Flink_tutorial

I. FLINK TERMINAL

1. Terminal

```
docker exec -it flink-sql-client /bin/bash
```

```
/opt/flink/bin/sql-client.sh embedded
```

I. FLINK KẾT NỐI KAFKA

1. Terminal

```
docker exec -it flink-sql-client /bin/bash

/opt/flink/bin/sql-client.sh embedded
```

2. Tạo bảng

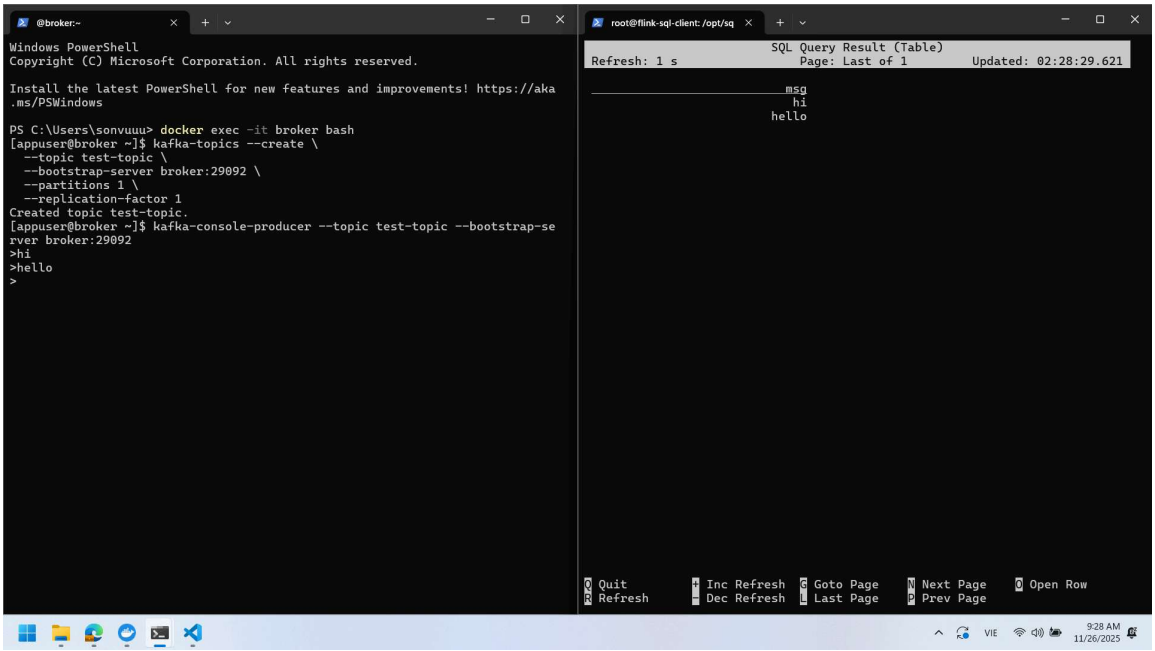
```
CREATE TABLE test_kafka (
  msg STRING
) WITH (
  'connector' = 'kafka',
  'topic' = 'test-topic',
  'properties.bootstrap.servers' = 'broker:29092',
  'properties.group.id' = 'test-group',
  'scan.startup.mode' = 'earliest-offset',
  'format' = 'raw'
);
```

3. Kết quả

root@flink-sql-client: /opt/sq

```
PS C:\Users\sonvuuu> docker exec -it flink-sql-client /bin/bash
root@flink-sql-client:/opt/sql-client# /opt/flink/bin/sql-client.sh embedded
```

```
                                                                   BETA
 ____  _     _       ____   ___  _       ____ _ _            _
|  _ \(_)_ _| | __  / ___| / _ \| |     / ___| (_) ___ _ __ | |_
| |_) | | '_ \ |/ / \___ \| | | | |     | |   | |/ _ \ '_ \| __|
|  __/| | | | |   <   ___) | |_| | |___  | |___| |  __/ | | | |_
|_|   |_|_| |_|_|\_\ |____/ \__\_\_____|  \____|_|\___|_| |_|\__|

        Welcome! Enter 'HELP;' to list all available commands. 'QUIT;' to exit.

Command history file path: /root/.flink-sql-history

Flink SQL> CREATE TABLE test_kafka (
>   msg STRING
> ) WITH (
>   'connector' = 'kafka',
>   'topic' = 'test-topic',
>   'properties.bootstrap.servers' = 'broker:29092',
>   'properties.group.id' = 'test-group',
>   'scan.startup.mode' = 'earliest-offset',
>   'format' = 'raw'
> );
[INFO] Execute statement succeed.

Flink SQL> select * from test_kafka;
[INFO] Result retrieval cancelled.

Flink SQL>
> show tables;
+-------------+
| table name  |
+-------------+
| test_kafka  |
+-------------+
1 row in set

Flink SQL>
```


@broker:~
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS C:\Users\sonvuuu> docker exec -it broker bash
[appuser@broker ~]$ kafka-topics --create \
--topic test-topic \
--bootstrap-server broker:29092 \
--partitions 1 \
--replication-factor 1
Created topic test-topic.
[appuser@broker ~]$ kafka-console-producer --topic test-topic --bootstrap-server broker:29092
>hi
>hello
>
root@flink-sql-client: /opt/sq
SQL Query Result (Table)
Refresh: 1 s
Page: Last of 1
Updated: 02:28:29.621
msg
hi
hello
Q Quit
R Refresh
+ Inc Refresh
- Dec Refresh
G Goto Page
L Last Page
N Next Page
P Prev Page
O Open Row
VIE
9:28 AM
11/26/2025