

# FULL CHAT RUNBOOK – Two Node CDC Setup

This PDF contains the complete runnable instructions derived from the entire chat conversation. It covers Docker installation, PostgreSQL CDC setup on Node 1, Kafka (KRaft mode) + Debezium on Node 2, validation steps, and Denodo integration details.

## Architecture

Node 1: PostgreSQL 15 (CDC Source)  
Node 2: Kafka (KRaft mode) + Kafka Connect + Debezium  
Denodo connects externally to Kafka on Node 2.

## Node 1 – PostgreSQL CDC

Commands:

```
unzip postgres-cdc-node1.zip
cd postgres-cdc-node1
docker compose up -d
docker ps
```

Validate database:

```
docker exec -it cdc_postgres psql -U dbuser -d mydb
SELECT * FROM customers;
```

## Node 2 – Kafka + Debezium

Commands:

```
unzip kafka-debezium-node2.zip
cd kafka-debezium-node2
docker compose up -d
docker ps
```

Register connector:

```
curl -X POST -H "Content-Type: application/json" \
--data @connect/register-postgres.json \
http://localhost:8083/connectors
```

## End-to-End Validation

Insert data on Node 1:

```
INSERT INTO customers VALUES (DEFAULT,'Alice','alice@mail.com');
```

Consume Kafka topic on Node 2:

```
docker exec -it cdc_kafka kafka-console-consumer \
--bootstrap-server localhost:9092 \
```

```
--topic pgcdc.public.customers --from-beginning
```

## Denodo Integration

Kafka Bootstrap: NODE2\_IP:9092

Topic: pgcdc.public.customers

Format: Debezium JSON

Mode: Real-time CDC