

Debezium MySQL CDC with Kafka (KRaft)

1. Download Correct Debezium SQL Server Plugin (v3.3)

```
wget https://repo1.maven.org/maven2/io/debezium/debezium-connector-sqlserver/3.3.0.Final/debezium-connector-sqlserver-3.3.0.Final-plugin.tar.gz
```

Extract plugin And Move to /opt/kafka/connectors

```
tar -xzf debezium-connector-sqlserver-3.3.0.Final-plugin.tar.gz -C /opt/kafka/connectors
```

Restart your Kafka Connect service:

```
systemctl restart kafka-connect
```

Create SQL Server User With Required Permissions

```
CREATE DATABASE DebeziumTest;  
USE DebeziumTest;
```

```
EXEC sys.sp_cdc_enable_db;

CREATE TABLE dbo.Customers (
    CustomerID INT IDENTITY(1,1) PRIMARY KEY,
    FirstName NVARCHAR(100),
    LastName NVARCHAR(100),
    Email NVARCHAR(255),
    CreatedAt DATETIME DEFAULT GETDATE()
);

EXEC sys.sp_cdc_enable_table
    @source_schema = 'dbo',
    @source_name = 'Customers',
    @role_name = NULL,
    @supports_net_changes = 0;

INSERT INTO dbo.Customers (FirstName, LastName, Email)
VALUES
    ('Golam', 'Kibria', 'golam@example.com'),
    ('John', 'Doe', 'john.doe@example.com'),
    ('Jane', 'Smith', 'jane.smith@example.com');

UPDATE dbo.Customers
SET Email = 'golam.kibria@updated.com'
WHERE CustomerID = 1;

SELECT name, is_cdc_enabled FROM sys.databases WHERE name='DebeziumTest';

SELECT name, is_tracked_by_cdc FROM sys.tables WHERE name='Customers';

USE master;
CREATE LOGIN debezium WITH PASSWORD = 'StrongPassword!123';

USE DebeziumTest;
CREATE USER debezium FOR LOGIN debezium;

ALTER ROLE db_owner ADD MEMBER debezium;
```

Register debezium connector

```
curl -X POST http://192.168.1.226:8083/connectors \
-H "Content-Type: application/json" \
-d '{
  "name": "mssql-connector",
  "config": {
    "connector.class": "io.debezium.connector.sqlserver.SqlServerConnector",

    "database.hostname": "192.168.1.225",
    "database.port": "1433",
    "database.user": "debezium",
    "database.password": "StrongPassword!123",

    "database.names": "DebeziumTest",
    "database.server.name": "sqlserver",
    "database.encrypt": "false",

    "topic.prefix": "mssql",

    "snapshot.mode": "initial",

    "table.include.list": "dbo.Customers",

    "schema.history.internal.kafka.bootstrap.servers": "192.168.1.226:9092",
    "schema.history.internal.kafka.topic": "schema-changes.mssql",

    "include.schema.changes": "true"
  }
}'
```

. Verify Connector

```
curl http://localhost:8083/connectors
```

Check status

```
curl http://localhost:8083/connectors/mssql-connector/status
```

. Kafka Topics Created

```
/opt/kafka/bin/kafka-topics.sh --bootstrap-server localhost:9092 --list
```

Consume CDC Messages

```
/opt/kafka/bin/kafka-console-consumer.sh \  
  --bootstrap-server 192.168.1.226:9092 \  
  --topic mssql.sqlserver.DebeziumTest.dbo.Customers \  
  --from-beginning
```

Delete Connector

```
curl -X DELETE http://localhost:8083/connectors/mssql-connector
```

Check kafka-connect log

```
tail -f /opt/kafka/logs/connect.log
```

Revision #6

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