

Aliyun IIoT

Aliyun IIoT is currently divided into two categories:End-User and Manufacturer,and the two only differ in the registration process.

HMI Setting

①Set IP address and DNS server address

The screenshot shows the 'HMI Attribute' configuration window. The 'Network Setting' section is expanded, and the 'Network 1 Setting' is highlighted with a red box. The settings for Network 1 are as follows:

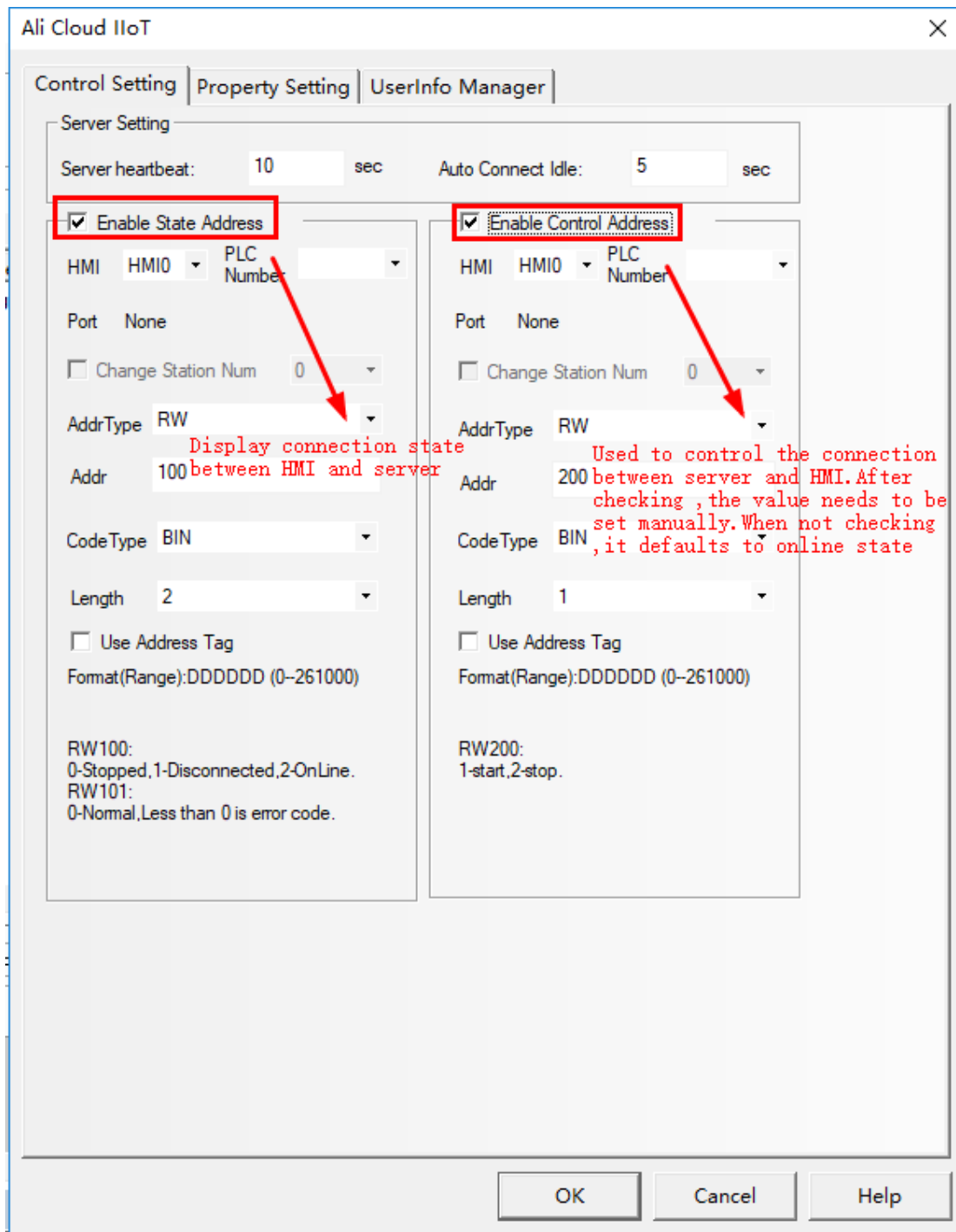
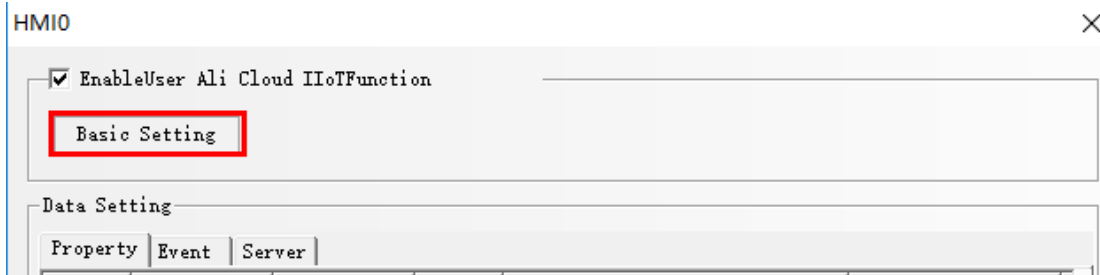
Field	Value
IP	192 . 168 . 205 . 156
Subnet Mask	255 . 255 . 255 . 0
Default Gateway	192 . 168 . 205 . 1
Enable DNS	<input checked="" type="checkbox"/>
DNS1	192 . 168 . 100 . 254
DNS2	192 . 168 . 100 . 253

Below the Network 1 settings, there are sections for Network 2 Setting and WIFI Setting. The Network 2 Setting section has empty fields for IP, Subnet Mask, Default Gateway, Enable DNS, DNS1, and DNS2. The WIFI Setting section has IP 127 . 0 . 0 . 2, Subnet Mask 255 . 255 . 255 . 0, Default Gateway 192 . 168 . 0 . 1, and Enable DHCP checked.

At the bottom of the window, there are buttons for 'OK', 'Cancel', and 'Help'.

①Setting up the connection property with Aliyun IIoT

Choice "IoT">>"aliyun IIoT">>"Basic Setting">>"Control Setting",setting up whether connect with Aliyun or not.



②Set the way the data is sent to the server
 Choice "IoT">"aliyun IIoT">"Basic Setting">"property Setting", set the way data is sent to

the server, which is a global setting (all entries added to the properties interact with the server in this setting)

Ali Cloud IIoT

Control Setting | Property Setting | UserInfo Manager

Send Mode Setting

Only send changed data

DataChang Sending

Periodic Sending 10 *100ms

Address trigger sending

Trigger Mode OFF->ON

HMI HM10 PLC Num

Port None

ChangeStationNum 0

AddrType LB

Addr 0

CodeType BIN Length 1

Format(Range):DDDD (0-9999)

QOS Setting

QOS: 1

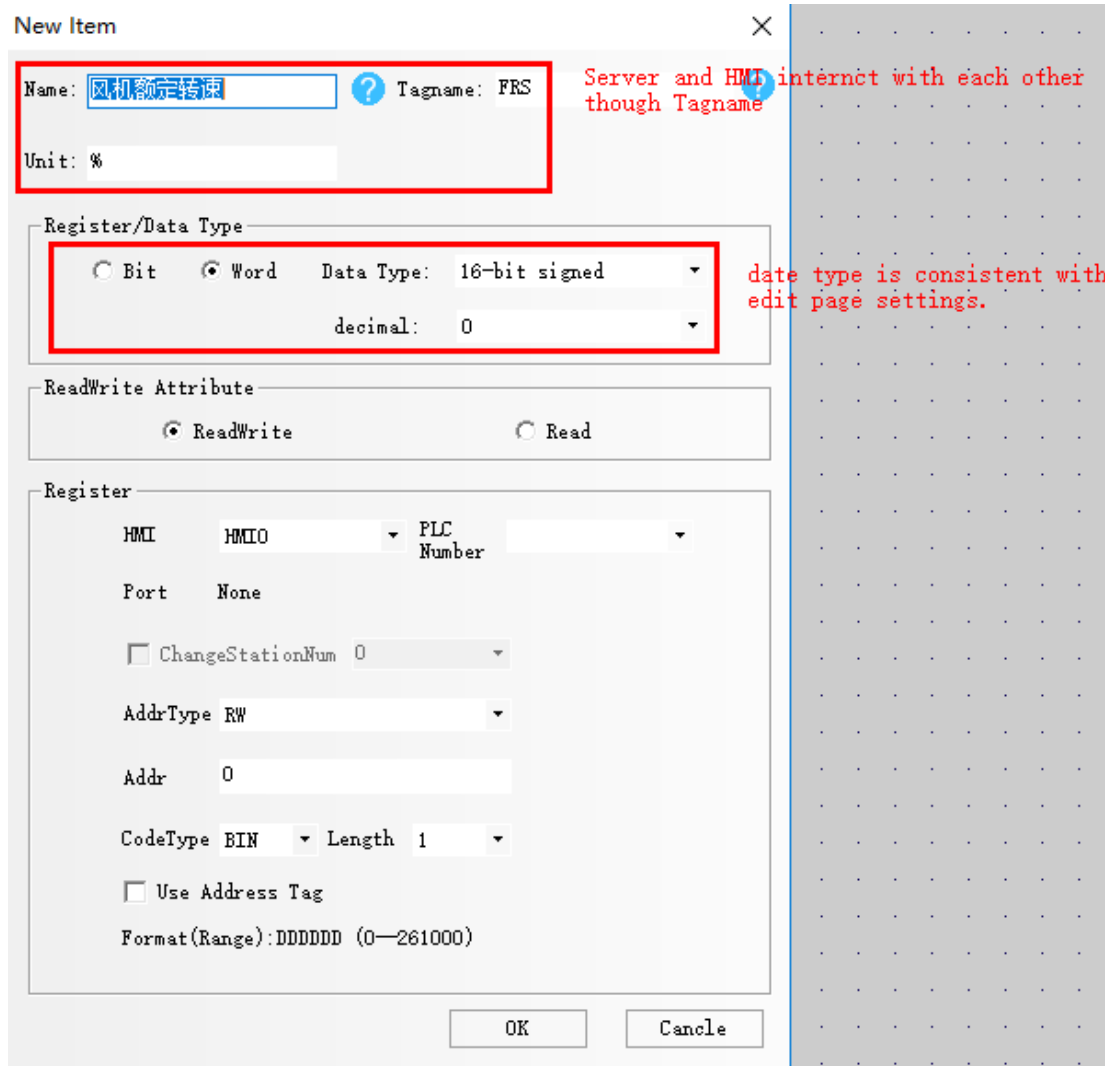
OK Cancel Help

③Userinfo Manager will be told in the third step (Registration) to explain how to use.

④Three functional types of data interaction with servers

Choice“IoT”>>“aliyun IIoT”,data setting are divided into Property, Event, Service, used for data interaction with the server.

1.Property



Note: use of text components does not support Extended ASCII

2.Event

Events are usually sent as important data, such as a temperature alarm, HMI configuration set the trigger conditions of the alarm, to trigger an alarm content to the Aliyun server. Aliyun server can edit and explain each alarm content, and finally push it to the user's remote device (APP, Mobile phone short message). The sending mode generally chooses "address trigger to send".

Taking three return air temperatures as an example, add the output parameters of the event alarm (when the event alarm triggers, the output of three temperature values will be pushed to the server).

Event Add [X]

Name: 回风高温告警事件 [?] TagName: RAirHTempaLARM [?]

QOS: 1 [?]

Send Mode Setting

Periodic Sending 100 *100ms
 Address trigger sending

DataChang Sending
 Only send changed data

Trigger Mode OFF->ON
 HMI HMI0 PLC Number

Port None
 ChangeStationNum 0

AddrType LB
 Use Address Tag

Addr 300
 Format(Range): DDDD (0-9999)

CodeType BIN Length 1

Parameters List

No.	Name	TagName	Unit	Address Info(HMI:PLC:Statio...	Data T

Each event can independently set different sending modes.

New Item

Name: ItemValue 1 Tagname: ItemValue 1

Unit: Property List

Register/Data Type

Bit Word Data Type: 16-bit signed

decimal: 0

Property List

No.	Name	TagName	Unit	Address Info	Data Type
0	风机额定	FBS	%	HMIO(RW:0)	16-bit signed
1	回风温度...	RAT	°C	HMIO(RW:28)	float
2	回风温度...	RAT2	°C	HMIO(RW:30)	float
3	回风温度...	RAT3	°C	HMIO(RW:32)	double

Event Add [X]

Name: 回风高温告警事件 [?] TagName: RAirHTempaLARM [?]

QOS: 1 [?]

Send Mode Setting

Periodic Sending 100 *100ms Address trigger sending

DataChang Sending Only send changed data

Trigger Mode: OFF->ON

HMI: HMIO PLC Number

Port: None

ChangeStationNum 0

Use Address Tag

AddrType: LB Format(Range): DDDD (0-9999)

Addr: 300

CodeType: BIN Length: 1

Parameters List

No.	Name	TagName	Unit	Address Info(HMI:PLC:Statio...	Data T
1	回风温度...	RAT	℃	HMIO (RW:28)	float
2	回风温度...	RAT2	℃	HMIO (RW:30)	float
3	回风温度...	RAT3	℃	HMIO (RW:32)	double

Buttons: Add, Delete, DeleteAll, Modify, OK, Cancel

3. Server

Mainly used for the server's call to the service.

HMIO ×

EnableUser Ali Cloud IIoTFunction

Basic Setting

Data Setting

Property | Event | Server

No.	Name	TagName	Input Paramet...	Output Param...
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Add Delete DeleteAll Modify Export Import

OK

Server Add

Name: ServerTopics 1 ? TagName: ServerTopics 1 ?

QOS: 1 ?

Send Mode Setting

Parameters List

No.	Name	TagName	Parame...	Unit	Address Info(HMI:PLC:Statio...
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< >

Add Delete DeleteAll Modify

OK Cancel

New Item

Name: ItemValue 1 Tagname: ItemValue 1

Unit: Property List

Register/Data Type

Bit Word Data Type: 16-bit signed

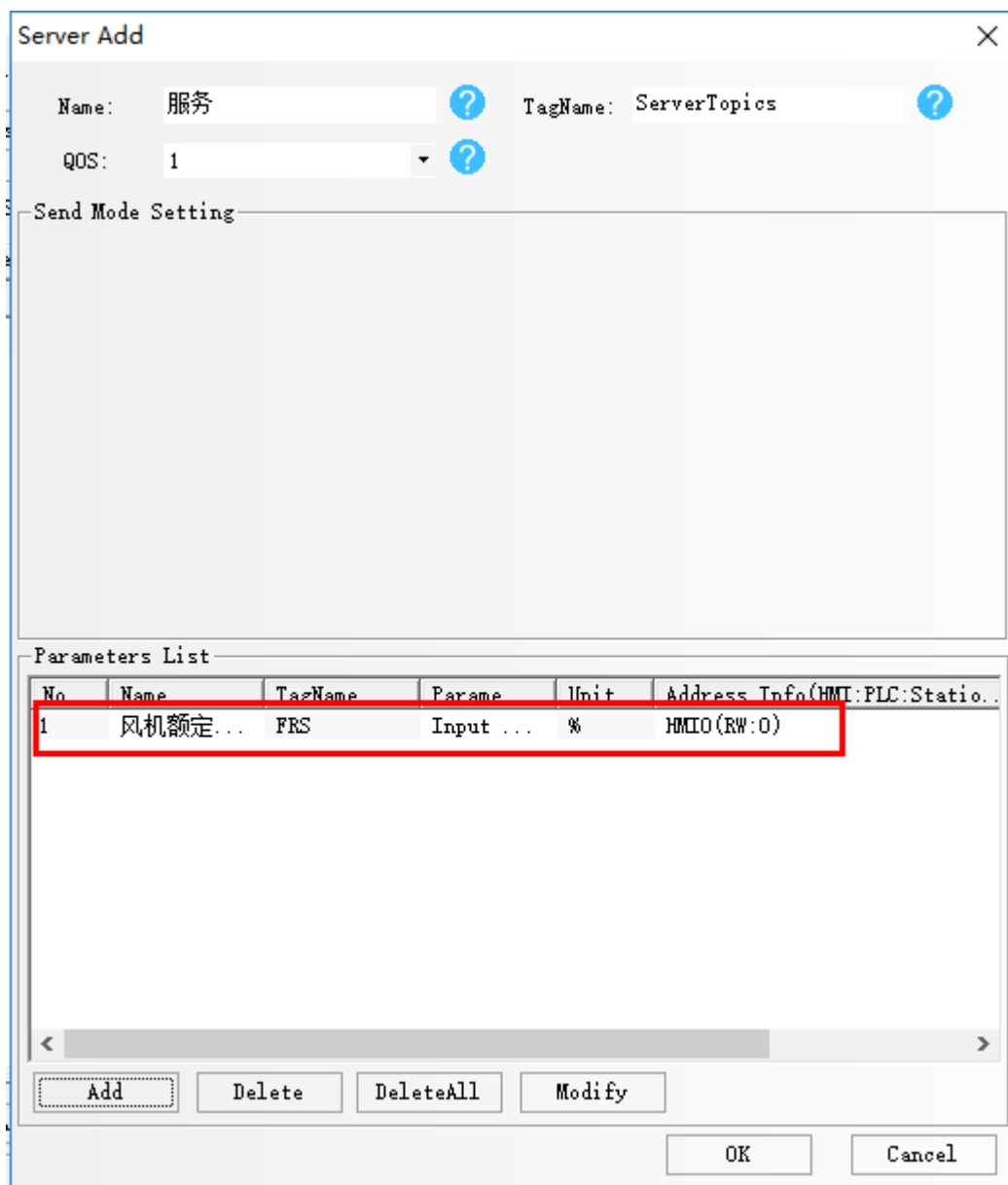
decimal: 0

Parameters Type

Input Parameter Output Parameter

Property List

No.	Name	TagName	Unit	Address_Info(HMI-PLC-Static	Data Type
0	风机额定...	FRS	%	HMIO(RW:0)	16-bit signed
1	回风温度...	RAT1	℃	HMIO(RW:28)	float
2	回风温度...	RAT2	℃	HMIO(RW:30)	float
3	回风温度...	RAT3	℃	HMIO(RW:32)	double



Aliyun platform setting

① Register an Aliyun platform account, get APP and AppSecret (for registration)



② product development

Choice "device management" >> "product development" >> "New product" >> "look up", many attributes and events have been added (the Tagname must correspond to HMI setting), and Product Key (for registration purposes) has been generated.

阿里云工业互联网平台

设备管理

设备列表

产品开发

边缘计算网关

项目管理

服务调用

帮助文档 kin****

请输入产品名称进行搜索 搜索 全部产品类型

产品名称	Product Key	产品类型	产品行业	创建时间	操作
步科	a1622E0GT1	直连设备	电力仪表	2018-10-26 17:51:49	查看 删除

新增产品

产品详情

步科

Product Key: a1622E0GT1 复制

产品类型: 直连设备

产品行业: 电力仪表

编辑

硬件平台: Cortex M0M3M4

操作系统: AliOS Things

联网方式: Wi-Fi

数据格式: Alink JSON

产品描述: 测试

功能定义 设备开发

新增

功能类型	功能名称	标识符	描述	操作
属性	室内温度显示	RAT	-	编辑 删除 复制
属性	室内温度显示2	RAT2	-	编辑 删除 复制
属性	室内温度显示3	RAT3	-	编辑 删除 复制
属性	风机转速	FRS	-	编辑 删除 复制
事件	室内高温告警事件	RAinTempLARM	-	编辑 删除 复制

③ device list

Choice "device management" >> "device list" >> "look up", The registered screen is already in the device list, and you can choose automatic refresh, and view the data changes in real time.

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设备总数 71

在线设备数 2

在线网关数 0

设备已用存储空间 0.69G/10G

设备列表 申请记录

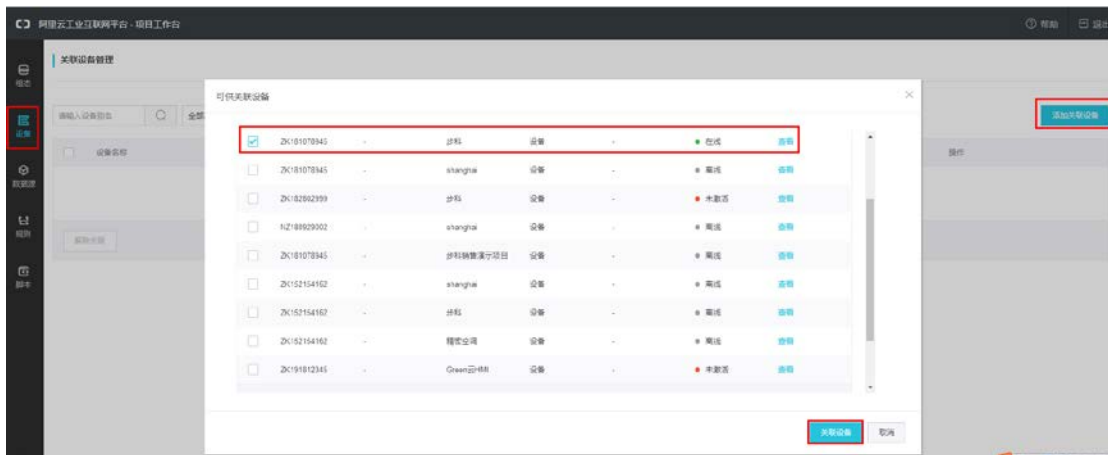
帮助文档 新增设备

设备名称	设备别名	产品名称	设备位置	所属项目	设备标签	连接状态(全部)	最后上线时间	操作
ZK181078945		步科	-	-	-	● 在线	2018-11-01 20:05:50	查看



④ project management

Choice "Project Management Center" >> "New project" >> "device" >> "add associated device", You can see your own registered HMI, and then select the "associated device" to put the device in the specified project



⑤ Aliyun configuration

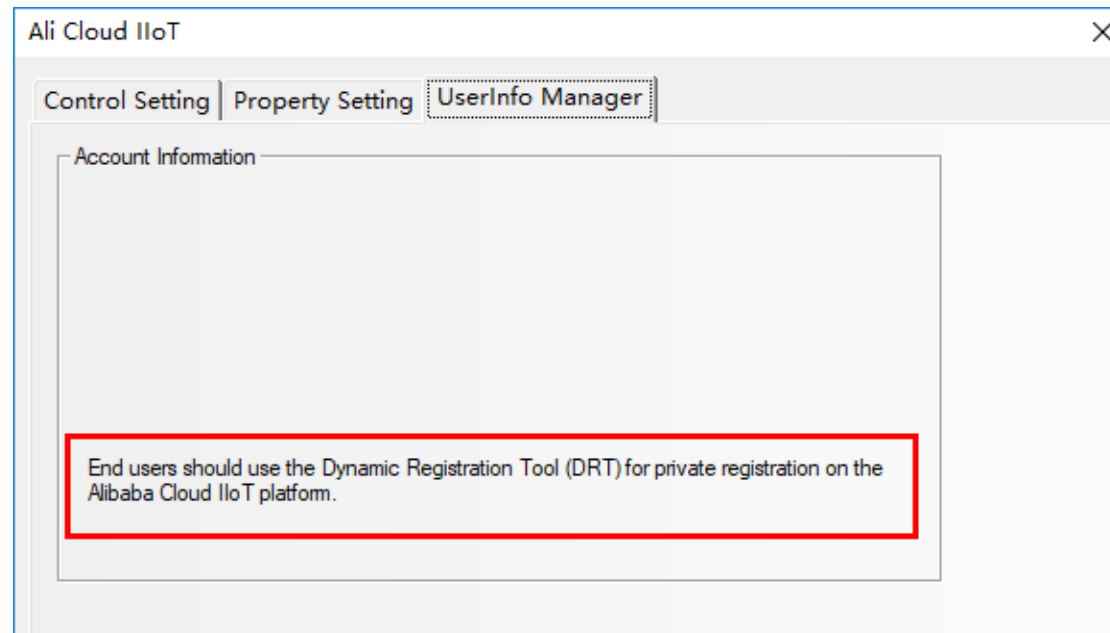
Connecting with Aliyun, the configuration can be displayed in the screen of Kinco ,perhaps to display through the configuration of Aliyun Platform itself. Aliyun platform how to configure, you can refer to Ali cloud help document

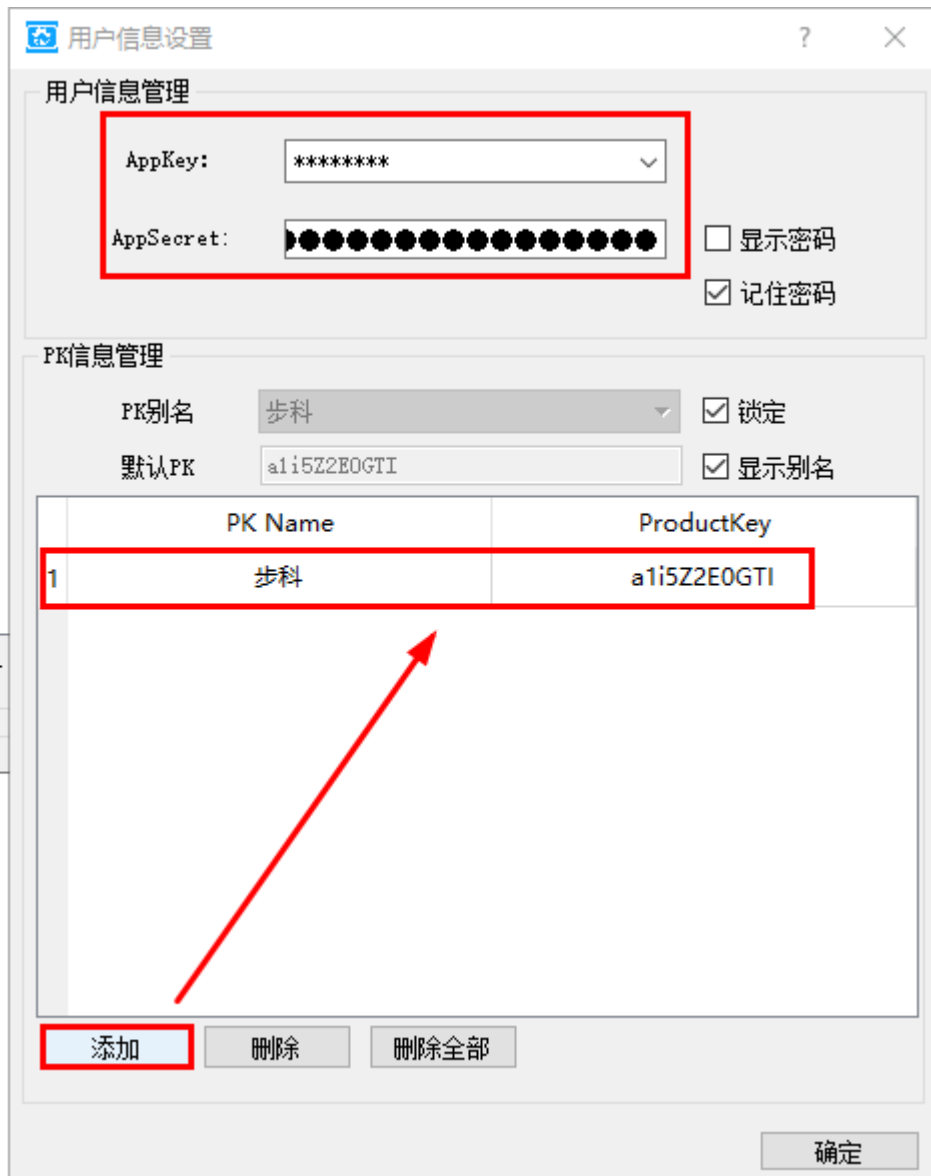
registration

In HMI settings, we refer to Userinfo Manager, which is used to register account information, including AppKey, AppSecret and Product Key, which can be obtained from the Aliyun platform. The process of registration between End-User and Manufacturer is different.

①End-User

End-user registration is achieved by dynamic registration tool(DRT). The specific registration process can refer to DRT document.





②Manufacturer

Manufacturer registration is set up in Userinfo Manager and updated by downloading project.

Account Information

AppKey:

AppSecret: Hide Password

ProductKey:

Device vendor account information and ProductKey can only be modified here and updated by downloading the project.