

### **Tianchi User Manual**



### **Preface**

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# 1 Register

For a new participant, the first step is to do a registration on Tianchi website.

Log in Tianchi official website (https://tianchi.aliyun.com/) and click
 <Registration>:



Figure 1 Tianchi Official Website

2) Click <sign up>:

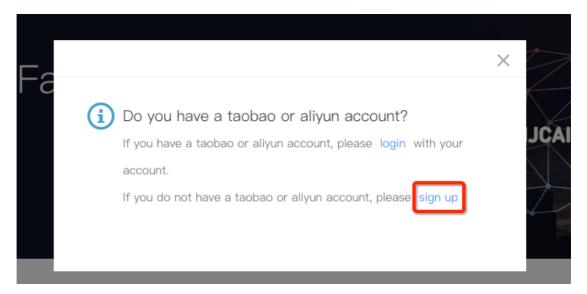
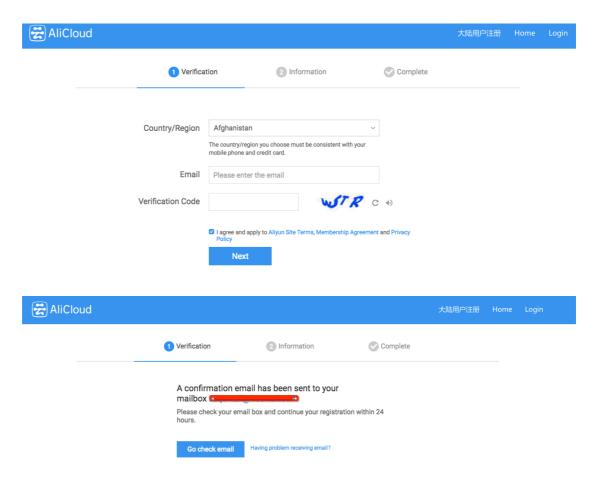


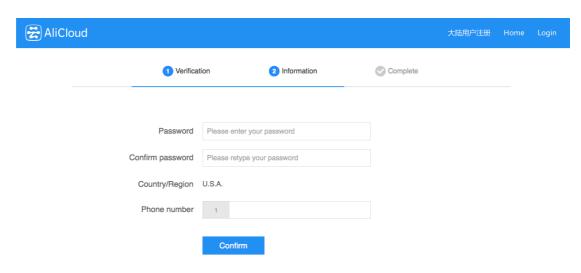
Figure 2 Do you have a taobao or aliyun account

3) Choose your Country/Region and verify your email address:

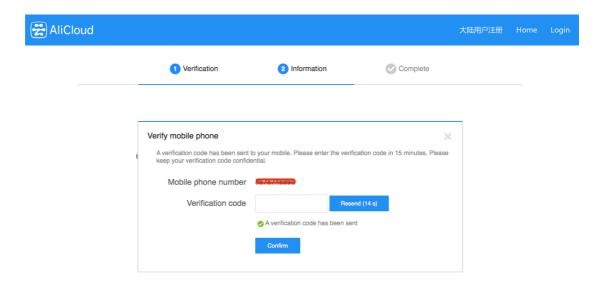
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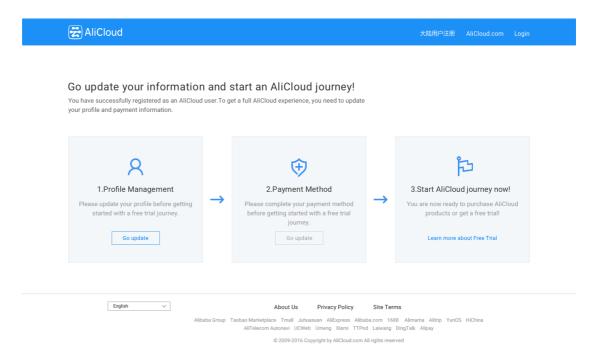
4) Set the password and verify your phone number:







#### Click < Confirm > and the registration completed.





5) Please go Back to Tianchi Home and click <Login>:

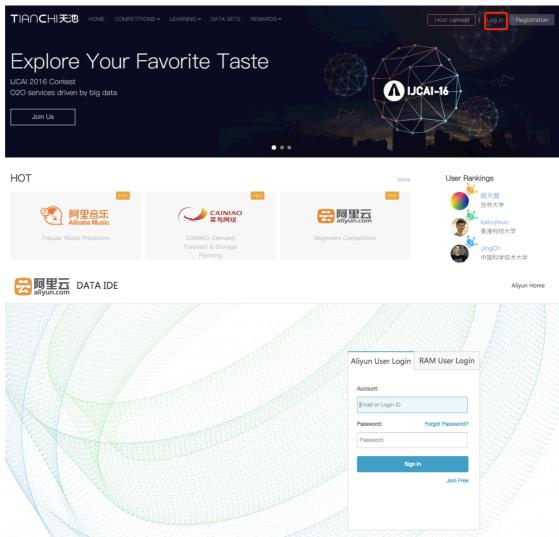


Figure 3 Login Maininterface



# 2 Competition on Local

During this competition, participants can download data sets into the local and submit their results by uploading local file onto Tianchi website. Participants can submit as many results as they want, but only the latest submission before the update will be evaluated.

## 2.1 Sign up and Download Data

For a new Tianchi user, you need to fill in your personal info in order to participate a contest.

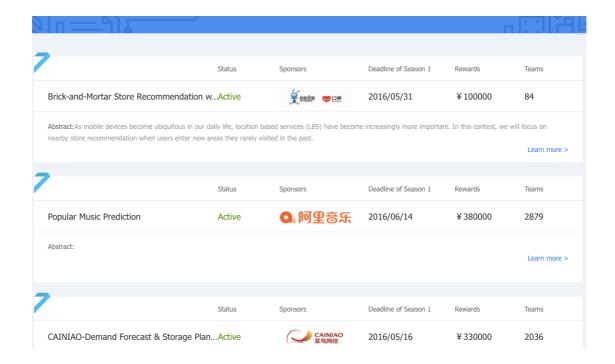
 Click [COMPETITIONS->ALGORITHM COMPETITIONS] to find out your interested competition:



Figure 5 Competitions Interface

2) Click <Learn more> at the end of the competition to open the competition details, as follows:





3) Click <Sign up> to join in the competiton:

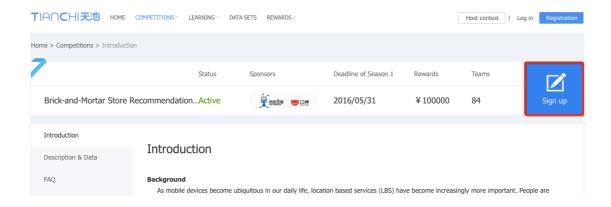
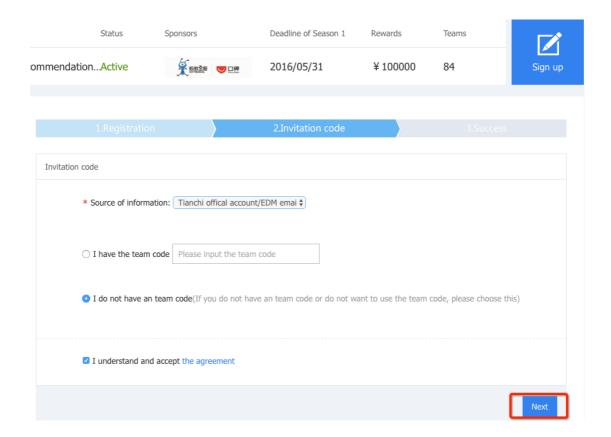
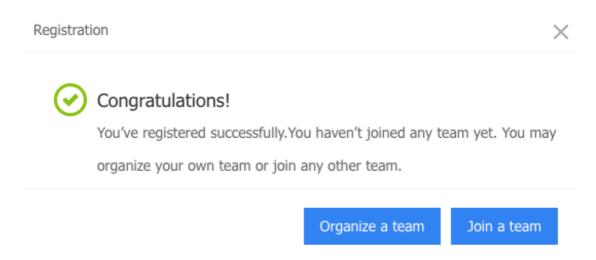


Figure 6 Sign up a competition

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4) After signing up successfully, the system will ask if you need to <Join a team> or <Organize a team>. Gengerally, team mergers are allowed during the competition, so you can firstly click <Organize a team> (yourself is a team with a team name of your Tianchi nick defaultly).



5) You can download the date sets from [Description & Data] page:



### Description & Data

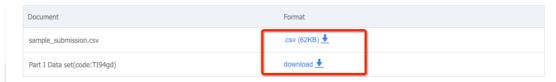


Figure 7 Download Data

## 2.2 Submit Result

1) Click <Submit result> to submit your result:

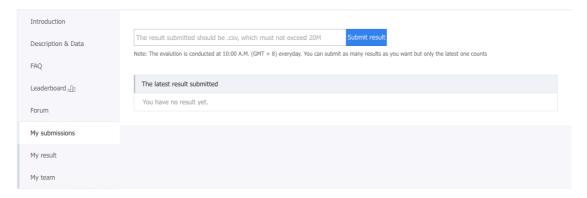
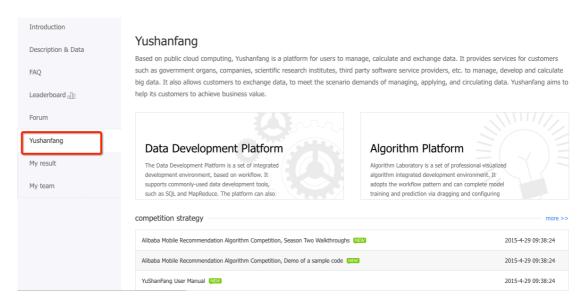


Figure 8 Submit Result Page



# 3 Competition on Yushanfang Platform

Some competitions may need to use the distributed competition platform – Yushanfang. For those competitions, you will find the following tab:



### 3.1. Verfication

In order to use the distributed platform, you must verify your account via your ID info (ID card, student card, Passport etc.).

Verifying your account will help to prove that you are not holding multiple accounts. Tianchi will not use your personal info beyond the purpose of verifying the account.

Click on your account name at the right-upper corner to enter into [My Page].
 Click <Verify your account>:

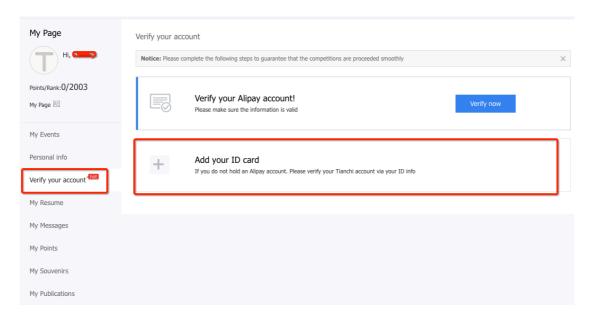


Figure 11 Account Verification

2) Click on to fill in your info:

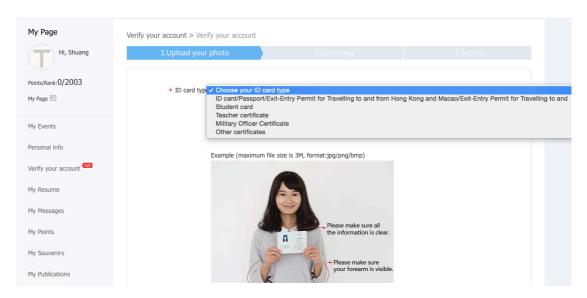


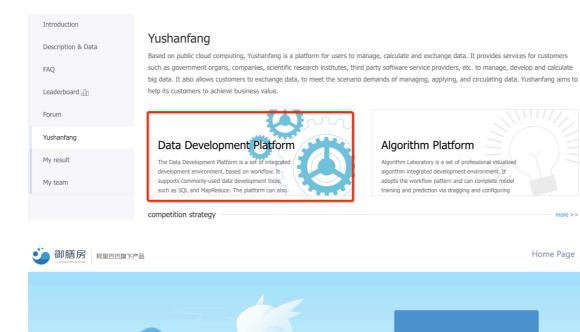
Figure 12 Upload Your Photo

Choose your ID type and upload the photo with your ID card. Please make sure all the information is clear and your forearm is visible.

## 3.2 Log in Yushanfang Platform

Click and log in the Yushanfang Platform (Please use your Tianchi account to log in the Yushanfang Platform).







## 3.3 Project Page

After logging in Yushanfang platform, you can enter into your project granted by Tianchi.

 Click [My Workbench->Data Center->Workbench] to enter into your project page, as follows:

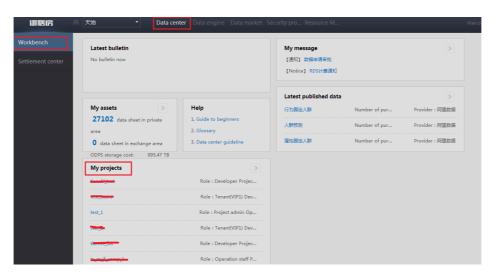


Figure 14 Workbench

- 2) In [My projects] list, you can find your project. Such as test\_1.
- 3) Click on your project name to enter into your project index interface, as follows:

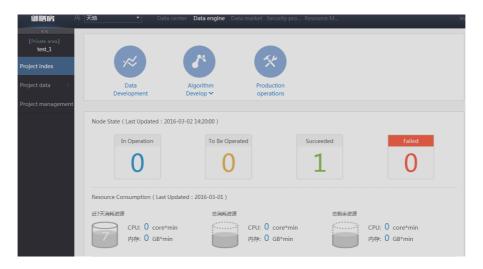


Figure 15 Project Index

### 3.4 Check Data

After you enter into your project, you can check your data.

- 1) On Figure 15, click [Project data -> Data resource
  - -> Application of data within the organization], as follows:

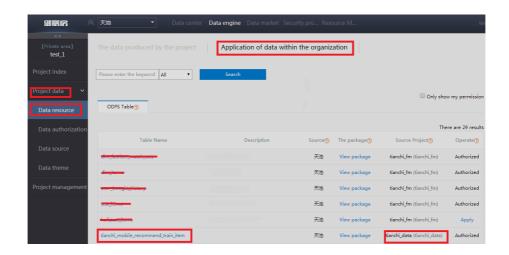


Figure 16 Check Data

2) Access the tables on [Data Development] platform.

When accessing a table, you need to add the project name before the table name. For example:

If the project name is tianchi\_data, you need to write the table name as tianchi\_data.tianchi\_mobile\_recommend\_train\_user.

#### Note:

You can copy the tables to your own project by writing the following SQL on [Data Development] platform:

Create table if not exists tianchi\_mobile\_recommend\_train\_user as select \* from tianchi\_data. tianchi\_mobile\_recommend\_train\_user;

## 3.5 Data Development

On "Data Development" platform, you can use ODPS SQL, MapReduce and UDF.

- 1) Enter into [Project Index] page, as shown on Figure 12.
- 2) Click on the "Data Development" icon to enter the following interface:

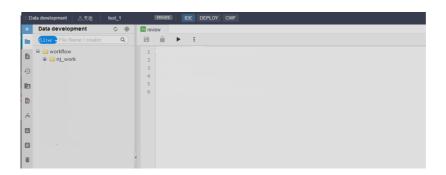


Figure 17 Data Development Workbench (IDE)

3) Add a new folder.

Click on "+" to pop up a menu.

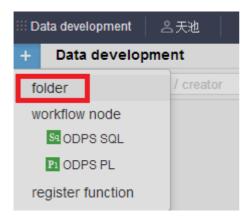


Figure 18 Menu

Click on folder to add a new folder, as follows:

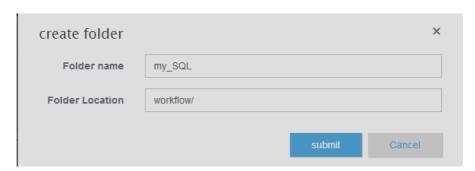


Figure 19 Create folder

4) Add a workflow node.

Right click on a folder to pop up a menu. Click <+ workflow node> to add a new workflow as follows:

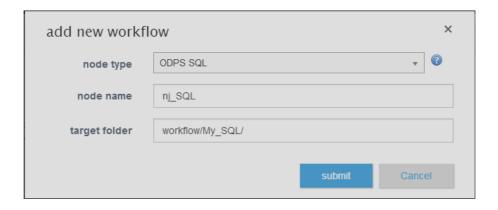


Figure 20 add a new Workflow

Click <submit> and then you can run ODPS SQL in right area, as follows:

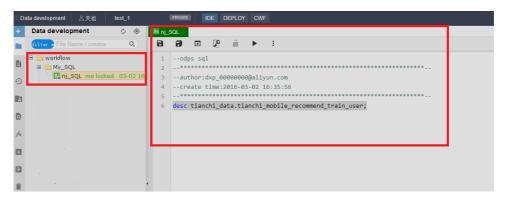


Figure 21 Run SQL

#### Note:

To learn more about data development, please refer to (http://setting.tenant.yushanfang.com/portal/help/doc.html? file=ShuJuKaiFa).

To learn ODPS SQL sytax, UDF and MapReduce, please refer to "ODPS User Manual" (<a href="http://tianchi.shuju.aliyun.com/competition/information.htm?spm=5176.100">http://tianchi.shuju.aliyun.com/competition/information.htm?spm=5176.100</a> 067.5678.2.imn7Ax&raceId=231532).

To learn MapReduce and UDF configuration, please refer to (http://setting.tenant.yushanfang.com/portal/help/doc.html? file=MrUdfLocalDev).

### 3.6 Algorithm Development

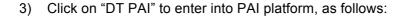
You can do Data Preprocessing, Statistics, Modeling, evaluation by build-in models on Algorithm Platform.

- 1) Enter into [Project Index] page, as shown on Figure 15
- 2) Click on the "Algorithm Develop" icon, as follows:



Figure 22 Algorithm Development





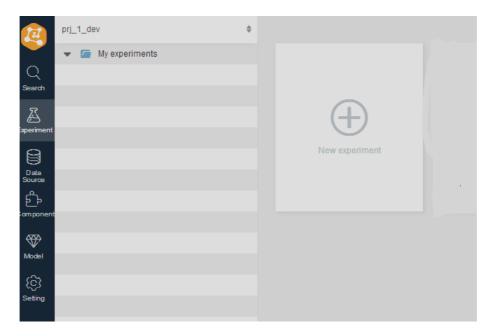


Figure 23 Algorithm Platform Interface

#### Note:

When doing data analysis on Algorithm Platform, you need to copy all the required tables into your own project at first. For the copy method, please refer to 3.4).

Please void using the full data directly. You are suggested to do data sampling before modeling.

To learn more about DT PAI, please refer to (http://setting.tenant.yushanfang.com/portal/help/doc.html?file=SuanFaPingTai).

### 3.7 Submit Result

Select the reasonable data set from the result generated by modeling and submit the data into the table which is required in [Competition Description & Data] tab on Tianchi website, as shown in figure 8.

# 4 Appendix

### **Common Used Commands:**

show tables; --show tables in your project.

desc table\_name; -- check the structure of a table.

show partitions table\_name; -- check the partition of a table

#### **Documents:**

1) Yushanfang Platform Documents

http://setting.tenant.yushanfang.com/portal/help/index.html? Lang=en

2) Algorithm Platform Documents

http://yushanfang.com/portal/help/doc.html? file=SuanFaPingTai

3) ODPS User Manual.pdf

Please Download:

https://tianchi.aliyun.com/datalab/dataSet.htm?id=6