Service

Select Adapter Type

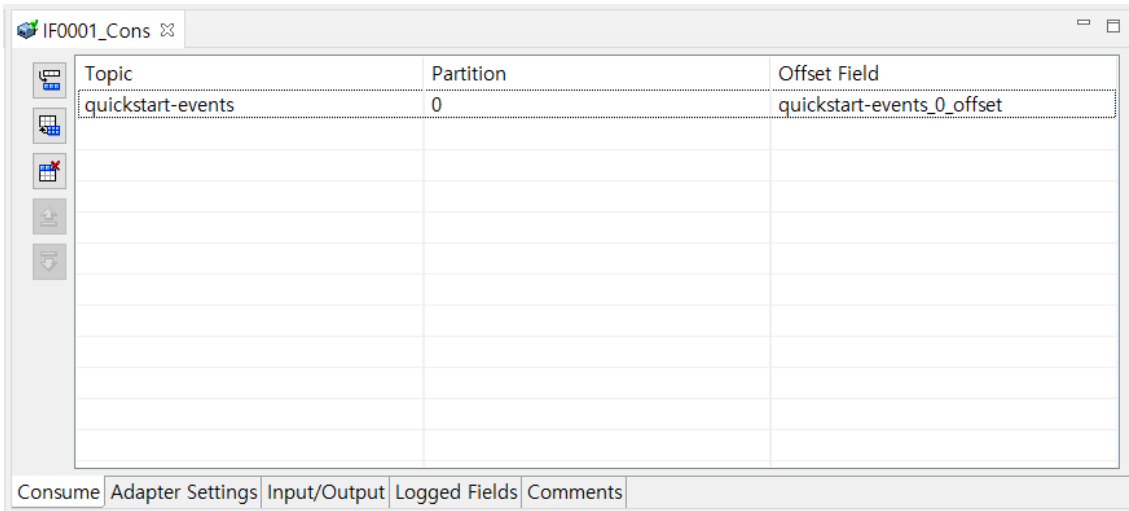
Select an Adapter Type

Adapter Type

IBM webMethods Adapter for Apache Kafka

< Back Next > Finish Cancel

[illegible][illegible]



Consume 할 Topic 과 토픽 내 Partition을 지정한다.

Offset Field 는 기본 값으로 Topic 명 + Partition + _offset 으로 지정.

[192.168.101.68:5555] DEMO.adpt:IF0001_Consume (2024. 11. 26. 오후 4:49:10)

Name	Value
IF0001_ConsumeOutput	
messages	
messages[0]	
topic	quickstart-events
offset	15
partition	0
key	1
value	
Col1	a
Col2	b
header	
messages[1]	
topic	quickstart-events
offset	16
partition	0
key	2
value	
Col1	c
Col2	d
header	

Consume Adapter Service 서비스 실행 예시

groupId	test-consumer-group
Client ID	webMethods
Key Deserializer Class	org.apache.kafka.common.serialization.StringDeserializer
Value Deserializer Class	com.wm.adapter.wmkafka.idata.IDataDeserializer
Deserializer Error Handler	
Enable Auto Commit	false

Produce 와 마찬가지로 Consumer Connection 에 설정 한 Deserializer 에 따라 값이 역직렬화 되어 수신

※ Kafka Adapter Notification 생성 예시

Adapters > IBM webMethods Adapter for Apache Kafka > View Listener	
Return to IBM webMethods Adapter for Apache Kafka Listeners View Notification Order	
Default.kafka.kafka_72_Listner Details	
Listener Type	Kafka9 Consumer Listener
Package Name	Default
Connection name	Default.kafka.kafka_72_cons
Retry Limit	5
Retry Backoff Timeout	10
Listener Properties	
Topic Name(s)	quickstart-events
Partition	
Offset Field	
pollinterval	1000
Last Error	

Listener 생성 예시

Adapter Notification 생성 전 Listener 가 Enable 되어 있어야 한다.

Kafka Listener 는 Consumer Listener 만 지원.

Create a New Adapter Notification
This wizard is used to create a new Adapter notification.

Select the parent namespace

Server: IS68_2
URL: 192.168.101.68:5555 Package: DEMO
Namespace: DEMO.noti

Element name: IF0001_noti_consume

< Back Next > Finish Cancel

Adapter Notification 명 입력 후 Next

Select Adapter Type
Select an Adapter Type

Adapter Type
IBM webMethods Adapter for Apache Kafka

< Back Next > Finish Cancel

Adapter Type 선택 > Kafka

Select a Template
Select a Template

Template Name	Description
Apache Kafka Listener Notification (synchronous)	Handles Apache Kafka ev
Apache Kafka Listener Notification (asynchronous)	Handles Apache Kafka ev
Confluent Kafka Listener Notification (synchronous)	Handles Confluent Kafka
Confluent Kafka Listener Notification (asynchronous)	Handles Confluent Kafka

Navigation: ? < Back Next > Finish Cancel

Kafka 는 Sync / Async 방식의 notificaiton 을 지원

Select an Adapter Notification Listener
Select an Adapter Notification Listener

Notification Listener Name
DefaultKafka:kafka_72_Listnr

Navigation: ? < Back Next > Finish Cancel

생성 된 Consumer Listener 선택

Select service node
Click next to proceed

URL: 192.168.101.68:5555 Package: DEMO
Namespace: DEMO.srvc

- adpt
- noti
- srvc
 - IF0001_noti_target
 - IF0001_source
- Kafka
- WmAdmin
- WmART
- WmARExtDC
- WmCloud
- WmFlatFile
- WmISExtDC
- WmJSONAPI
- WmKafkaAdapter
- WmMonitor

Navigation: ? < Back Next > Finish Cancel

후속 처리 Flowservice 매핑

Request-Reply Document Names
Click on Finish to create the notification _documents

Request Document Name: IF0001_noti_consumeRequestDocument
Reply Document Name: IF0001_noti_consumeReplyDocument

Navigation: ? < Back Next > Finish Cancel

생성 되는 Document Name 확인 후 Finish

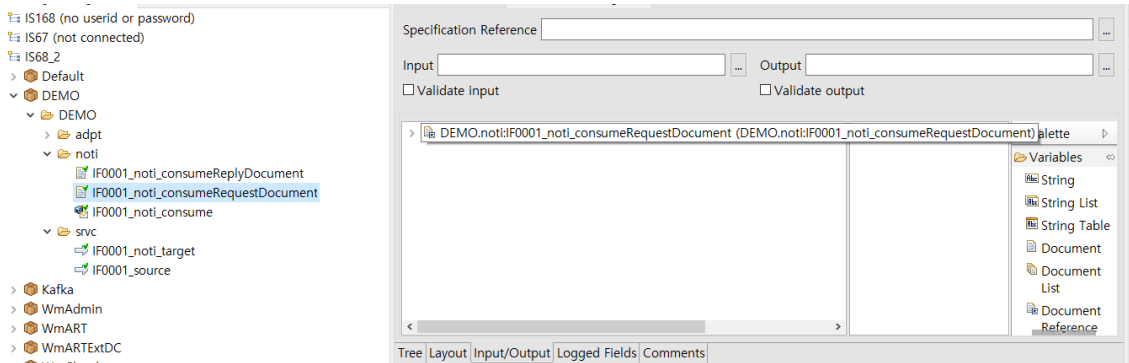
Adapters > IBM webMethods Adapter for Apache Kafka > Listener Notifications

Filter: Listener Notifications

Notification Name	Package Name	Enabled	Publish Events
DEMO.noti:IF0001_noti_consume	DEMO	Yes	No
Kafka.IF0003.noti:IF0003_noti	Kafka	Yes	No
Kafka.IF0002.noti:IF0002_noti	Kafka	Yes	No

→ Notification 은 생성 후 Kafka Adapter Web Admin 화면에서 Enable 해야 한다.

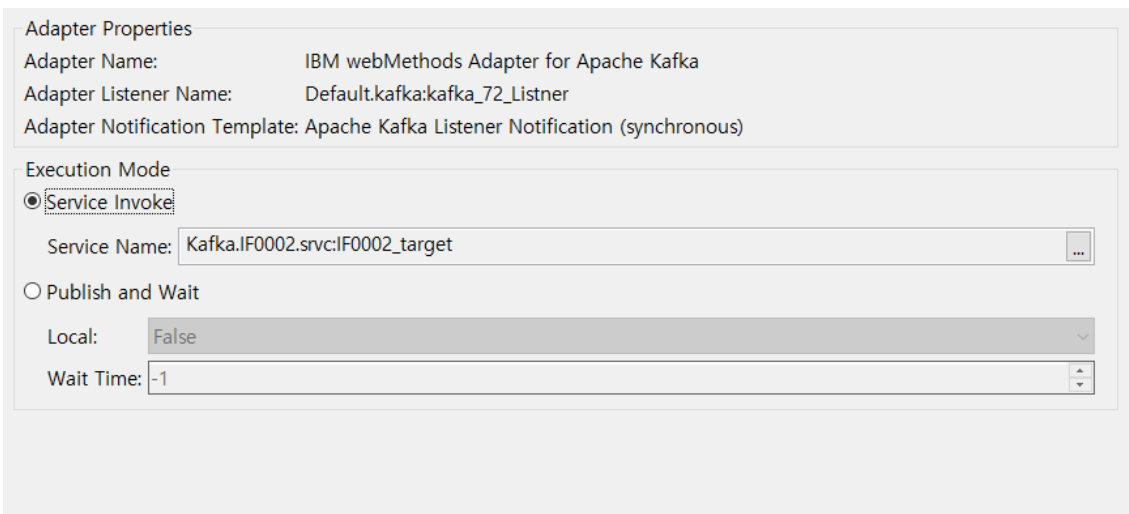
FlowService 설정



Input 의 Document 는 생성된 RequestDocument 을 Reference 로 사용하며, 이름은 FullName 으로 일치 시킨다.

Note. Sync / Async Notification 차이

Sync 방식



Service Invoke : 수신 받은 메시지를 Flow Service 직접 연결

Publish and Wait : Local Queue, UM 에 연결 Wait Time 을 두어 응답 시간만큼 대기 (Default = -1, 무기한 대기)

Async 방식

Adapter Properties

Adapter Name: IBM webMethods Adapter for Apache Kafka

Adapter Listener Name: Default.kafka:kafka_72_Listner

Adapter Notification Template: Apache Kafka Listener Notification (asynchronous)

Publish Document to

☒ webMethods Messaging Provider

Connection alias name: DEFAULT(IS_UM_CONNECTION) ▼

☐ JMS Provider

Connection alias name:

Destination name :

Destination type: Queue ▼

Apache Async Listener Notification Adapter Settings

수신 받은 메시지를 미리 구성 된 webMethods Messaging Provider 와 연결 (UM, Broker) 또는 JMS Provider 와 연결