

Lab 1 Postgres

localhost:8080/?pgsql=postgres&username=demo&db=shop&ns=public

Limba: Limba Română PostgreSQL » postgres » shop » Schema: public ieșire

Adminer 4.8.1

DB: shop Schema: public

[SQL query](#) [Importă](#) [Export](#) [Crează tabel](#)

În baza de date nu sunt tabele.

Schema: public

[Modifică schema](#) [Schema bazei de date](#)

Tabele și reprezentări

În baza de date nu sunt tabele.

[Crează tabel](#) [Crează reprezentare](#)

Proceduri și funcții salvate

[Crează funcție](#)

«Secvențe»

[Crează «secvență»](#)

Tipuri de utilizatori

[Crează tip noi](#)

S1-M-AC-SE1-MQT: Laboratory x Select: products - postgres - Ad x +

localhost:8080/?pgsql=postgres&username=demo&db=shop&ns=public&select=products

Language: English PostgreSQL » postgres » shop » public » Select: products Logout

Adminer 4.8.1

DB: shop Schema: public

[SQL command](#) [Import](#) [Export](#) [Create table](#)

select products

Select: products

[Select data](#) [Show structure](#) [Alter table](#) [New item](#)

[Select](#) [Search](#) [Sort](#) [Limit](#) [Text length](#) [Action](#)

[Select](#)

SELECT * FROM "products" LIMIT 50 (0.000 s) [Edit](#)

<input type="checkbox"/>	Modify	id	name	price
<input type="checkbox"/>	edit	1	cup	1
<input type="checkbox"/>	edit	2	kettle	5
<input type="checkbox"/>	edit	3	phone	500
<input type="checkbox"/>	edit	4	tablet	125

[Whole result](#) [Modify](#) [Selected \(0\)](#) [Export \(4\)](#)

☐ 4 rows [Save](#) [Edit](#) [Clone](#) [Delete](#)

[Import](#)



```
100 478 100 478 0 0 17234 0 --:--:-- --:--:-- --:--:-- 17703
[
  {
    "class": "io.confluent.connect.jdbc.JdbcSinkConnector",
    "type": "sink",
    "version": "10.7.4"
  },
  {
    "class": "io.confluent.connect.jdbc.JdbcSourceConnector",
    "type": "source",
    "version": "10.7.4"
  },
  {
    "class": "org.apache.kafka.connect.mirror.MirrorCheckpointConnector",
    "type": "source",
    "version": "1"
  },
  {
    "class": "org.apache.kafka.connect.mirror.MirrorHeartbeatConnector",
    "type": "source",
    "version": "1"
  },
  {
    "class": "org.apache.kafka.connect.mirror.MirrorSourceConnector",
    "type": "source",
    "version": "1"
  }
]
alex@Alex:/mnt/c/Users/coman$
```

S1-M-AC-SE1-MQT: Laboratory | Select products - postgres - Ad | Control Center | Download Postman | Get Start...

localhost:9021/clusters/6k_IQXVgSuSaDpDqOGDq:Q/management/connect/connect-default/connectors

Dashboard | Gmail | YouTube | Maps | Translate

CONFLUENT

HOME > CONTROLCENTER.CLUSTER > CONNECT CLUSTERS > CONNECT-DEFAULT >

Cluster overview
Brokers
Topics
Connect
ksqldb
Consumers
Replicators
Cluster settings

Health+ New

Connectors

Connectors

1

Total

1

Running

0

Degraded

0

Failed

0

Paused

Control Center

localhost:8180/ui/docker-kafka-server/topic/connect-jdbc-1-products/data?sort=Oldest&partition=All

Sort: (Oldest) Partition: (All) Timestamp: Search: Offsets: 6

Key	Date	Partition	Offset	Headers	Schema
null	2 minutes ago	0	0	0	<pre>{ "schema": { "type": "struct", "fields": [{ "type": "int32", "optional": false, "field": "id", "name": "id", "type": "string", "optional": true, "field": "name", "name": "name", "type": "int32", "optional": true, "field": "price", "name": "price" }, { "type": "string", "optional": true, "field": "product", "name": "product" }, { "type": "string", "optional": true, "field": "phone", "name": "phone" }] }, "payload": { "id": 1, "name": "Kettle", "price": 5 } }</pre>
null	2 minutes ago	0	1	0	<pre>{ "schema": { "type": "struct", "fields": [{ "type": "int32", "optional": false, "field": "id", "name": "id", "type": "string", "optional": true, "field": "name", "name": "name", "type": "int32", "optional": true, "field": "price", "name": "price" }, { "type": "string", "optional": true, "field": "product", "name": "product" }, { "type": "string", "optional": true, "field": "phone", "name": "phone" }] }, "payload": { "id": 2, "name": "Kettle", "price": 5 } }</pre>
null	2 minutes ago	0	2	0	<pre>{ "schema": { "type": "struct", "fields": [{ "type": "int32", "optional": false, "field": "id", "name": "id", "type": "string", "optional": true, "field": "name", "name": "name", "type": "int32", "optional": true, "field": "price", "name": "price" }, { "type": "string", "optional": true, "field": "product", "name": "product" }, { "type": "string", "optional": true, "field": "phone", "name": "phone" }] }, "payload": { "id": 3, "name": "Kettle", "price": 5 } }</pre>
null	2 minutes ago	0	3	0	<pre>{ "schema": { "type": "struct", "fields": [{ "type": "int32", "optional": false, "field": "id", "name": "id", "type": "string", "optional": true, "field": "name", "name": "name", "type": "int32", "optional": true, "field": "price", "name": "price" }, { "type": "string", "optional": true, "field": "product", "name": "product" }, { "type": "string", "optional": true, "field": "phone", "name": "phone" }] }, "payload": { "id": 4, "name": "Kettle", "price": 5 } }</pre>
null	41 seconds ago	0	4	0	<pre>{ "schema": { "type": "struct", "fields": [{ "type": "int32", "optional": false, "field": "id", "name": "id", "type": "string", "optional": true, "field": "name", "name": "name", "type": "int32", "optional": true, "field": "price", "name": "price" }, { "type": "string", "optional": true, "field": "product", "name": "product" }, { "type": "string", "optional": true, "field": "phone", "name": "phone" }] }, "payload": { "id": 5, "name": "Kettle", "price": 5 } }</pre>
null	41 seconds ago	0	5	0	<pre>{ "schema": { "type": "struct", "fields": [{ "type": "int32", "optional": false, "field": "id", "name": "id", "type": "string", "optional": true, "field": "name", "name": "name", "type": "int32", "optional": true, "field": "price", "name": "price" }, { "type": "string", "optional": true, "field": "product", "name": "product" }, { "type": "string", "optional": true, "field": "phone", "name": "phone" }] }, "payload": { "id": 6, "name": "Kettle", "price": 5 } }</pre>

Empty Topic Copy Topic Live Tail Produce to topic

Lab 2 Postgres

Control Center

localhost:9021/clusters/6k_IQXVgSuSaDpDqQGDqXQ/management/connect/connect-default/connectors

CONFLUENT

HOME > CONTROLCENTER.CLUSTER > CONNECT CLUSTERS > CONNECT-DEFAULT >

Cluster overview

Brokers

Topics

Connect

ksqldb

Consumers

Replicators

Cluster settings

Health+ New

Connectors

2 Total 2 Running 0 Degraded 0 Failed 0 Paused

Search connectors Filter by category + Add connector Upload connector config file

Connector name	Status	Category	Plugin name	Topics	Number of tasks
jdbc-source-connector	Running	Source	JdbcSourceCon...	--	1
jdbc-source-connector-2	Running	Source	JdbcSourceCon...	--	1

S1-M-AC-SE1-MQT: Laboratory x Control Center x +

Windows PowerShell x alex@Alex:/mnt/c/Users/coman x + v

```
alex@Alex:/mnt/c/Users/coman$ curl.exe -X PUT localhost:8083/connectors/jdbc-source-connector/pause
alex@Alex:/mnt/c/Users/coman$ curl.exe -X GET localhost:8083/connectors/jdbc-source-connector/status
{"name":"jdbc-source-connector","connector":{"state":"PAUSED","worker_id":"connect:8083"},"tasks":[{"id":0,"state":"PAUSED","worker_id":"connect:8083"}],"type":"source"}alex@Alex:/mnt/c/Users/coman$ curl.exe -X GET localhost:8083/connectors/jdbc-source-connector/status | jq
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 169 100 169 0 0 40266 0 --:--:-- --:--:-- --:--:-- 42250
{
  "name": "jdbc-source-connector",
  "connector": {
    "state": "PAUSED",
    "worker_id": "connect:8083"
  },
  "tasks": [
    {
      "id": 0,
      "state": "PAUSED",
      "worker_id": "connect:8083"
    }
  ],
  "type": "source"
}
```

alex@Alex:/mnt/c/Users/coman\$ |

Connector Name	State	Type	Worker ID	Task ID	Task State
jdbc-source-connector-2	Running	Source	JdbcSourceCon...	--	1

connector config file

S1-M-AC-SE1-MQT: Laboratory x Control Center x SQL command - postgres - Admin x Connect | akhq.io x +

localhost:8180/ui/docker-kafka-server/topic/connect-jdbc-2-products/data?sort=Oldest&partition=All

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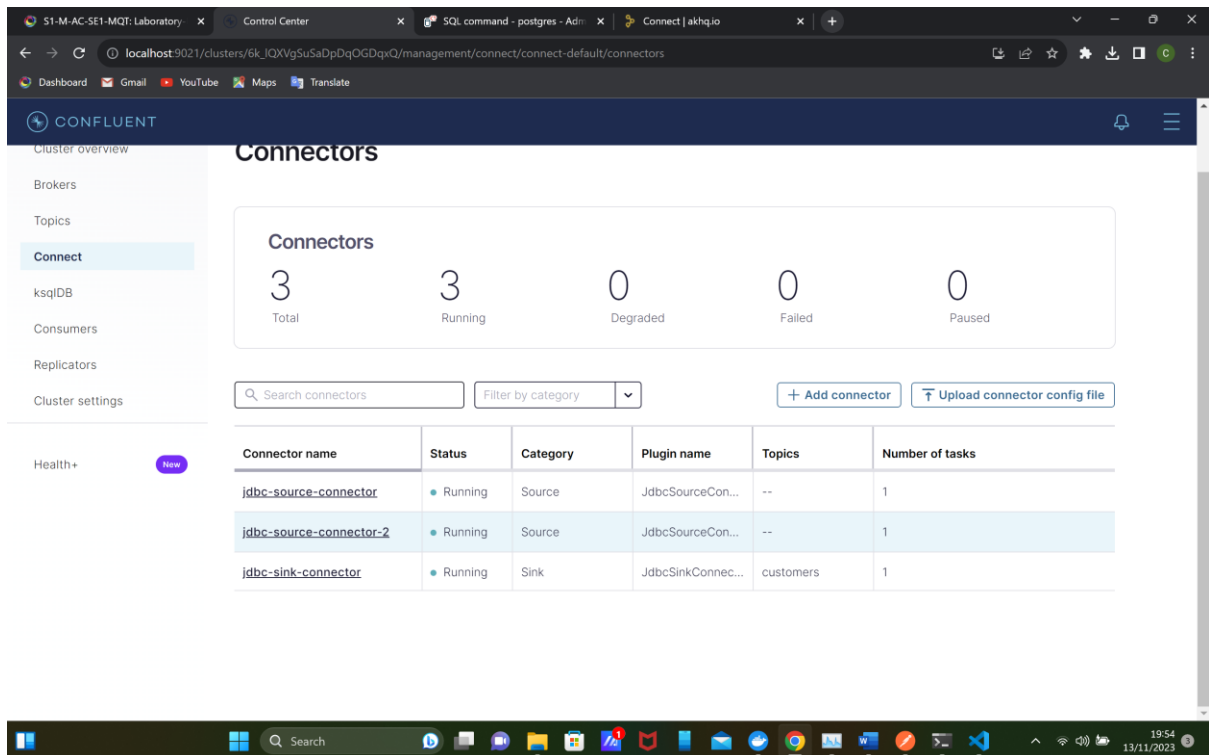
Sort: (Oldest) Partition: (All) Timestamp: Search: Offsets: = 8

Offset	Timestamp	Partition	Size	Actions
7	2 minutes ago	0	6	0
8	2 minutes ago	0	7	0

```
1 {
2   "schema": {
3     "type": "struct",
4     "fields": [
5       {
6         "type": "int32",
7         "optional": false,
8         "field": "id"
9       },
10      {
11        "type": "string",
12        "optional": true,
13        "field": "code"
14      },
15      {
16        "type": "int32",
17        "optional": true,
18        "field": "price"
19      }
20    ],
21    "optional": false,
22    "name": "products"
23  },
24  "payload": {
25    "id": 8,
26    "code": "iron",
27    "price": 7
28  }
29 }
```

Empty Topic Copy Topic Live Tail Produce to topic

Lab 3 Postgres



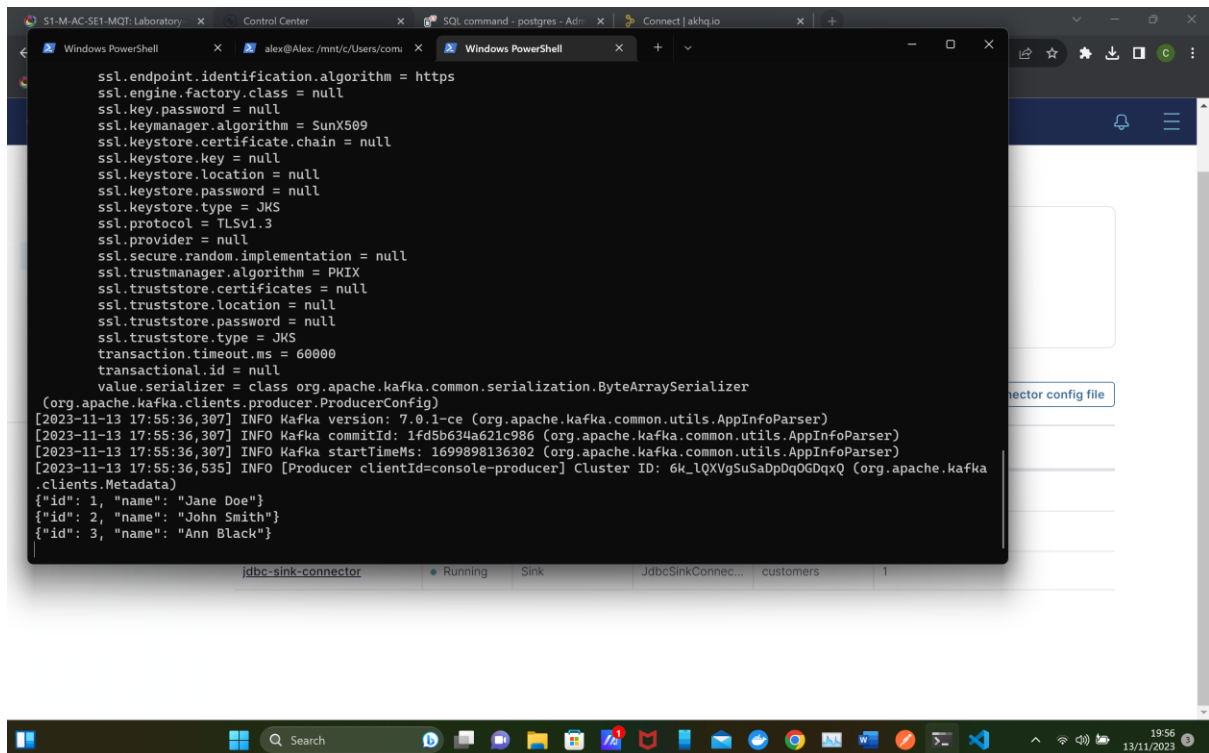
CONFLUENT

Connectors

3 Total 3 Running 0 Degraded 0 Failed 0 Paused

Search connectors Filter by category + Add connector Upload connector config file

Connector name	Status	Category	Plugin name	Topics	Number of tasks
jdbc-source-connector	Running	Source	JdbcSourceCon...	--	1
jdbc-source-connector-2	Running	Source	JdbcSourceCon...	--	1
jdbc-sink-connector	Running	Sink	JdbcSinkConne...	customers	1



```
ssl.endpoint.identification.algorithm = https
ssl.engine.factory.class = null
ssl.key.password = null
ssl.keymanager.algorithm = SunX509
ssl.keystore.certificate.chain = null
ssl.keystore.key = null
ssl.keystore.location = null
ssl.keystore.password = null
ssl.keystore.type = JKS
ssl.protocol = TLSv1.3
ssl.provider = null
ssl.secure.random.implementation = null
ssl.trustmanager.algorithm = PKIX
ssl.truststore.certificates = null
ssl.truststore.location = null
ssl.truststore.password = null
ssl.truststore.type = JKS
transaction.timeout.ms = 60000
transactional.id = null
value.serializer = class org.apache.kafka.common.serialization.ByteArraySerializer
(org.apache.kafka.clients.producer.ProducerConfig)
[2023-11-13 17:55:36,307] INFO Kafka version: 7.0.1-ce (org.apache.kafka.common.utils.AppInfoParser)
[2023-11-13 17:55:36,307] INFO Kafka commitId: 1fd5b634a621c986 (org.apache.kafka.common.utils.AppInfoParser)
[2023-11-13 17:55:36,307] INFO Kafka startTimeMs: 1699898136302 (org.apache.kafka.common.utils.AppInfoParser)
[2023-11-13 17:55:36,535] INFO [Producer clientId=console-producer] Cluster ID: 6k_LQXVgSuSaDpDqOGDqxQ (org.apache.kafka
clients.Metadata)
{"id": 1, "name": "Jane Doe"}
{"id": 2, "name": "John Smith"}
{"id": 3, "name": "Ann Black"}
```

DashboardGmailYouTubeMapsTranslate

Language: English

PostgreSQL > postgres > shop > public > Select: customers

Logout

Adminer 4.8.1

DB: shop
Schema: public

SQL command
Export
Import
Create table

select customers
select products

Select: customers

Select dataShow structureAlter tableNew item

SelectSearchSortLimit50Text length100ActionSelect

SELECT * FROM "customers" LIMIT 50 (0.000 s) Edit

Modify	id	name
<input type="checkbox"/> edit	1	Jane Doe
<input type="checkbox"/> edit	2	John Smith
<input type="checkbox"/> edit	3	Ann Black

Whole result
☐ 3 rows

Modify
Save

Selected (0)
EditCloneDelete

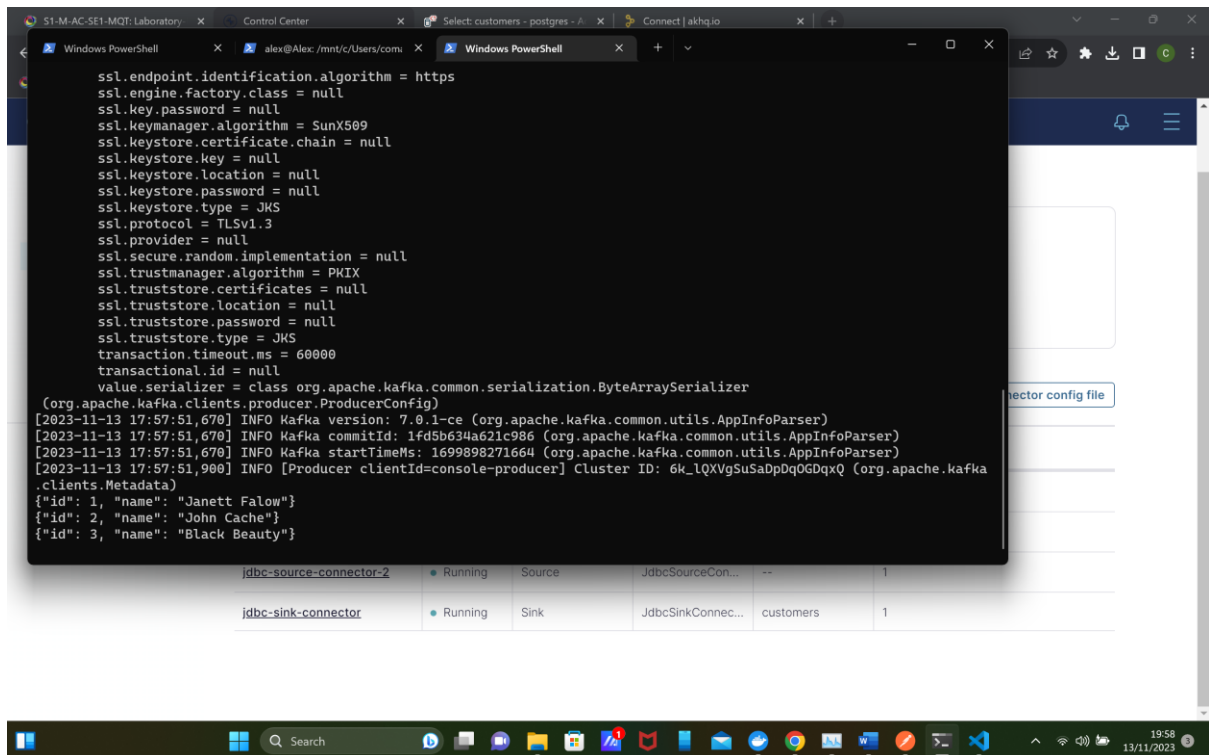
Export (3)

Import

Search

19:56
13/11/2023

Lab 4 Postgres

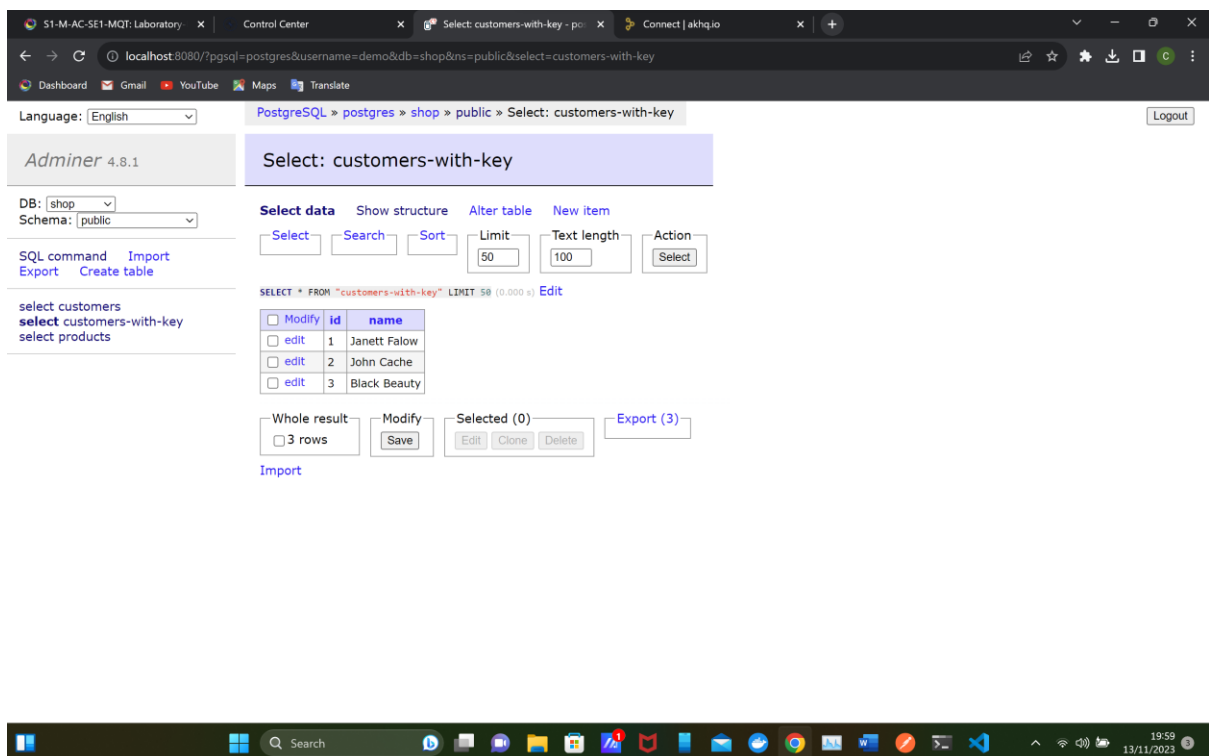


The screenshot shows a Windows PowerShell terminal window with the following content:

```
ssl.endpoint.identification.algorithm = https
ssl.engine.factory.class = null
ssl.key.password = null
ssl.keymanager.algorithm = SunX509
ssl.keystore.certificates.chain = null
ssl.keystore.key = null
ssl.keystore.location = null
ssl.keystore.password = null
ssl.keystore.type = JKS
ssl.protocol = TLSv1.3
ssl.provider = null
ssl.secure.random.implementation = null
ssl.trustmanager.algorithm = PKIX
ssl.truststore.certificates = null
ssl.truststore.location = null
ssl.truststore.password = null
ssl.truststore.type = JKS
transaction.timeout.ms = 60000
transactional.id = null
value.serializer = class org.apache.kafka.common.serialization.ByteArraySerializer
(org.apache.kafka.clients.producer.ProducerConfig)
[2023-11-13 17:57:51,670] INFO Kafka version: 7.0.1-ce (org.apache.kafka.common.utils.AppInfoParser)
[2023-11-13 17:57:51,670] INFO Kafka commitId: 1fd5b634a621c986 (org.apache.kafka.common.utils.AppInfoParser)
[2023-11-13 17:57:51,670] INFO Kafka startTimeMs: 1699898271664 (org.apache.kafka.common.utils.AppInfoParser)
[2023-11-13 17:57:51,900] INFO [Producer clientId=console-producer] Cluster ID: 6k_lQXVgSuSaDpDqQGQxQ (org.apache.kafka
.clients.Metadata)
{"id": 1, "name": "Janett Falow"}
{"id": 2, "name": "John Cache"}
{"id": 3, "name": "Black Beauty"}
```

Below the terminal window, a table shows the status of Kafka Connectors:

Connector Name	Status	Type	Configuration	Partitions
jdbc-source-connector-2	Running	Source	JdbcSourceCon...	1
jdbc-sink-connector	Running	Sink	JdbcSinkConnec...	1



The screenshot shows the PostgreSQL Adminer interface. The browser address bar displays the URL: `localhost:8080/?pgsql=postgres&username=demo&db=shop&ns=public&select=customers-with-key`. The interface shows the following details:

- Language:** English
- PostgreSQL > postgres > shop > public > Select: customers-with-key**
- Adminer 4.8.1**
- DB:** shop
- Schema:** public
- SQL command:** `select customers`
- SQL command:** `select customers-with-key`
- SQL command:** `select products`
- Select data:** `SELECT * FROM "customers-with-key" LIMIT 50`
- Table structure:**

id	name
1	Janett Falow
2	John Cache
3	Black Beauty
- Whole result:** 3 rows
- Selected (0):** `Edit` `Clone` `Delete`
- Export (3):** `Export`