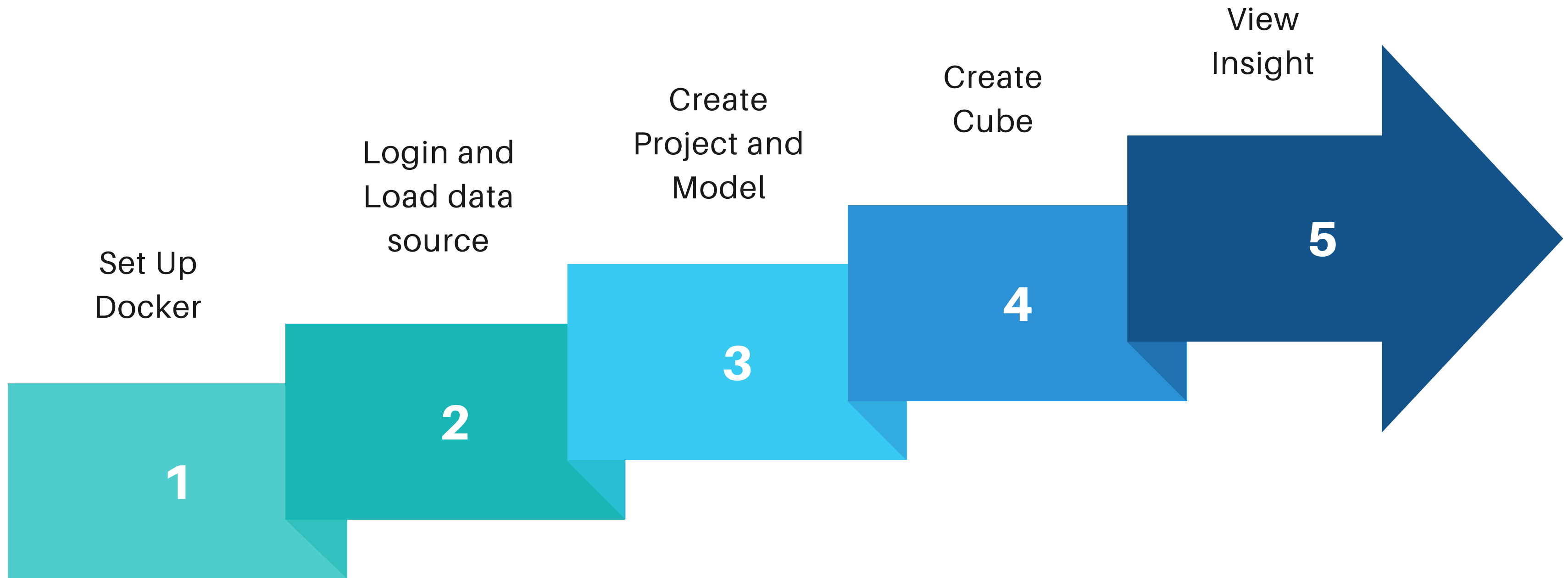


Bryan Felix - 68768

STEP BY STEP

Apache Kylin



Pull Image From Docker Repository

```
docker pull apachekylin/apache-kylin-standalone:3.0.1
```

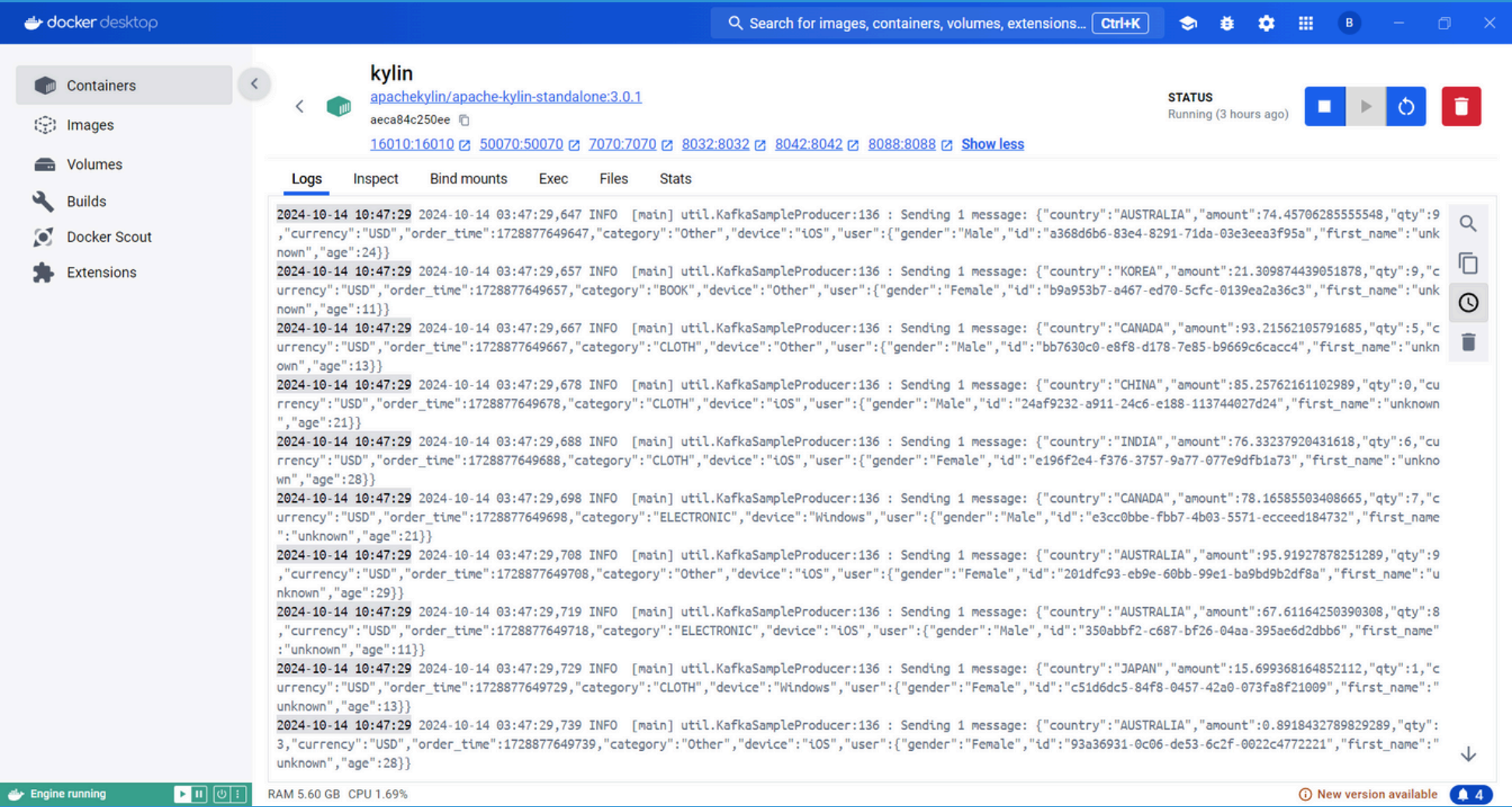
Start Container

```
docker run -d --hostname [hostname] --name [name] -m 8G -p 7070:7070 -p 8088:8088 -p 50070:50070 -p 8032:8032 -p 8042:8042 -p 16010:16010 apachekylin/apache-kylin-standalone:3.0.1
```

SET UP DOCKER

Create .wslconfig file (Only Windows)

```
Directory --> C://users/[your user name]/.wslconfig
Content --> [wsl2]
kernelCommandLine = vsyscall=emulate
```



LOGIN

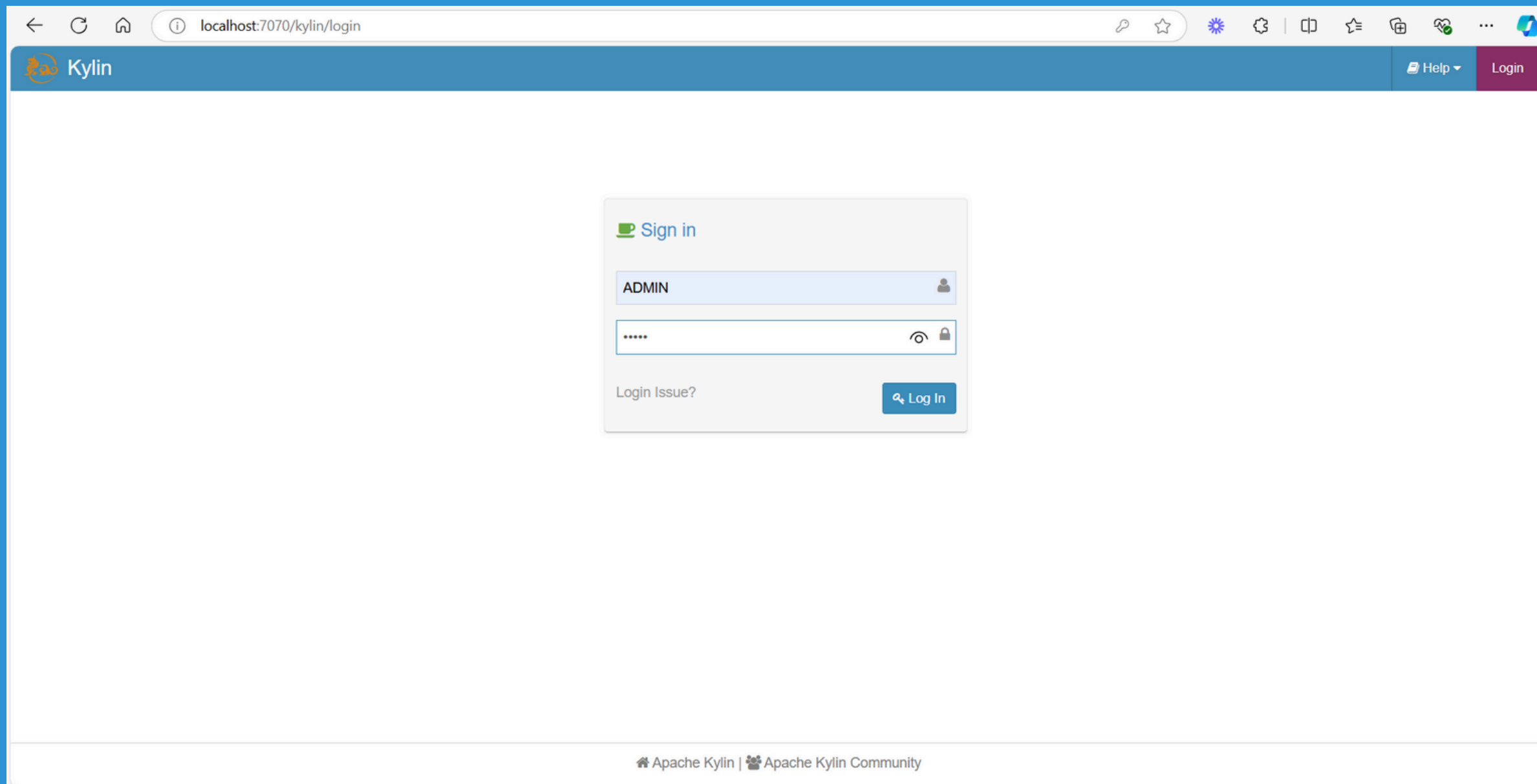
Open Kylin Website

http://localhost:7070/kylin/login

Login

username: ADMIN

password: KYLIN



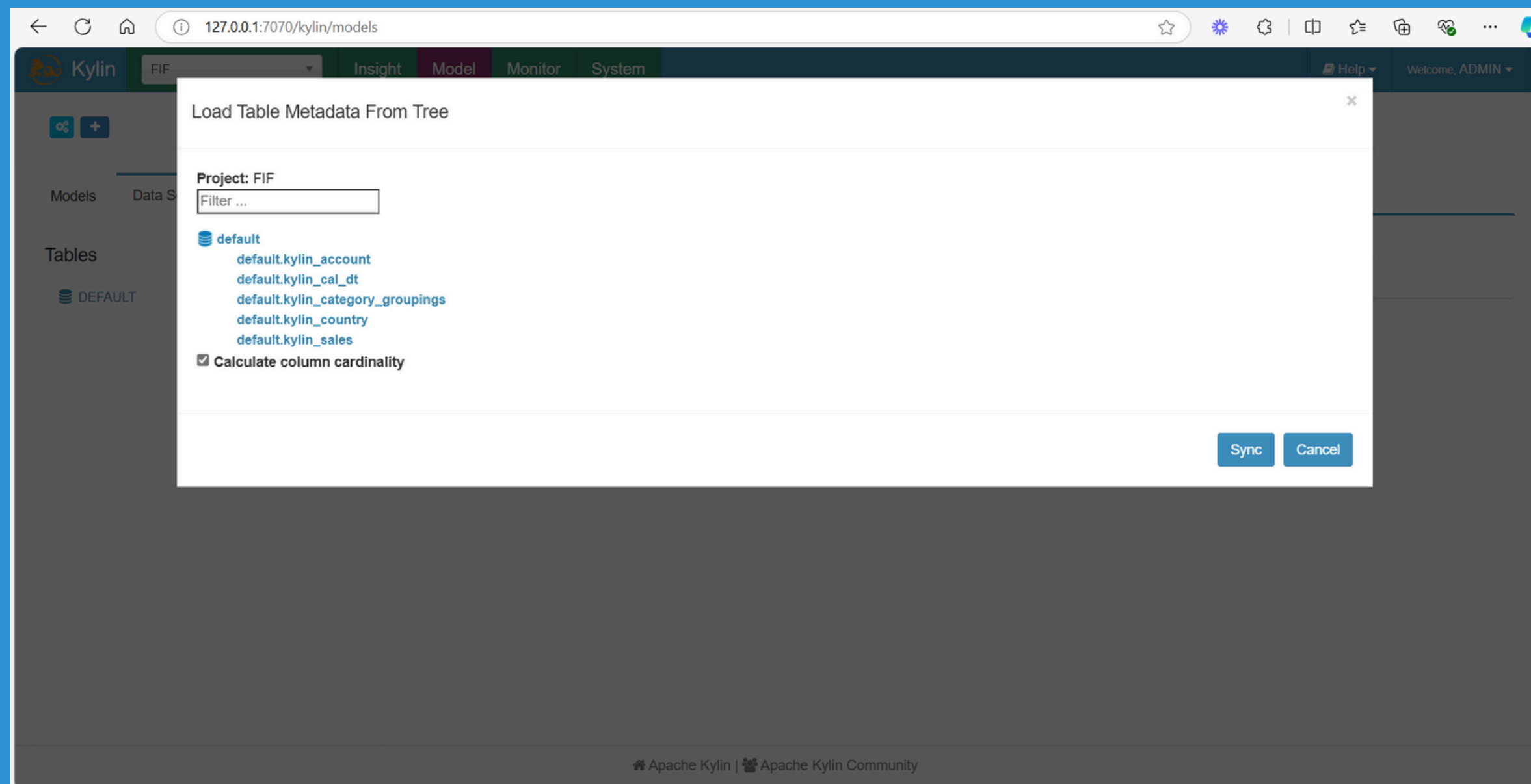
LOAD DATA SOURCE

Load Table Metadata From Tree

Choose default

Click Table needed

Sync table

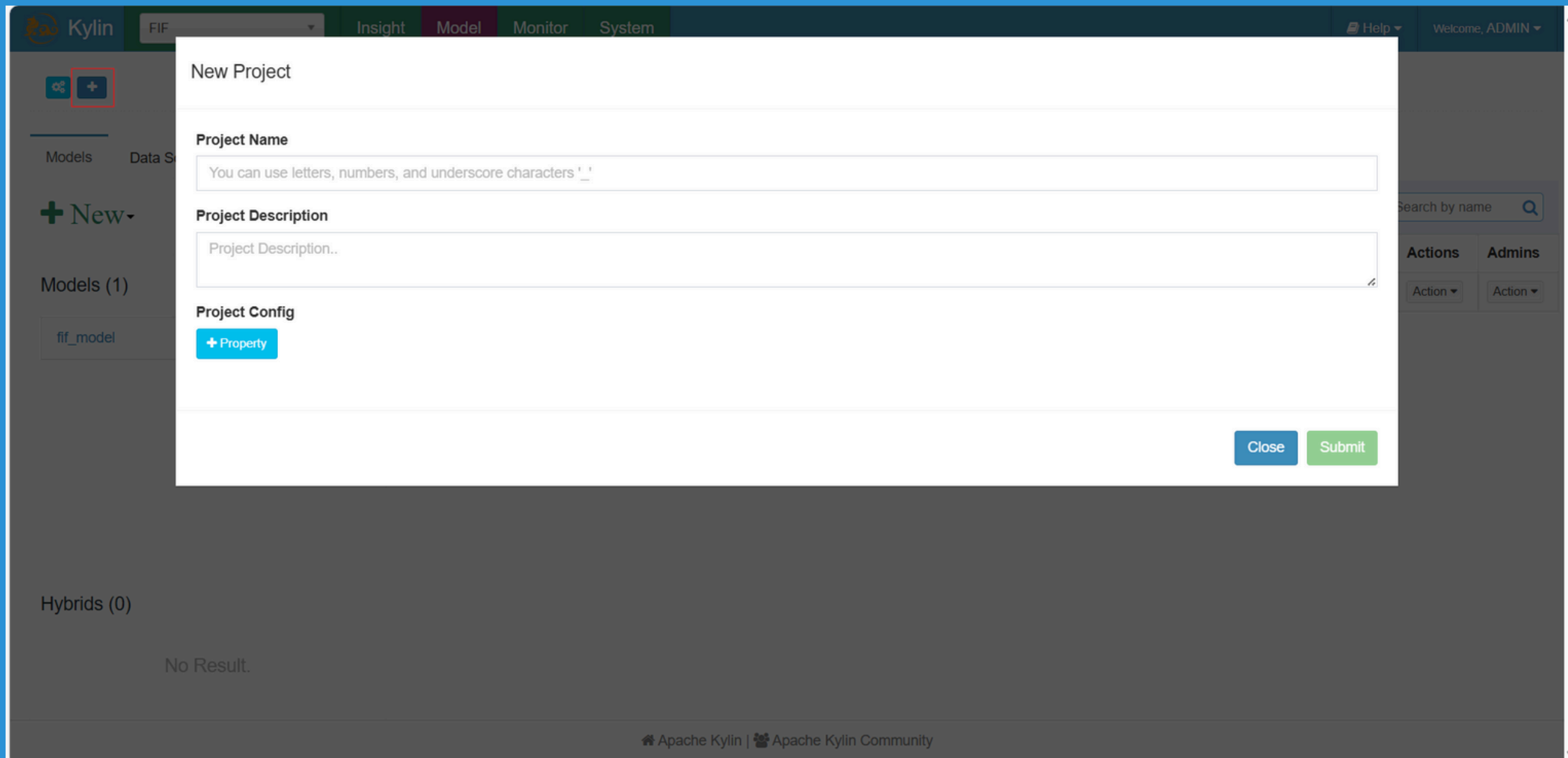


CREATE PROJECT

New Project

Click + button at top left

Insert project name and submit



The screenshot shows the Apache Kylin web interface with a 'New Project' modal dialog open. The dialog has a title bar 'New Project' and three main sections: 'Project Name', 'Project Description', and 'Project Config'. The 'Project Name' section has a text input field with a placeholder 'You can use letters, numbers, and underscore characters ' _ '' and a red box highlighting a '+' button in the top left of the Kylin interface. The 'Project Description' section has a text area with a placeholder 'Project Description..'. The 'Project Config' section has a '+ Property' button. At the bottom right of the dialog are 'Close' and 'Submit' buttons. The background interface shows the Kylin logo, a top navigation bar with tabs like 'Insight', 'Model', 'Monitor', and 'System', and a left sidebar with a '+ New' button and a list of models including 'fif_model'.

Kylin

FIF

Insight Model Monitor System

Help Welcome, ADMIN

New Project

Project Name

You can use letters, numbers, and underscore characters ' _ ''

Project Description

Project Description..

Project Config

+ Property

Close Submit

Models Data S

+ New

Models (1)

fif_model

Hybrids (0)

No Result.

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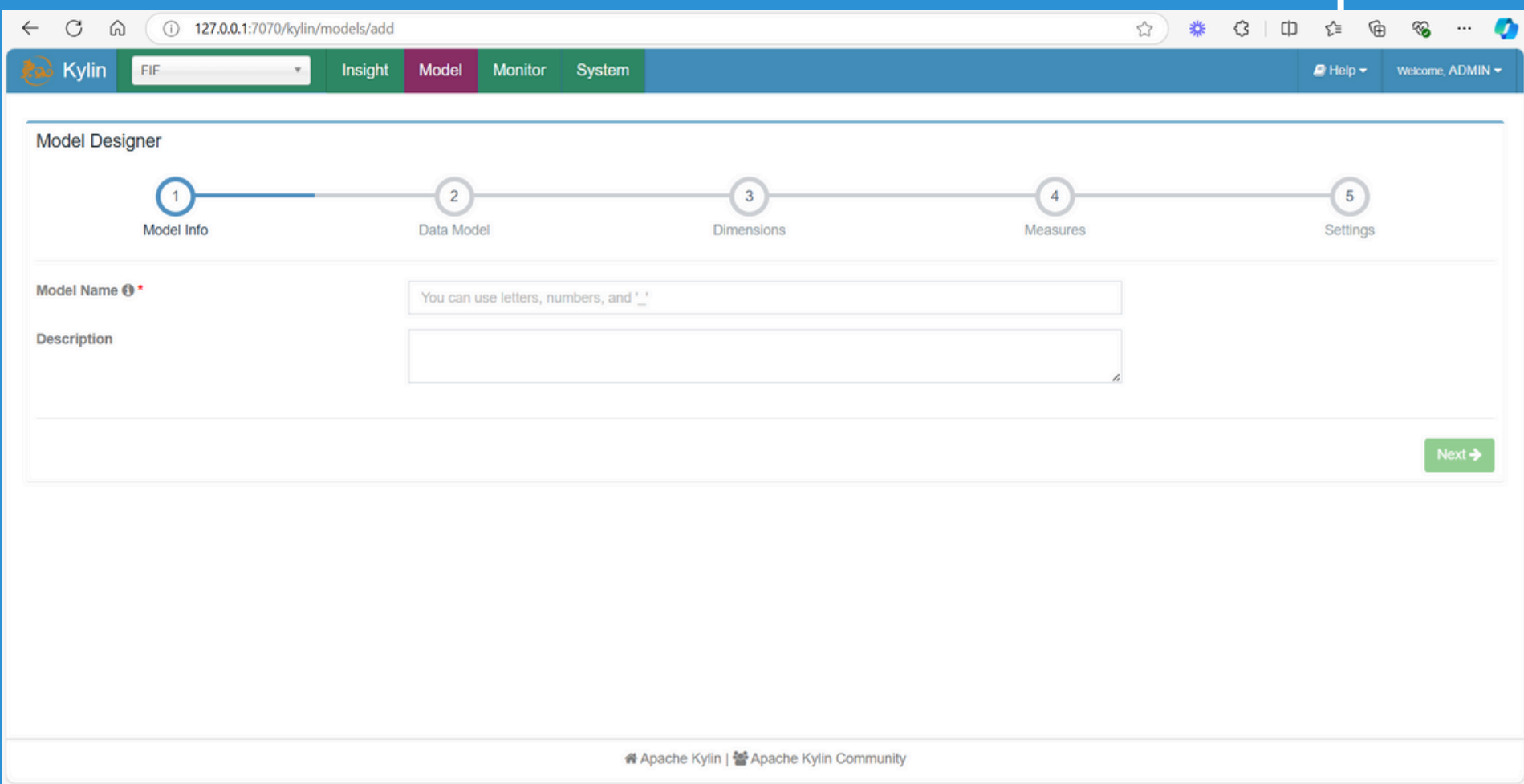
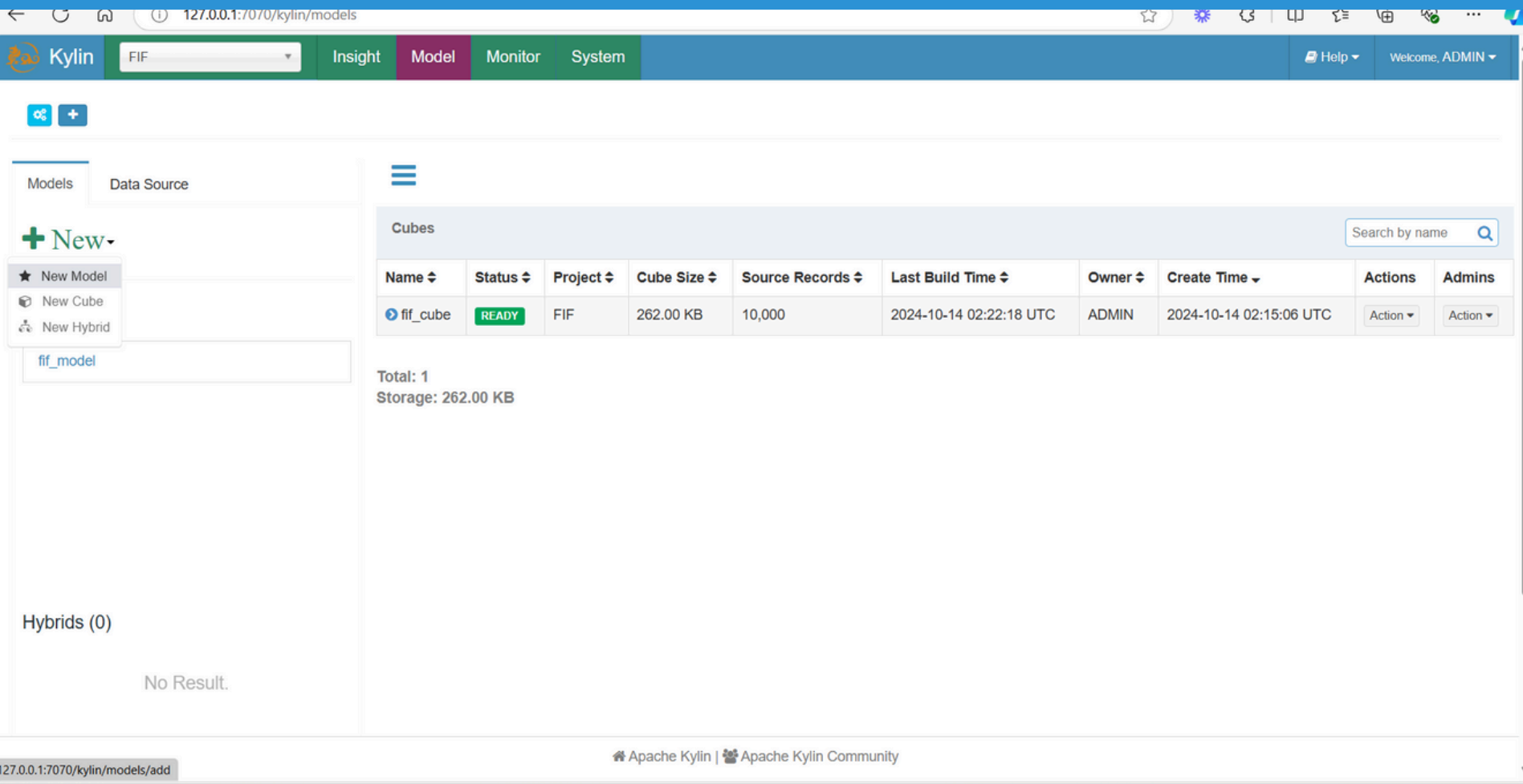
CREATE MODEL

New Model

Click +New button at left, Choose New Model

1. Model Info

Insert model name



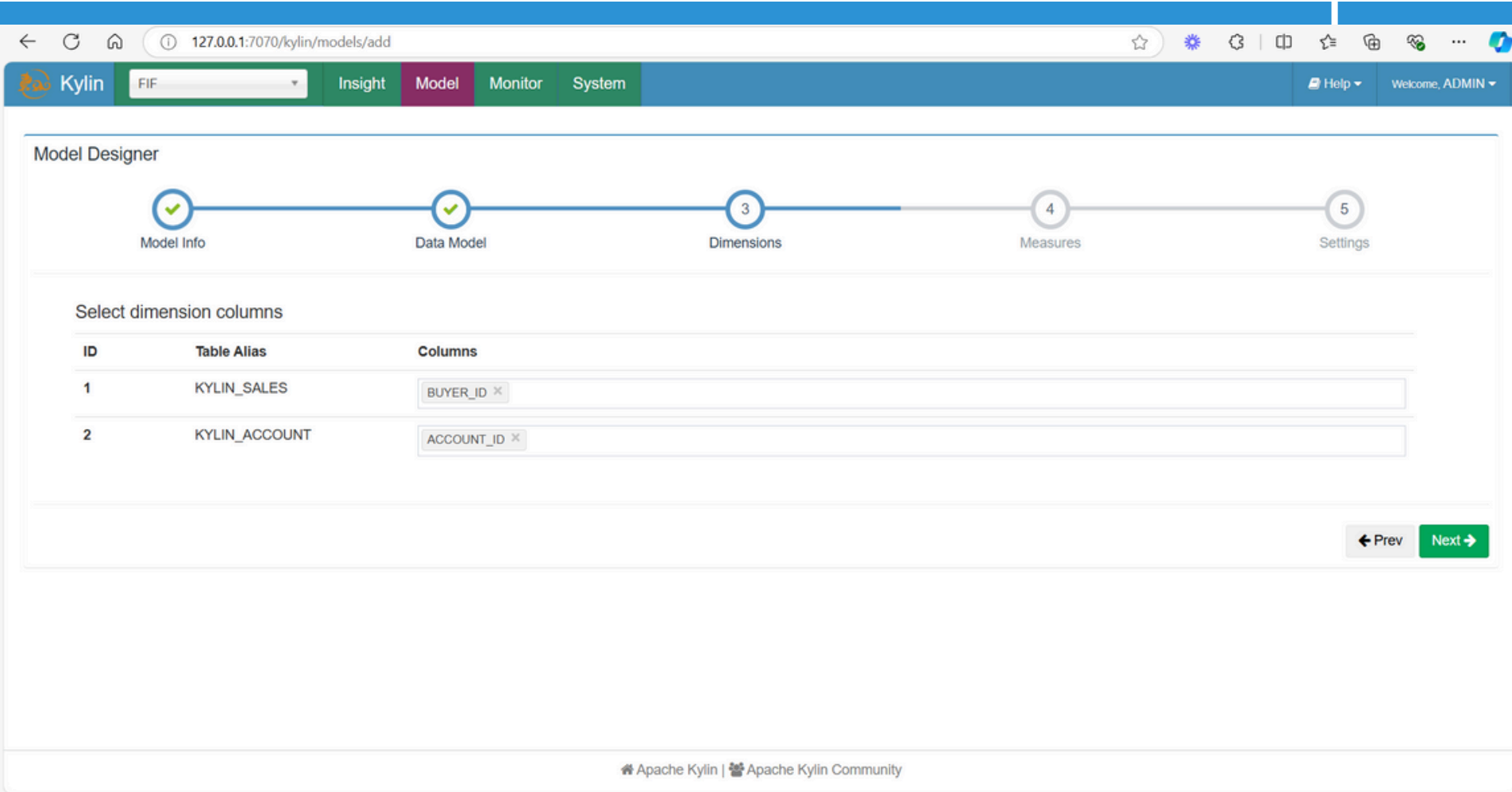
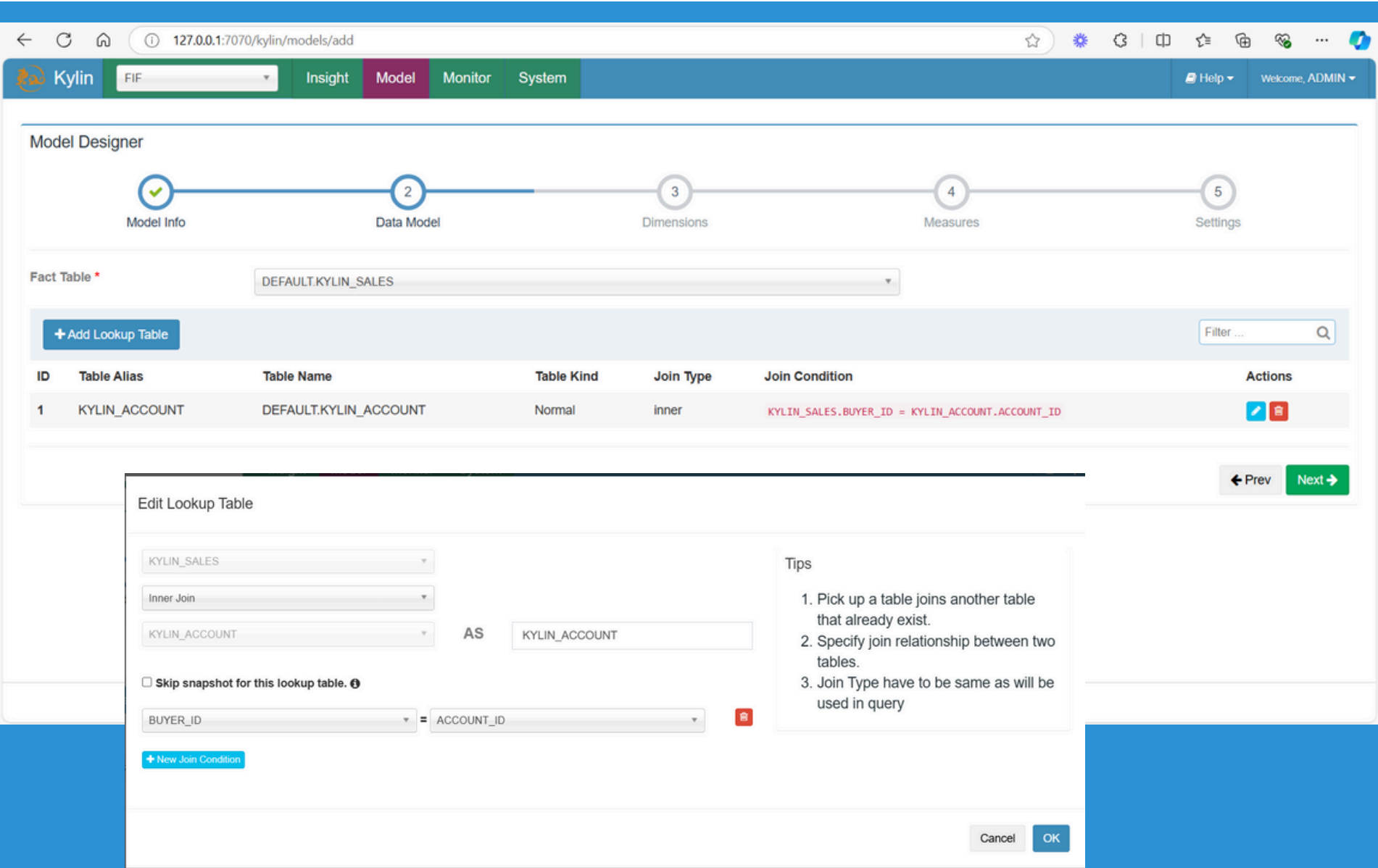
CREATE MODEL

2. Data Model

- Select table fact
- Add lookup table
- Join lookup table

3. Dimensions

- Select dimensions column



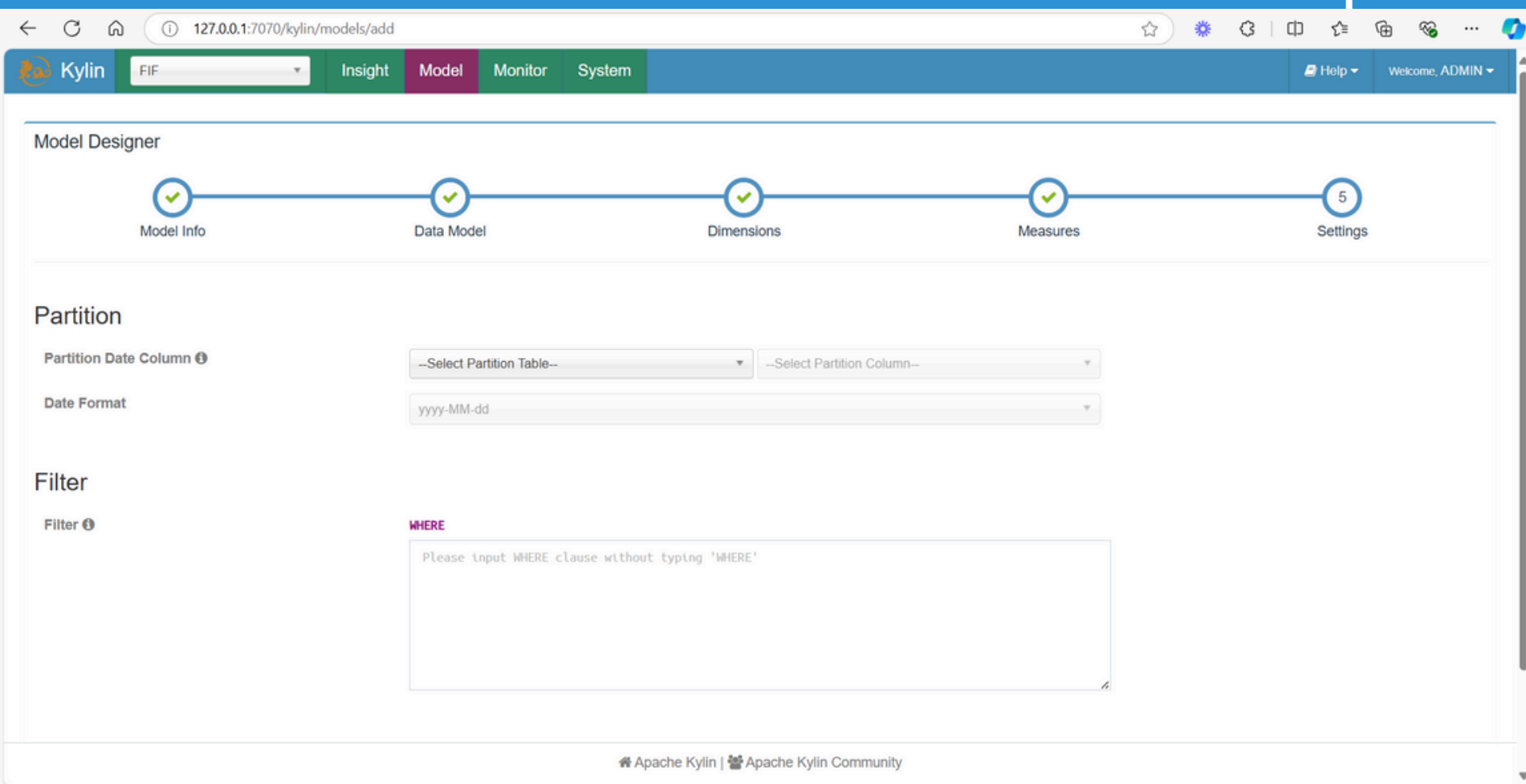
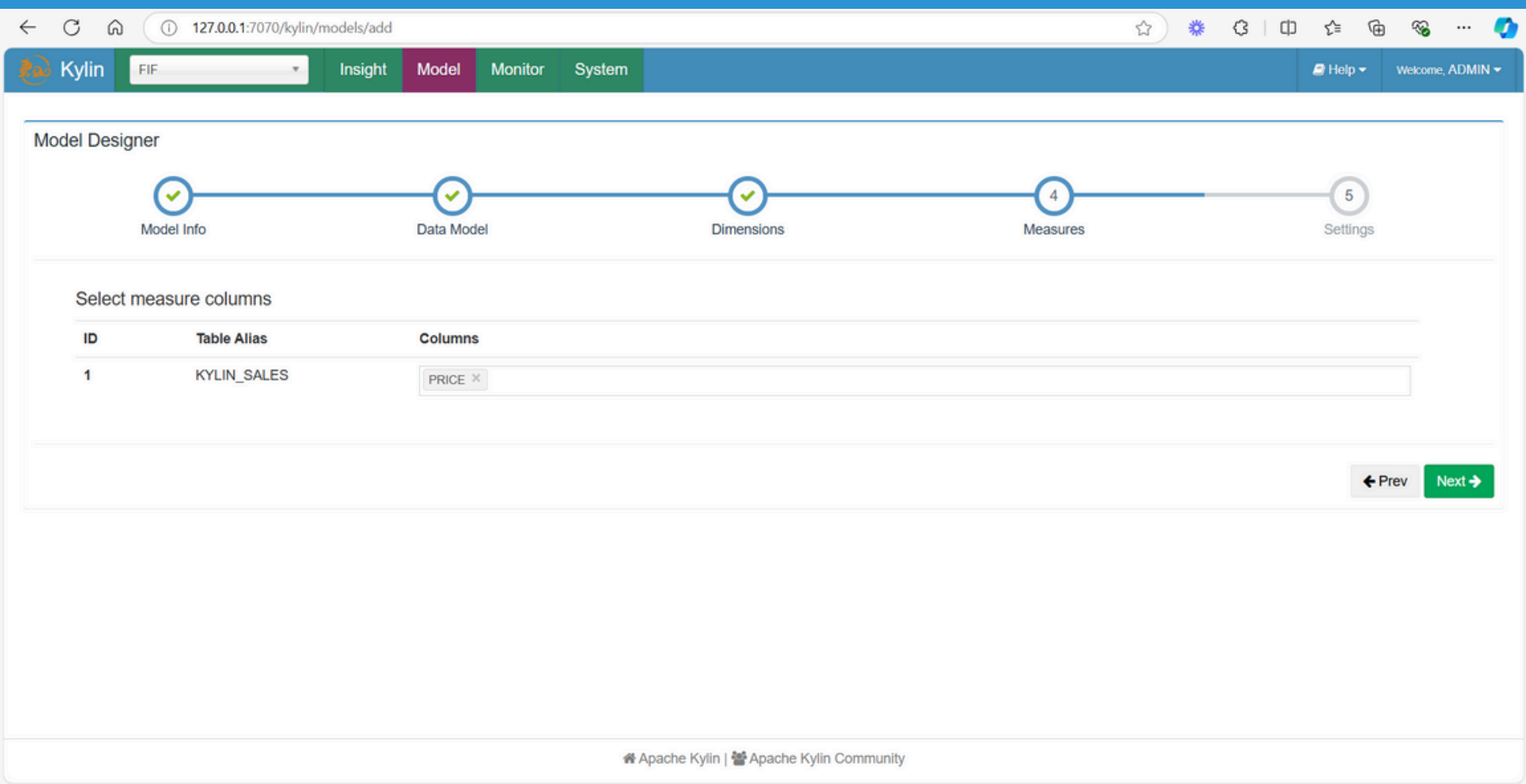
CREATE MODEL

4. Measures

Select measure column from fact table

5. Settings

Insert Partition



CREATE CUBE

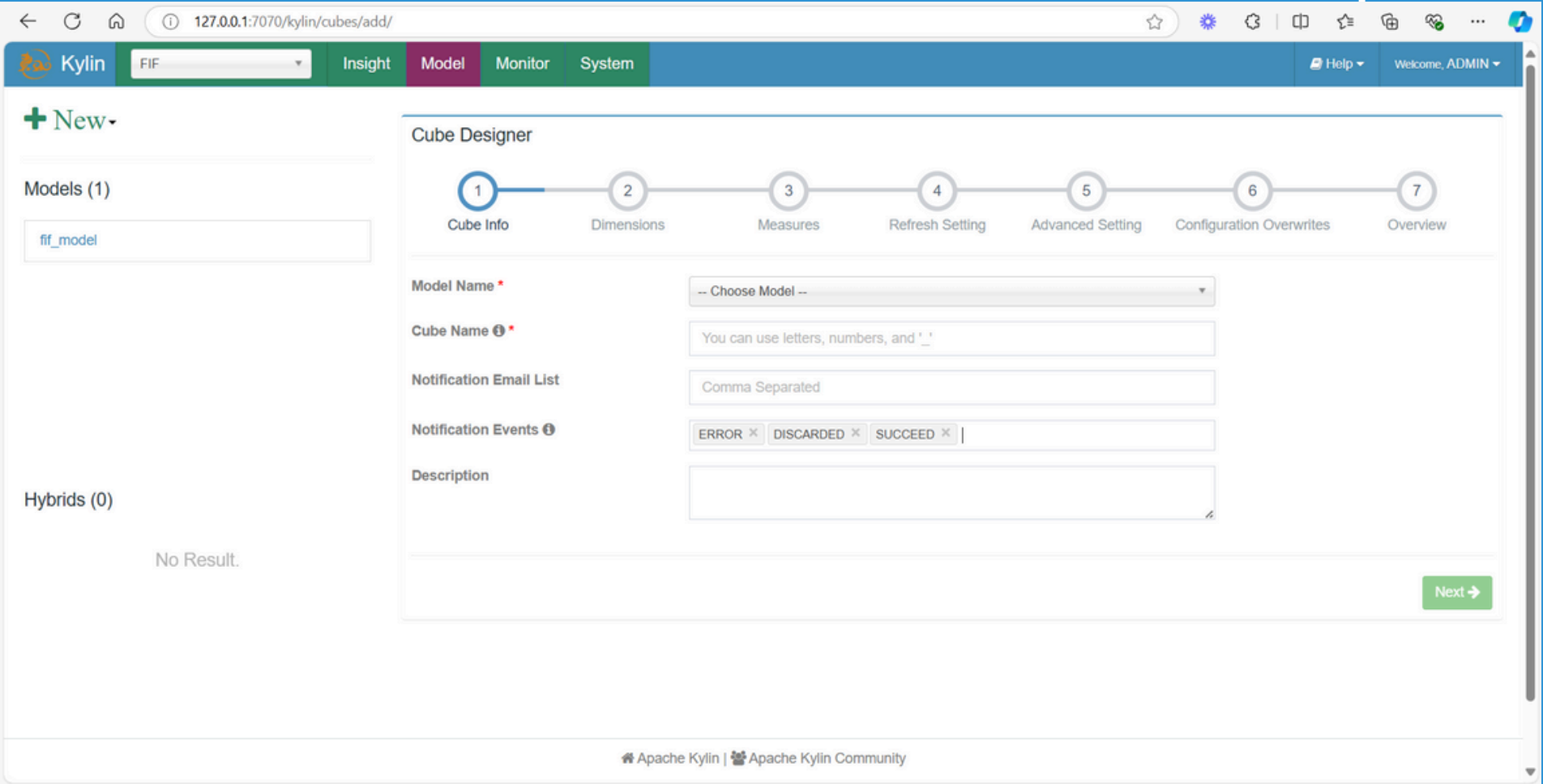
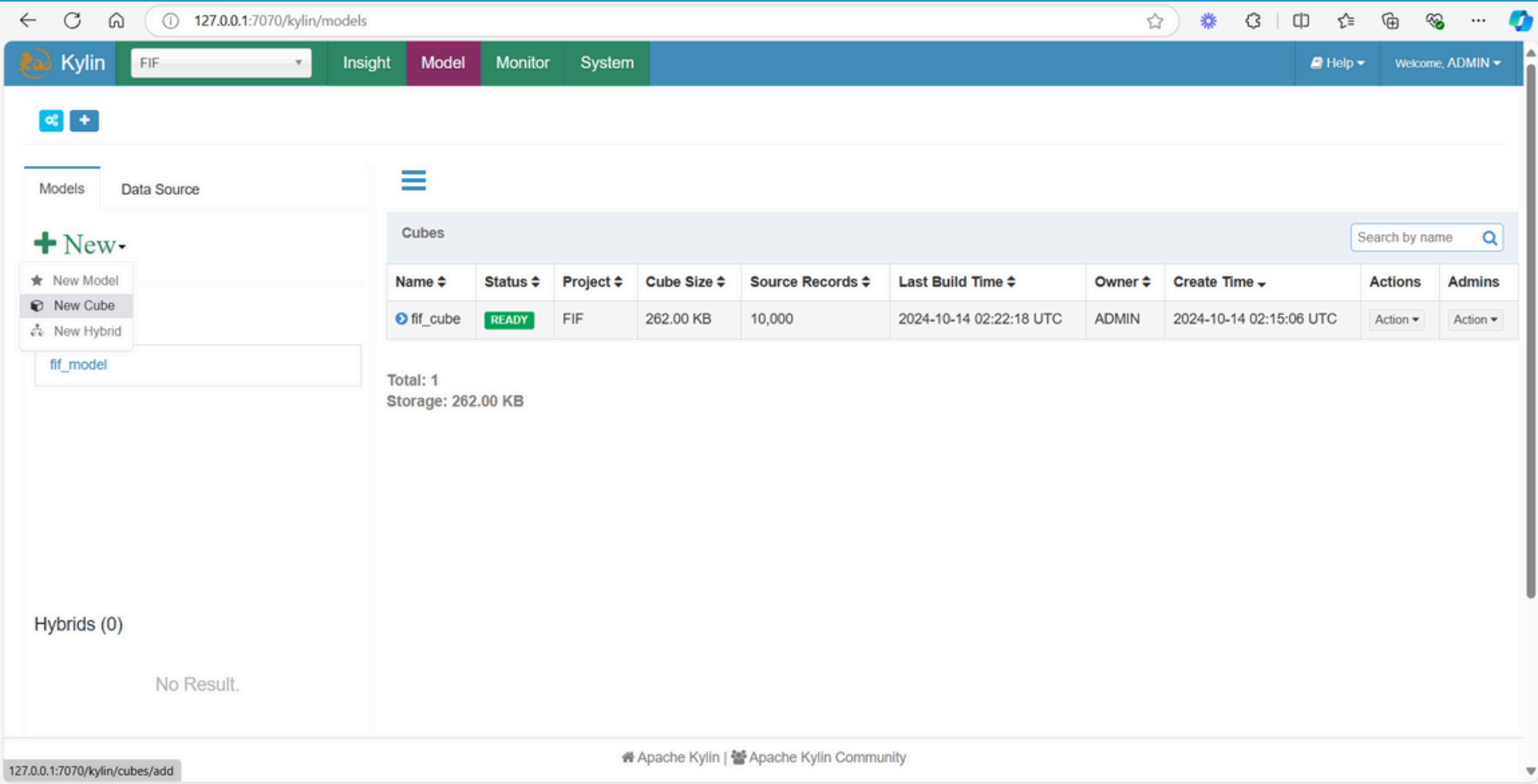
New CUBE

Click +New button at left, Choose New Cube

1. Cube Info

Choose model

Insert Cube name



CREATE CUBE

2. Dimensions

Add dimensions with
normal or derived type

3. Measures

Add measure

Bulk Add Measures can add SUM, RAW,
MIN, MAX, PERCENTILE

Click + Measure to add custom measures

The screenshot shows the Apache Kylin Cube Designer interface. The 'Model' tab is selected, and the 'Dimensions' step is active in the progress bar. A table lists dimensions with columns: ID, Name, Table Alias, Type, Column, and Actions. Below the table, a modal titled 'Auto Generate Dimensions' is open, showing a list of tables (KYLIN_SALES, KYLIN_ACCOUNT, KYLIN_COUNTRY) and their columns. The 'KYLIN_SALES' table is selected, and the 'BUYER_ID' column is highlighted. The modal also includes a 'Select All' checkbox and a 'Cancel' button.

ID	Name	Table Alias	Type	Column	Actions
1	BUYER_ID	KYLIN_SALES	normal	BUYER_ID	
2	ACCOUNT_ID	KYLIN_ACCOUNT	normal	ACCOUNT_ID	
3	ACCOUNT_COUNTRY	KYLIN_ACCOUNT	normal	ACCOUNT_COUNTRY	
4	COUNTRY	KYLIN_COUNTRY	normal	COUNTRY	

Auto Generate Dimensions ⓘ This is a helper for you to batch generate dimensions.
Visit [derived column](#) for more about derived column.

KYLIN_SALES [FactTable]

Select All	Name	Columns
<input checked="" type="checkbox"/>	BUYER_ID	BUYER_ID

KYLIN_ACCOUNT [LookupTable]

Select All	Name	Columns	Normal	Derived
<input checked="" type="checkbox"/>	ACCOUNT_ID	ACCOUNT_ID	<input checked="" type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/>	ACCOUNT_COUNTRY	ACCOUNT_COUNTRY	<input checked="" type="radio"/>	<input type="radio"/>

KYLIN_COUNTRY [LookupTable]

Select All	Name	Columns
------------	------	---------

Cancel OK

The screenshot shows the Apache Kylin Cube Designer interface. The 'Model' tab is selected, and the 'Measures' step is active in the progress bar. A table lists measures with columns: Name, Expression, Parameters, Return Type, and Actions. Below the table, a modal titled 'Edit Measure' is open, showing a form to configure a measure. The 'Name' field is 'TOTAL_PRICE', the 'Expression' is 'SUM', the 'Param Type' is 'column', and the 'Param Value' is 'Select Measure'. The 'Return Type' is 'KYLIN_SALES.PRICE'. The modal also includes a checkbox for 'Also Show Dimensions'.

Name	Expression	Parameters	Return Type	Actions
COUNT	COUNT	Value:1, Type:constant	bigint	

Edit Measure

Name: TOTAL_PRICE

Expression ⓘ: SUM

Param Type: column

Param Value ⓘ: Select Measure

Return Type: KYLIN_SALES.PRICE

☐ Also Show Dimensions

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CREATE CUBE

4. Refresh Settings

Set how and when the data within the cube is refreshed from the underlying source systems.

- Full refresh: Reloads all data
- Incremental refresh: Only updates with new or changed records
- Scheduled refresh: Runs at specified intervals

5. Advance Settings

Set advance configuration like caching settings for faster query responses, partitioning to manage large datasets efficiently, and optimization settings

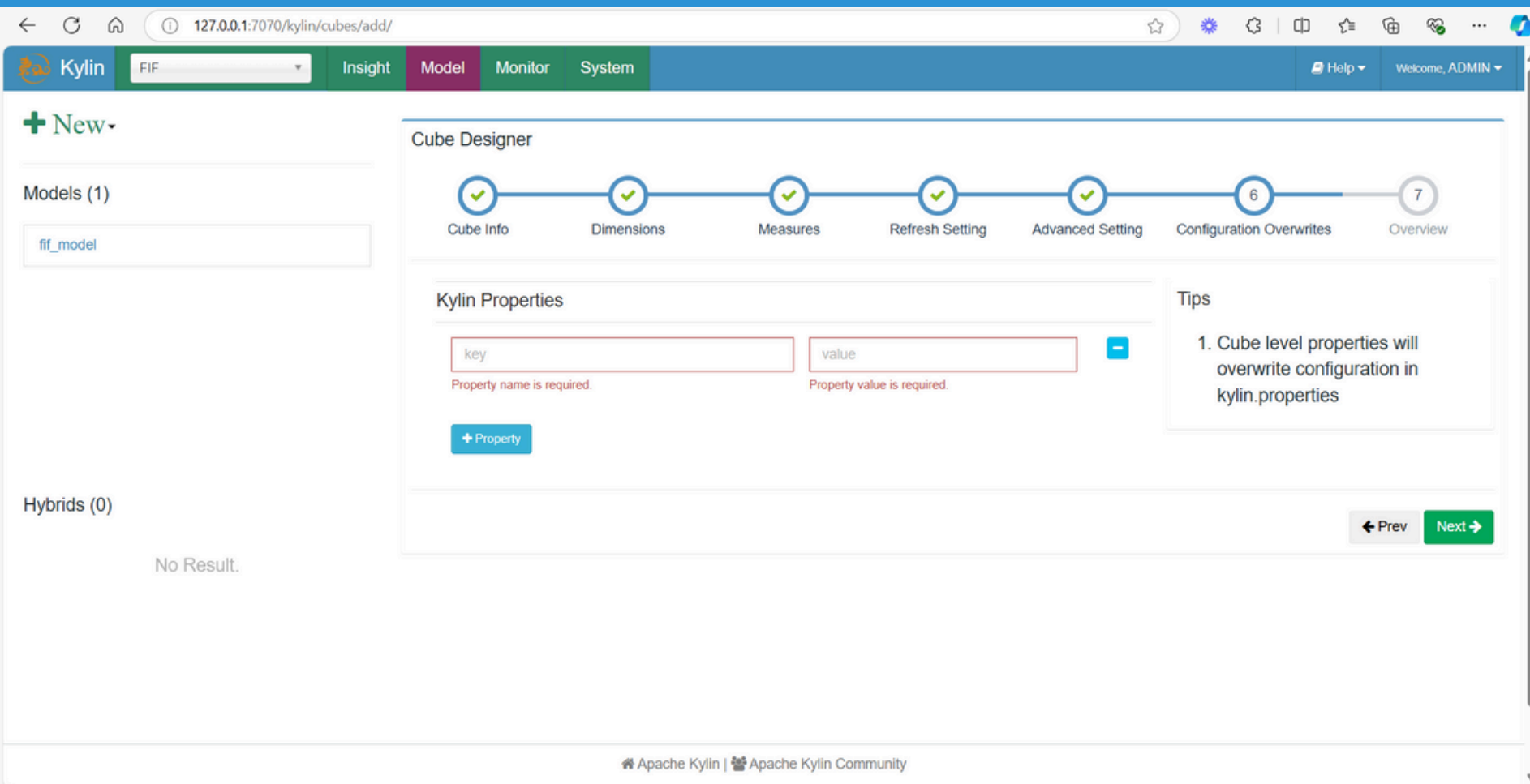
The screenshot shows the 'Refresh Setting' step (step 4) in the Apache Kylin Cube Designer. The progress bar at the top indicates the current step. The 'Auto Merge Thresholds' section has two rows: the first with a value of 7 and a unit of 'days', and the second with a value of 28 and a unit of 'days'. There is a 'New Thresholds +' button below. The 'Volatile Range' is set to 0. The 'Retention Threshold' is also set to 0. The 'Partition Start Date' field is empty with a calendar icon. Navigation buttons 'Prev' and 'Next' are at the bottom right.

The screenshot shows the 'Advanced Setting' step (step 5) in the Apache Kylin Cube Designer. The progress bar at the top indicates the current step. The 'Aggregation Groups' section is active, showing a table with one group. The group includes a list of dimensions: KYLIN_SALES.BUYER_ID, KYLIN_ACCOUNT.ACCOUNT_ID, KYLIN_ACCOUNT.ACCOUNT_COUNTRY, and KYLIN_COUNTRY.COUNTRY. There are buttons for 'Mandatory Dimensions', 'Hierarchy Dimensions', and 'Joint Dimensions'.

CREATE CUBE

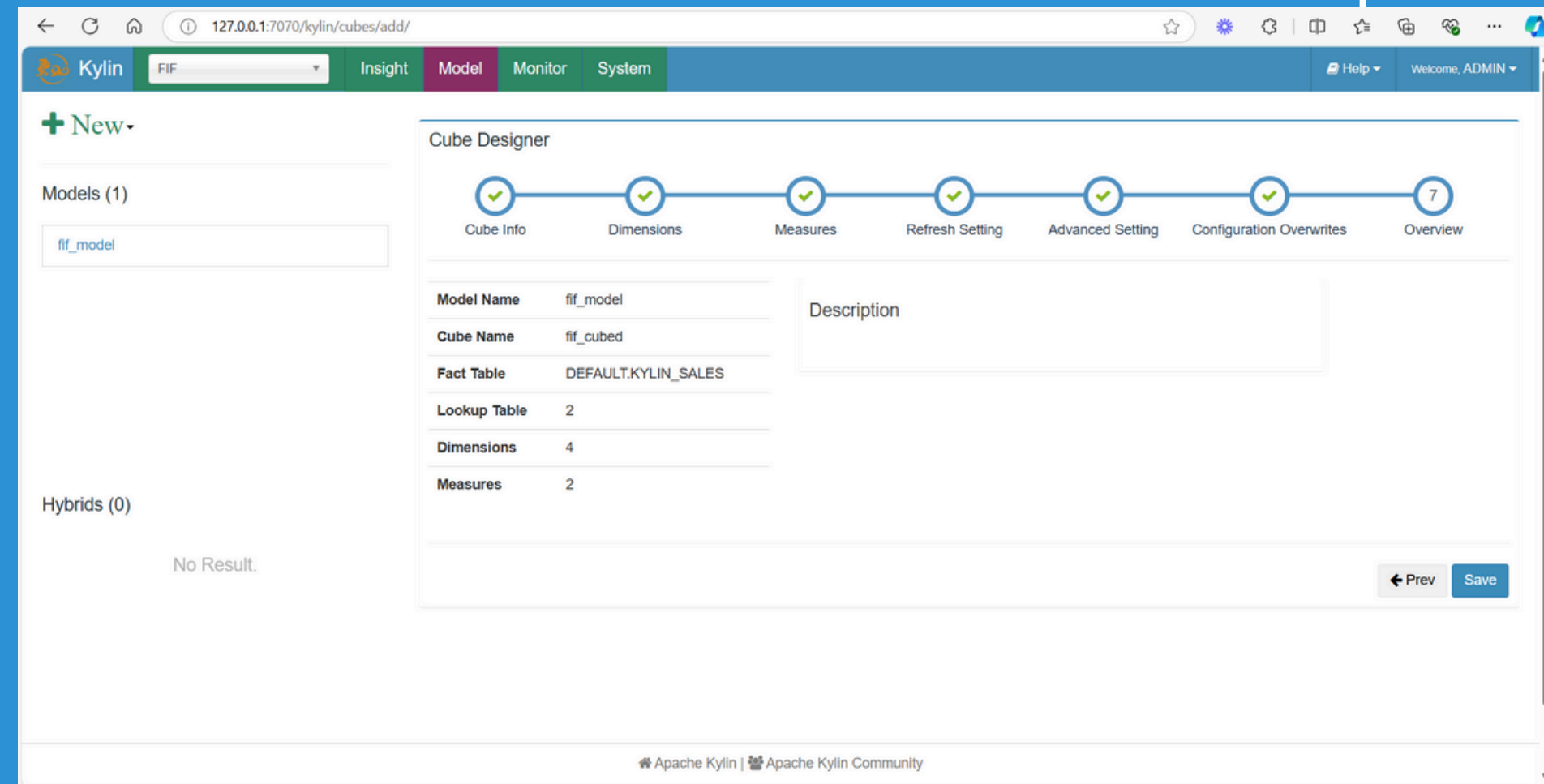
6. Configuration Overwrites

Provides the option to override default settings for specific queries or jobs.



7. Overview

A summary dashboard or high-level report of the cube's current status and usage.



VIEW INSIGHT

Query

Add query for view

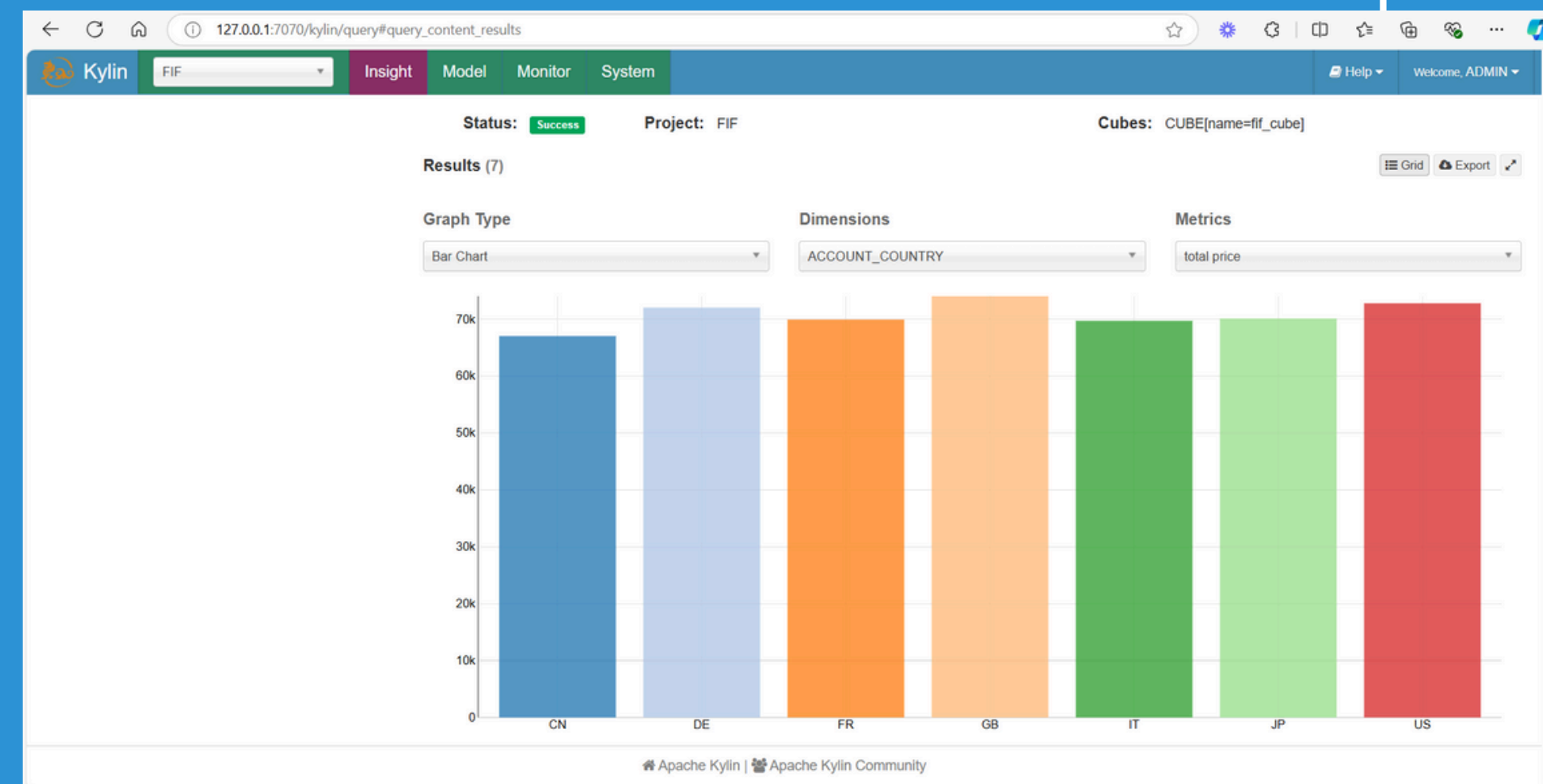
Visualize

Click Visualization button

The screenshot shows the Apache Kylin web interface with the 'Insight' tab selected. The 'New Query' tab is active in the query editor, displaying a SQL query:

```
1 select KYLIN_ACCOUNT.ACCOUNT_COUNTRY, sum(KYLIN_SALES.PRICE) as "total price"
2 from KYLIN_SALES
3 join KYLIN_ACCOUNT
4 on KYLIN_ACCOUNT.ACCOUNT_ID = KYLIN_SALES.BUYER_ID
5 group by KYLIN_ACCOUNT.ACCOUNT_COUNTRY
```

 The 'Project' is set to 'FIF'. The 'Status' is 'Success'. The 'Results' section shows 7 results. The 'Query String' is visible. The 'Start Time' is 2024-10-14 06:55:40 UTC and the 'Duration' is 1.00s. The 'Cubes' are CUBE[name=fif_cube]. The 'Visualization' button is visible at the bottom right of the results section.



THANK YOU