《V-BOX Web End User manual》
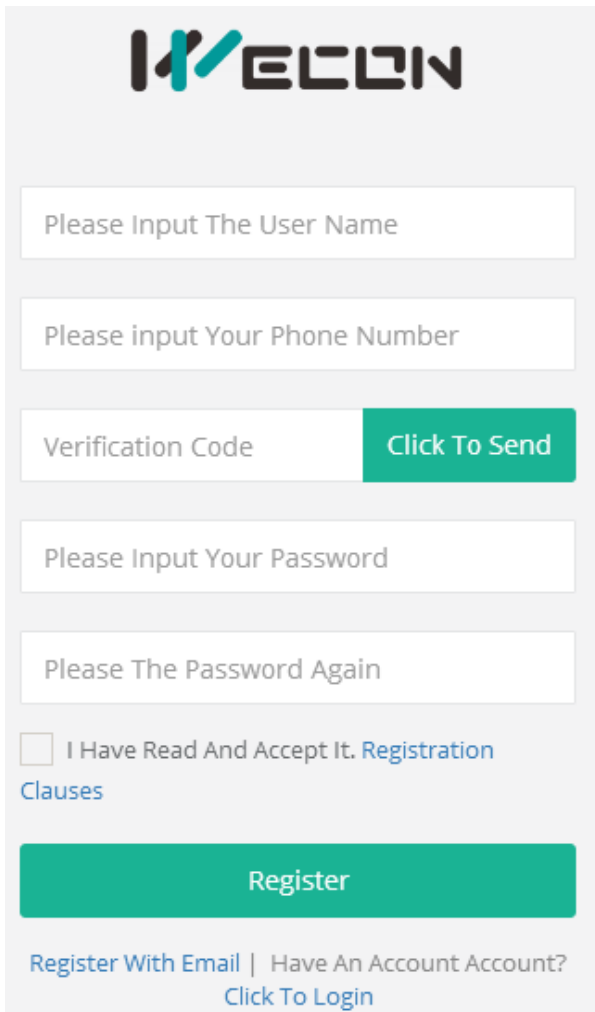
1. V-Box visit website

V-BOX Web visit website：http://v-box.net.

2. Basic Function

2.1. User registration

Users can register by mobile number and mailbox. The registration of the mobile phone number needs to receive a verification code, only when the mobile phone number is legal and the verification code is matching, the registration can succeed. As shown in figure 2-1; The registration of mailbox requires an activated link. Only the user receives the activated link and clicks it, after that the registration can succeed. As shown in figure 2-2.

Figure 2-1

Figure 2-2

2.2. Retrieve the password

The password can be retrieved through the mobile phone number or the mailbox. The password can only be be modified successfully if the password is the same as that received by the user on the mobile phone or in the mailbox, and the password is legal, as shown in figure 2-3.

Figure 2-3

2.3. User login

When the user logs in, the login account can be a mobile phone number or a mailbox, and only when the mobile phone number or mailbox which is legal, and the password is matched, the login can be successful. The same account can be logged in at the same time on Web and mobile, but not on different PC devices. If user logs on to the same account successively on different PC devices, the account on the first login device will be forced off line. The login interface is shown in figure 2-4.

Figure 2-4

2.4. User information management

Users can click on the profile or user name to enter the management interface of the user information, which shows the user's personal information, including user name, mailbox, mobile phone number, user can also "bind / change mailbox", "bind / change cell phone", "change passwords", and so on, as shown in figure 2-5.

Figure 2-5

When binding / changing mailboxes, user needs to key in a mailbox to bind / replace, which will succeed only if the mailbox is valid, as shown in figure 2-6.
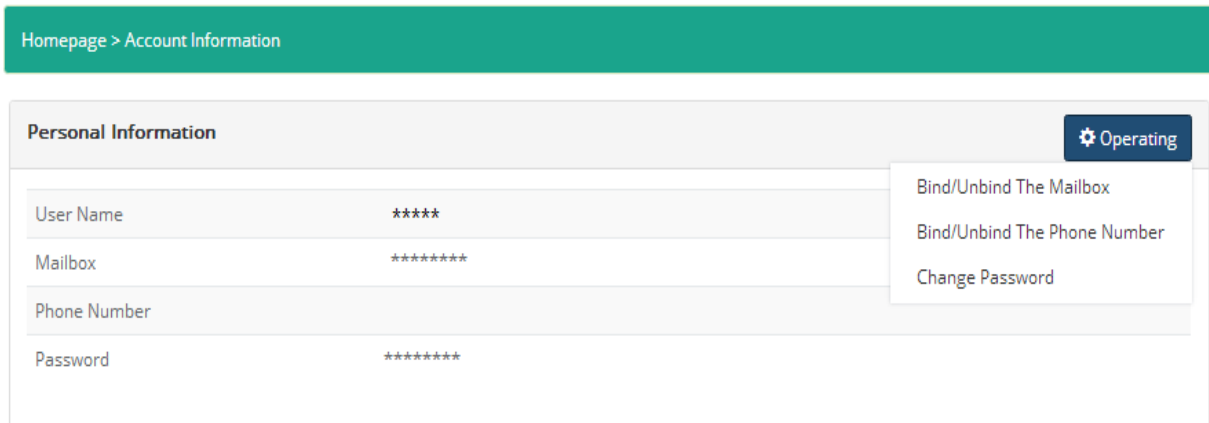

Figure 2-6

When binding / changing the mobile phone number, user needs to key in the mobile phone number to bind / change. After clicking the "click send" button, if the mobile phone number is legal, the user will receive a verification code. Only when the verification code matches, the operation can be carried out successfully, as shown in figure 2-7.
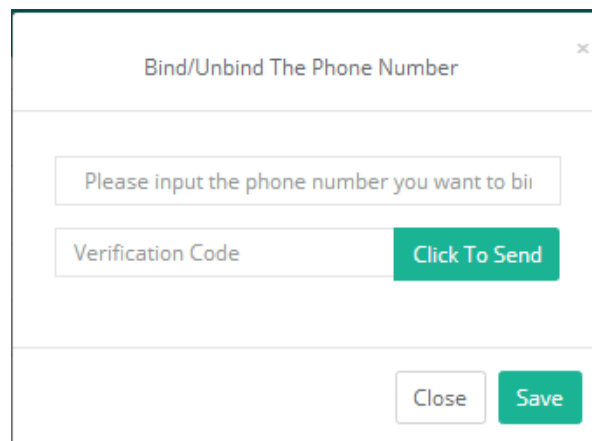

Figure 2-7

When changing a password, the user is required to key in an old password and a new password, and only if the password is valid, the operation can be carried out successfully, as shown in figure 2-8.

Figure 2-8

3. V-box parameter configuration

For the first time, user must configure the parameters. Open the V-BOX software on pc, as shown in figure 3-1.
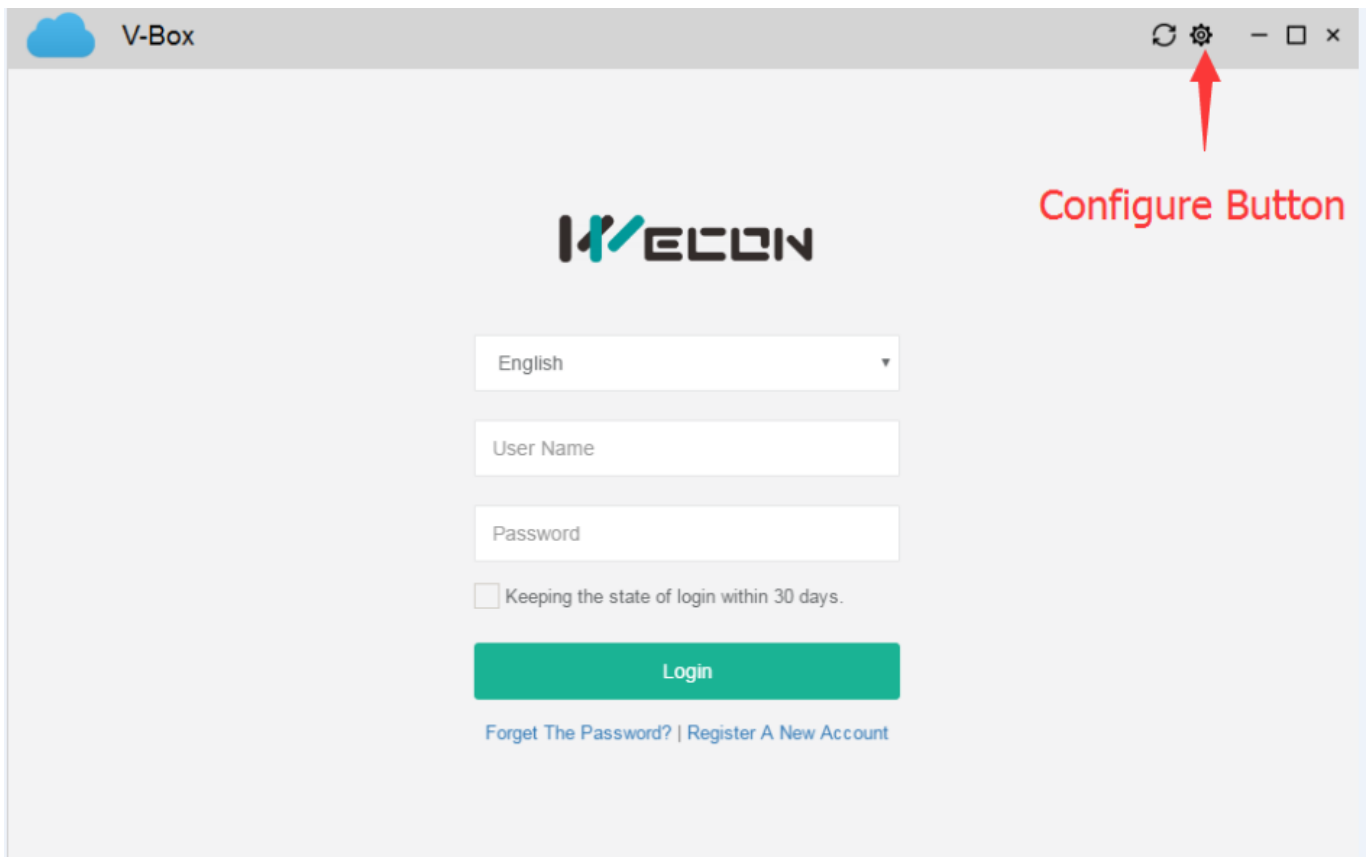
Figure 3-1

The configuration information of the V-Box includes the access password, the access mode, the machine code acquisition, the update time, and so on, as shown in figure 3-2.

Figure 3-2

3.1. Configuration V-Box

Download: use the Android download cable to connect the V-Box to the PC. When the PC recognizes the V-Box driver, it will be displayed in the list, as shown in figure 3-2. "recognize the V-Box of the 4G Module."

3.2. Device access password

When configuring a client to access the box, user needs to key in an access password that can be combined with numbers and letters. The default password is 888888.

3.3. Device connection setting

The device connection setup is configured to configure the V-Box access mode, which refers to the mode by the smart box to dock the data with the server.There are three modes of connection. Ethernet mode / WiFi mode and 4G network mode.

1、Ethernet mode. There are two modes of dynamic IP address and static IP address. When using static IP address mode, the complete IP information must be configured, and the IP information must not conflict with other IP.

2、WIFI mode： First configure the WIFI account and password, V-Box will automatically match the set of WIFI information, and connected to the network.

3、4G mode： Use mobile phone 4G card for networking. Please consult mobile phone client for the cost of data flow. After configuring the mode, user can choose the settings in device connection and write the information to the V-Box through the download configuration button.

3.4. Update time

Click the button of updating time to write the time of PC into the box.

3.5. Get the machine code

Each V-Box has a separate and unique machine code which can be bound and monitored only when the machine code is acquired. As shown in figure 3-3.

Figure 3-3

4. V-Box access configuration

4.1. Basic configuration

4.1.1. Adding V-Box

When the account logs in for the first time, it needs to add a V-Box and bind it to the account. The account that binds V-BOX is called the "administrator account" (relative to the view account).A V-Box can only be bound to one account, because the manager account is unique.

4.1.2. Binding V-Box

It's necessary to know the V-Box machine code, password and aliases, and user needs to set a group which has been added, the default of V-box which has been added by administrator will be placed in the group , if the administrator has created the group of V-Box , user can also choose to add the V-Box in the other groups, the interface of binding V-Box   as shown in figure 4-1.
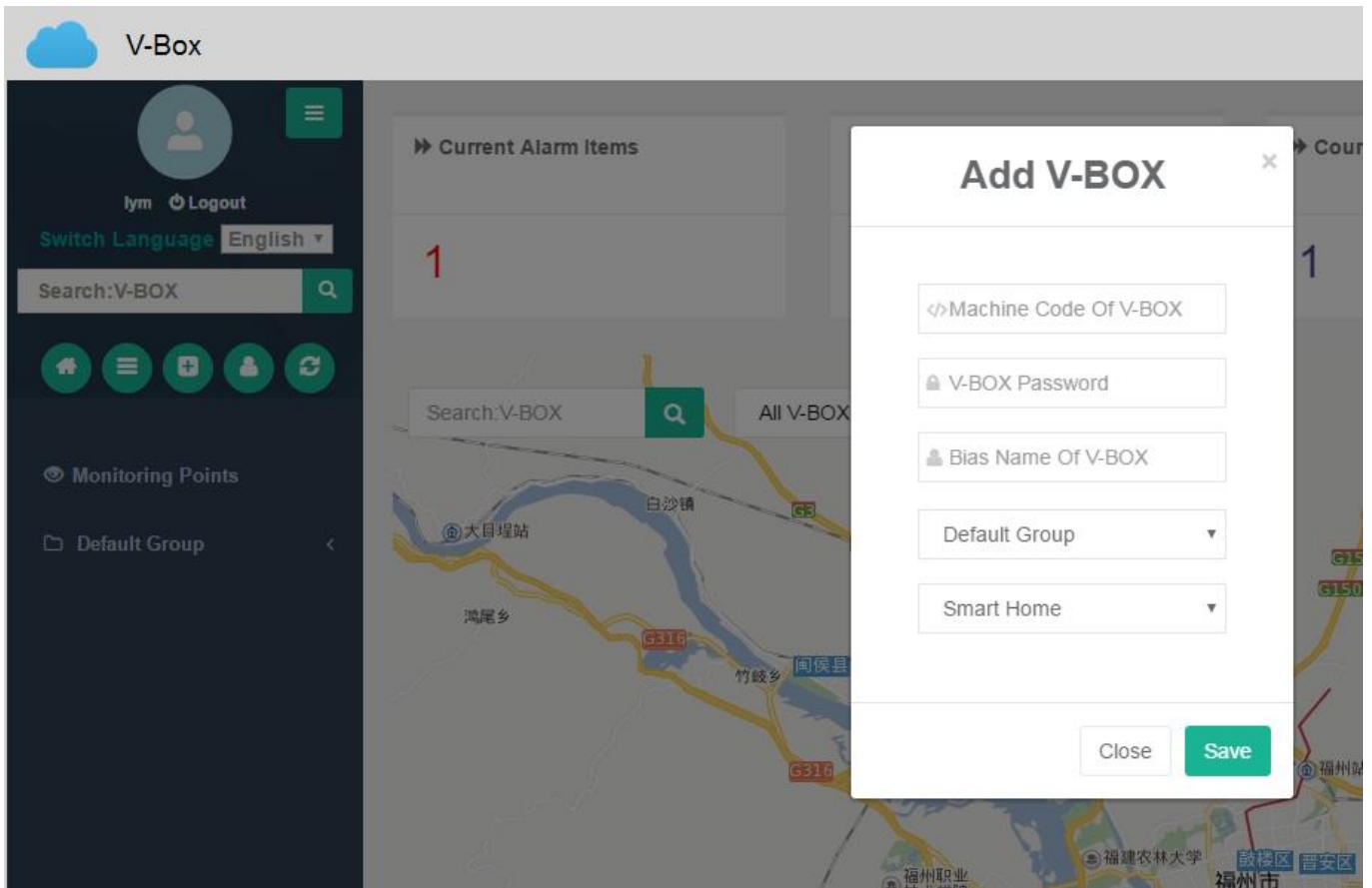
Figure 4-1

4.1.3. Basic Information

"Basic Information" is in the basic configuration of the sub-page , user can also manage the information of the V-Box, such as modifying the name, latitude and longitude of the box, and so on. After the user keys in the modified information, it still needs to click the "save modification" button at the bottom. And the input data is legal to be modified successfully. The information management interface is shown in figure 4-2.
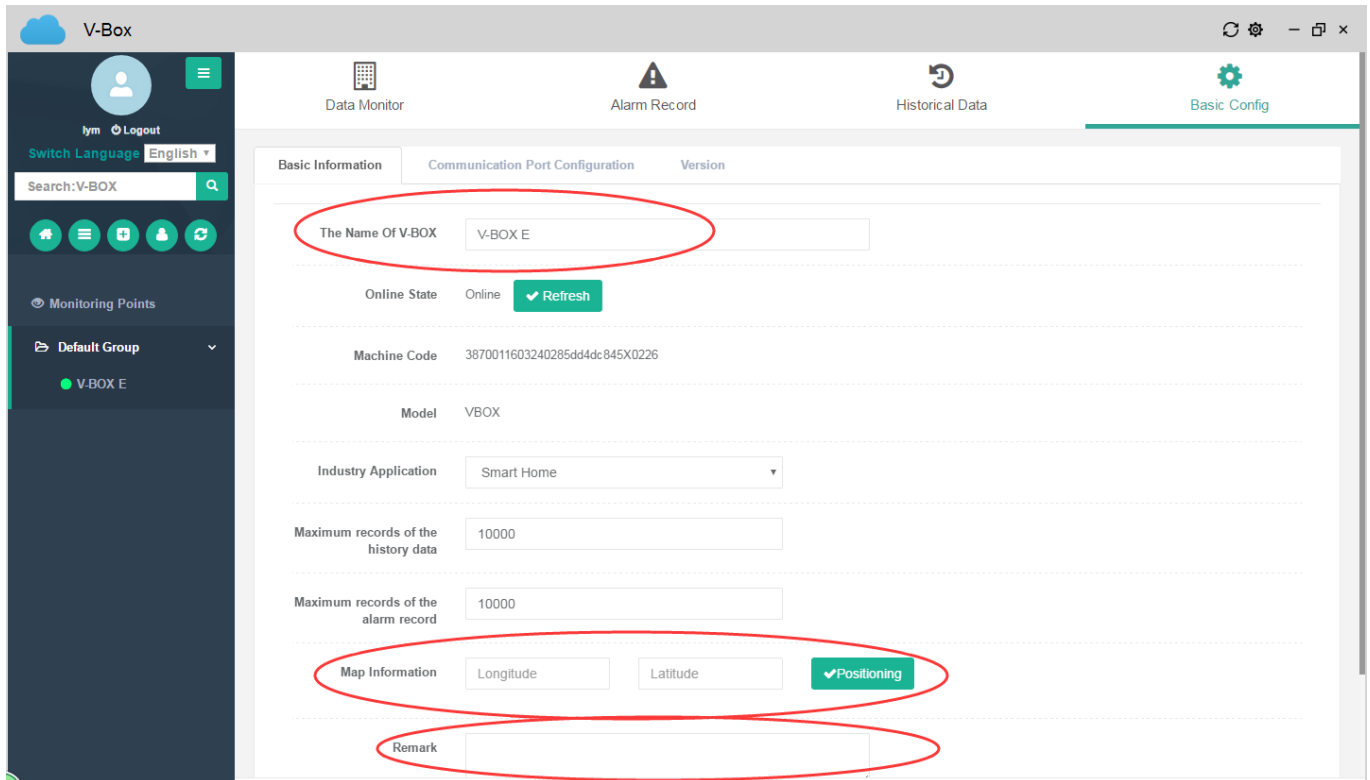
Figure 4-2

4.1.4. Unbind V-Box

After the administrator adds the V-Box, clicking on the left side of the V-Box list to select a particular V-Box, and entering the V-Box details interface, which includes four sub-pages. "data Monitoring", "alarm record", "Historical data" and "basic configuration". Administrator unbinds the box in the "basic information" sub-page under the "basic configuration" page , in other words, "delete V-BOX" in the following figure. After untying, if the configuration information of the message port and monitoring point in the V-Box is not deleted, then the V-Box is added in the next time, the data will still exist and will automatically be transferred to the V-Box, as shown in figure 4-3.
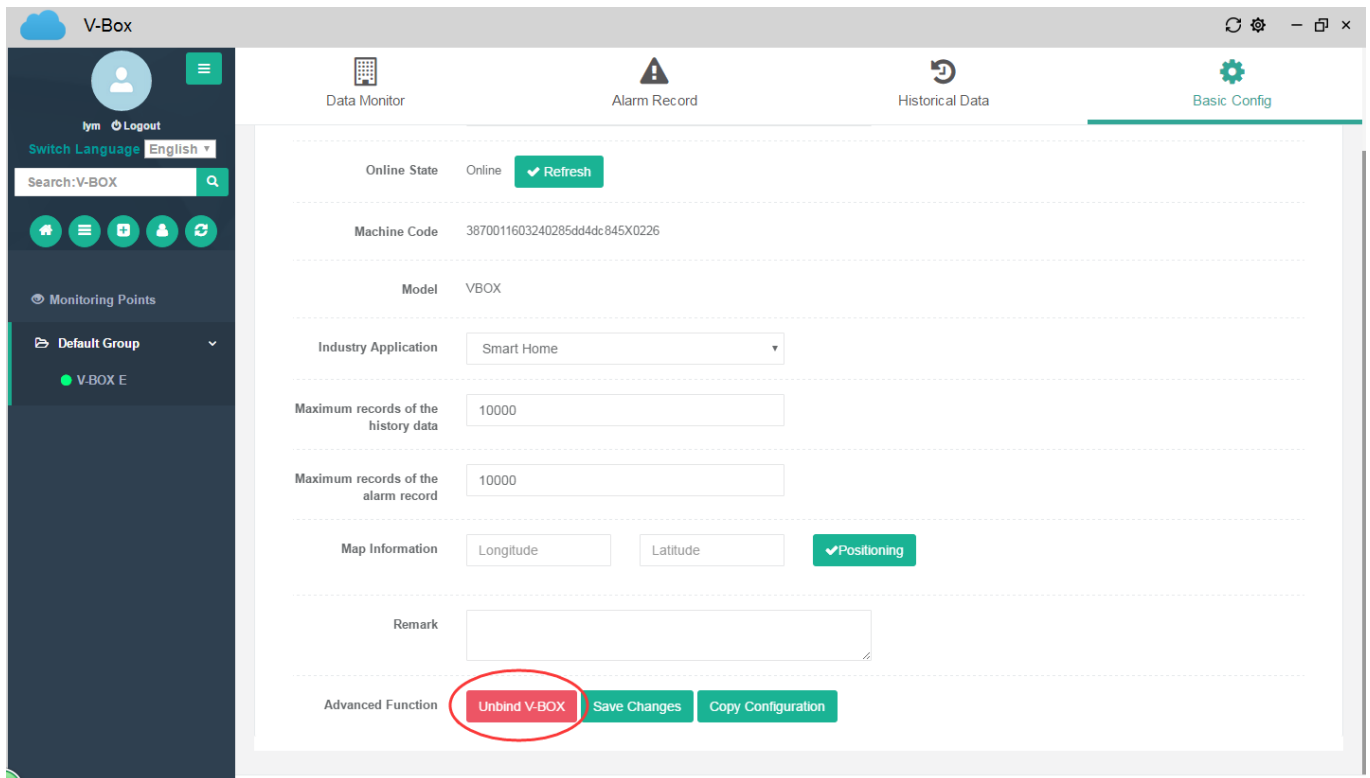
Figure 4-3

4.1.5. Copy configuration

If the configuration information of more than one box is the same or similar, the information of one box can be configured first, and the parameter information can be copied to another box by copying configuration information. As shown in figure 4-4.
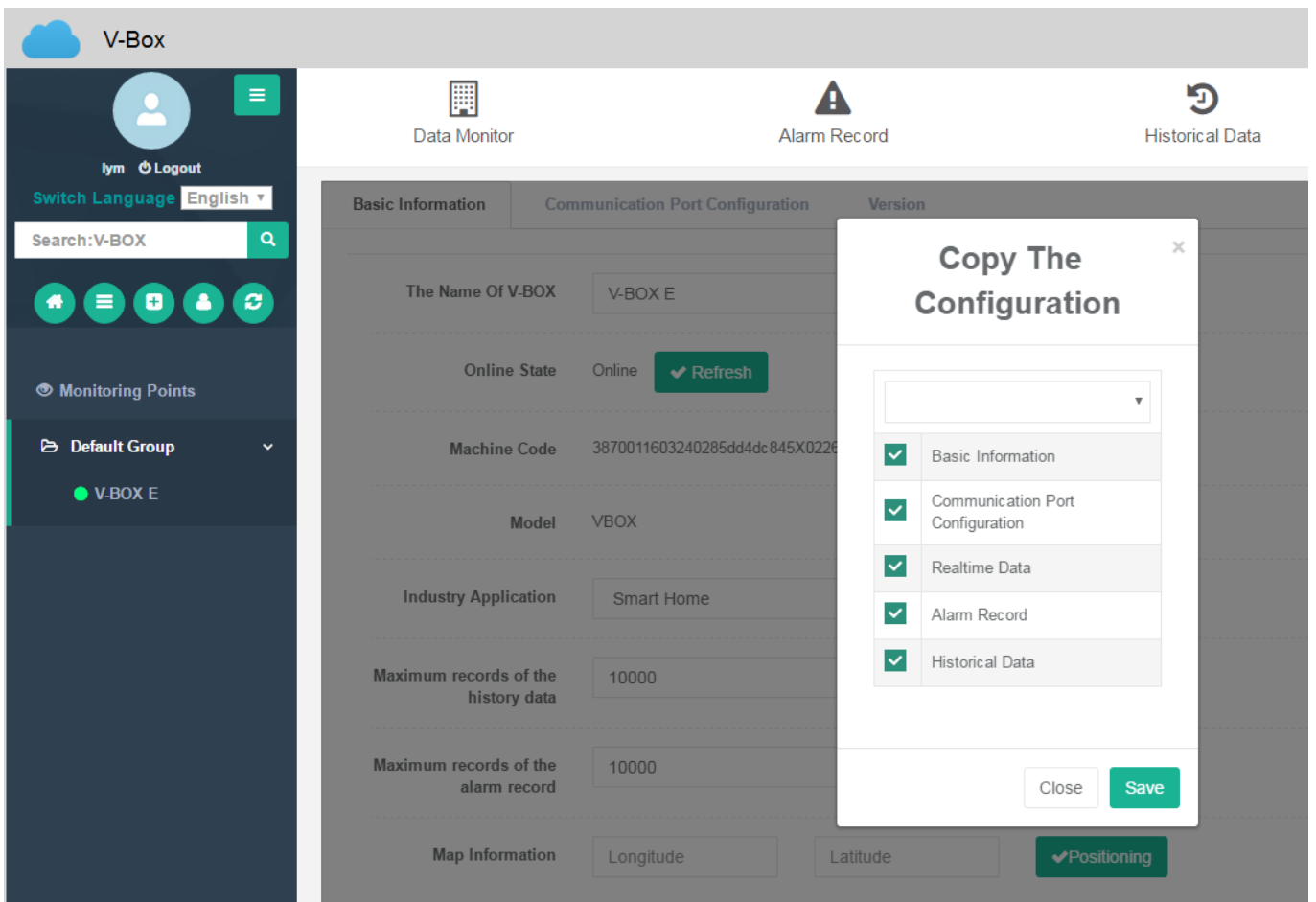
Figure 4-4

After copy the information successfully, the prompt is shown in the following figure.
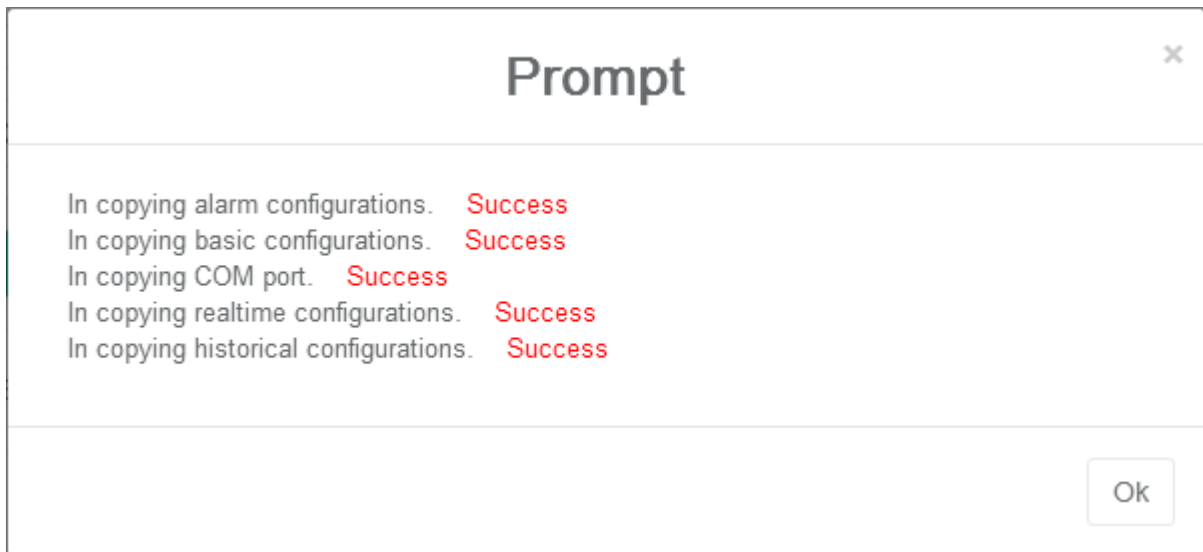

Figure 4-5

Note: user can copy the parameter configuration information only if the configuration information of "Test machine 1" is empty. If additional parameters are configured in this "Test machine 1", clicking the Save button which will prompt for the copy failure information. As shown in Figure 4-6.
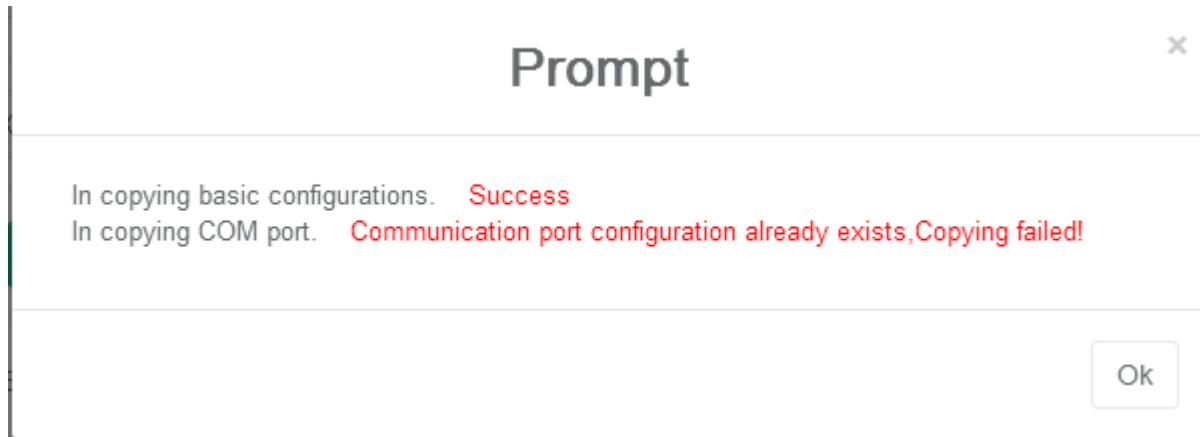

Figure 4-6

4.1.6. Communication port configuration

In the "basic configuration" "port configuration" interface can be used to add, modify and delete port configuration operations, only administrator account has permissions to operate this function. As shown in the following figure, adding the communication port configuration. select or input the communication protocol, device type, driver name, V-Box station number, PLC station number, and so on. After the communication port is configured successfully, the system will synchronize the configuration information and the file of driver to the V-Box within 30s. As shown in figure 4-7.
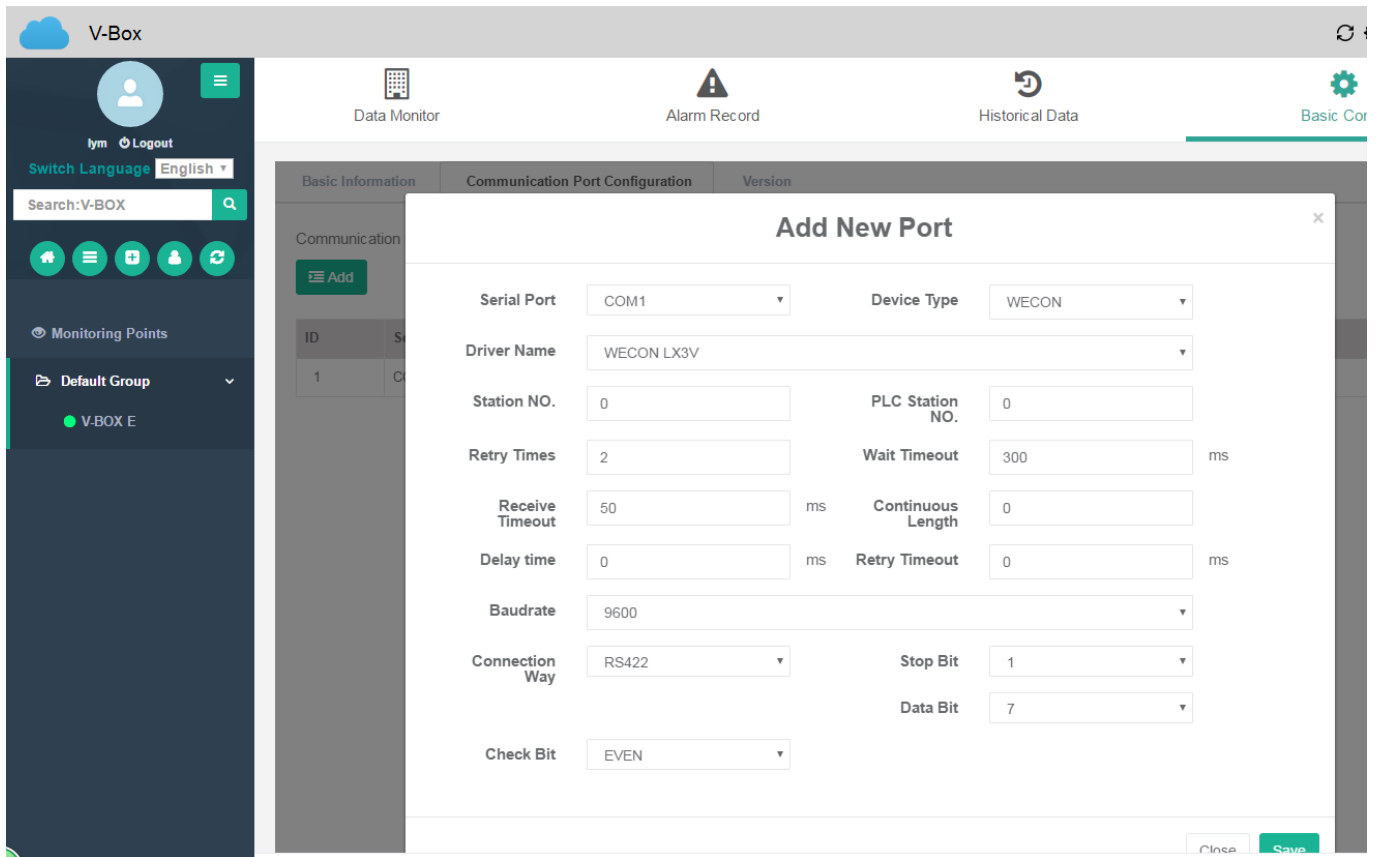
Figure 4-7

4.1.7. Updating the communication port

Modifying the configuration of communication port . The administrator can modify the data other than the device ID, and if the file of driver changes, the monitoring points and data under this port will be deleted, as shown in figure 4-8.
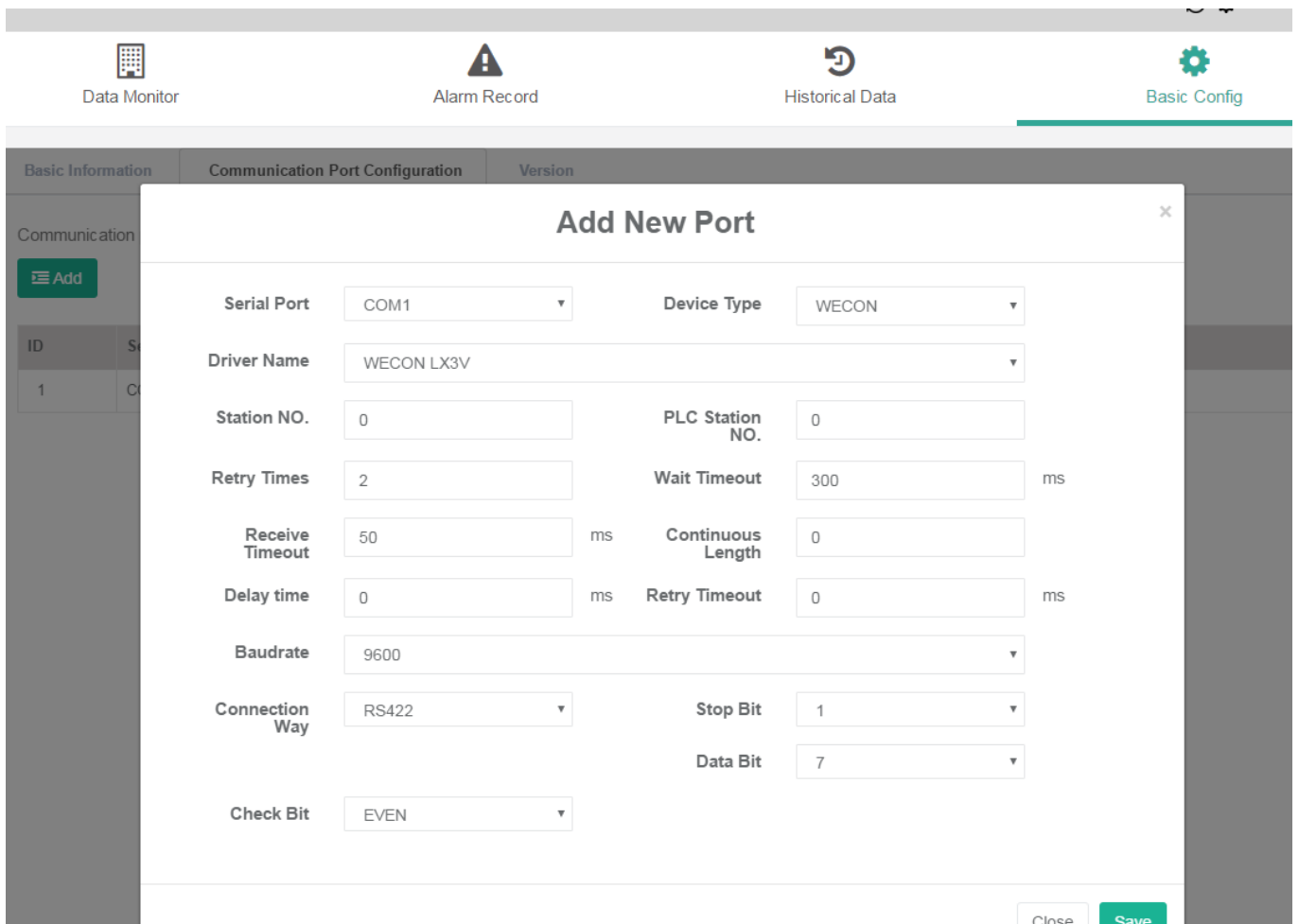
Figure 4-8

4.1.8. Communication port deletion

When the configuration of communication port is deleted, the monitoring point data which is associated with the communication port configuration of the V-Box will also be deleted; The prompt dialog box pops up when the port configuration is deleted to confirm the continuation of the operation , as shown in figure 4-9.
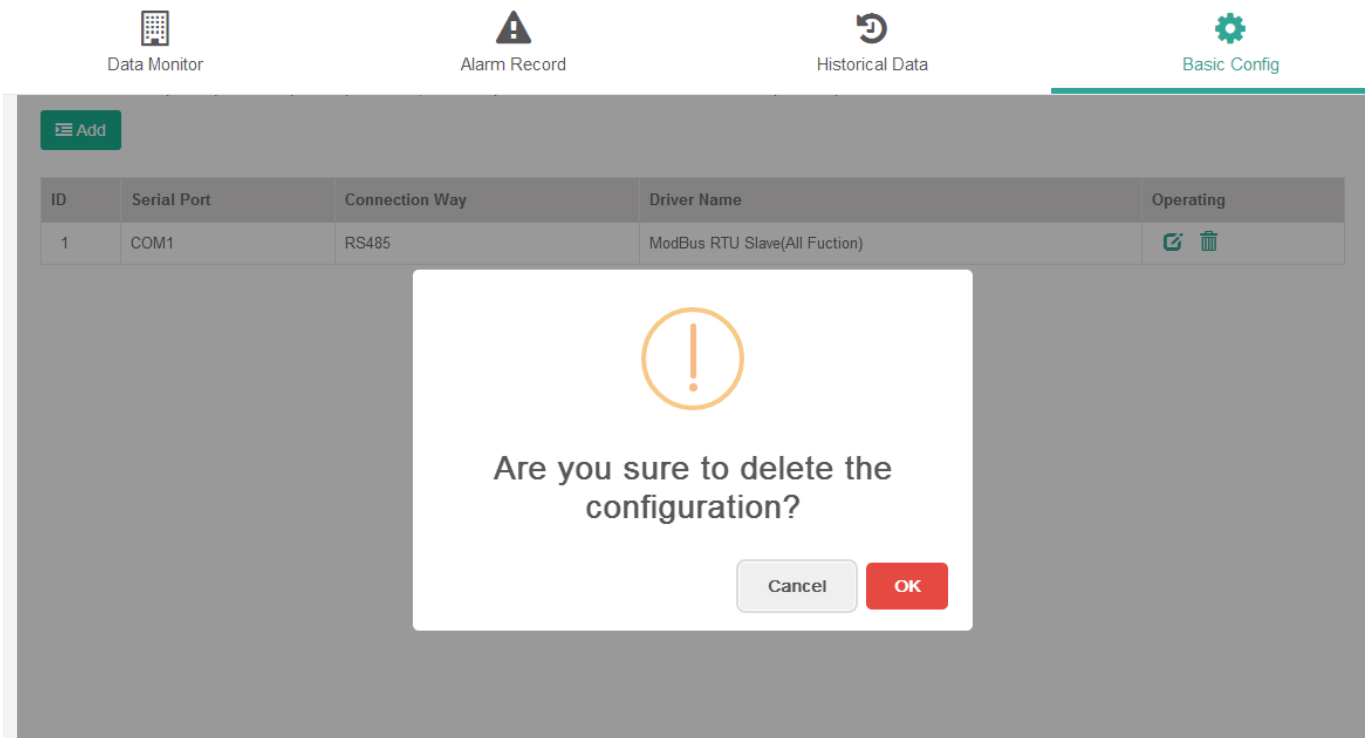
+

Figure 4-9

4.1.9. Version information

View the version information of the V-Box. Because of updating the product all the time, judging the function of the V-Box according to the version information. As shown in figure 4-10.
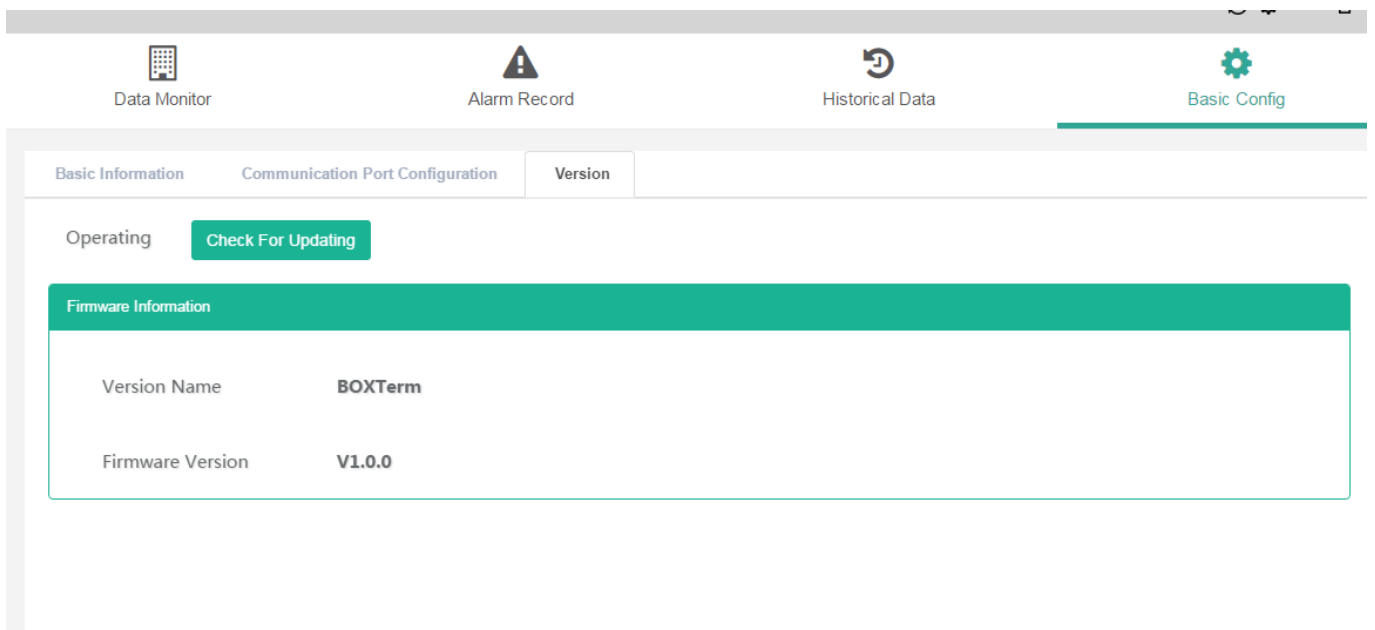

Figure 4-10

4.2. V-Box group management

Administrators can manage V-Box groups, including adding groups, modifying groups, and deleting groups, as shown in figure 4-11.
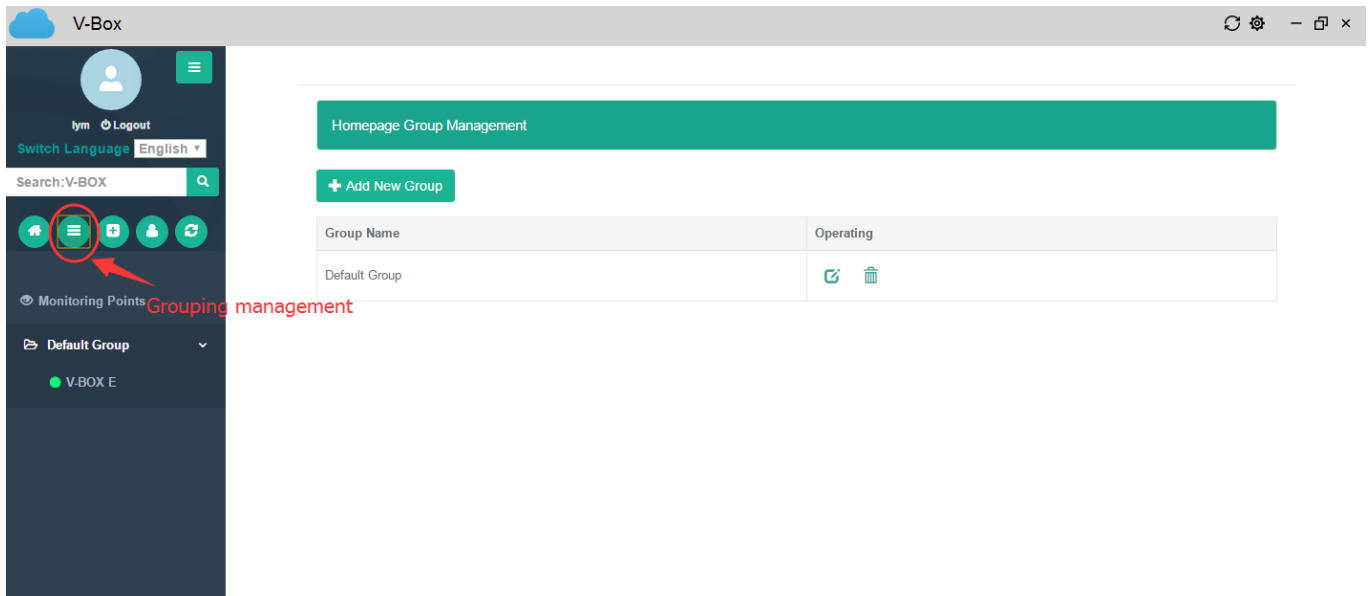

Figure 4-11

Adding groups： When adding a group, user need to enter the group name, as shown in figure 4-12.
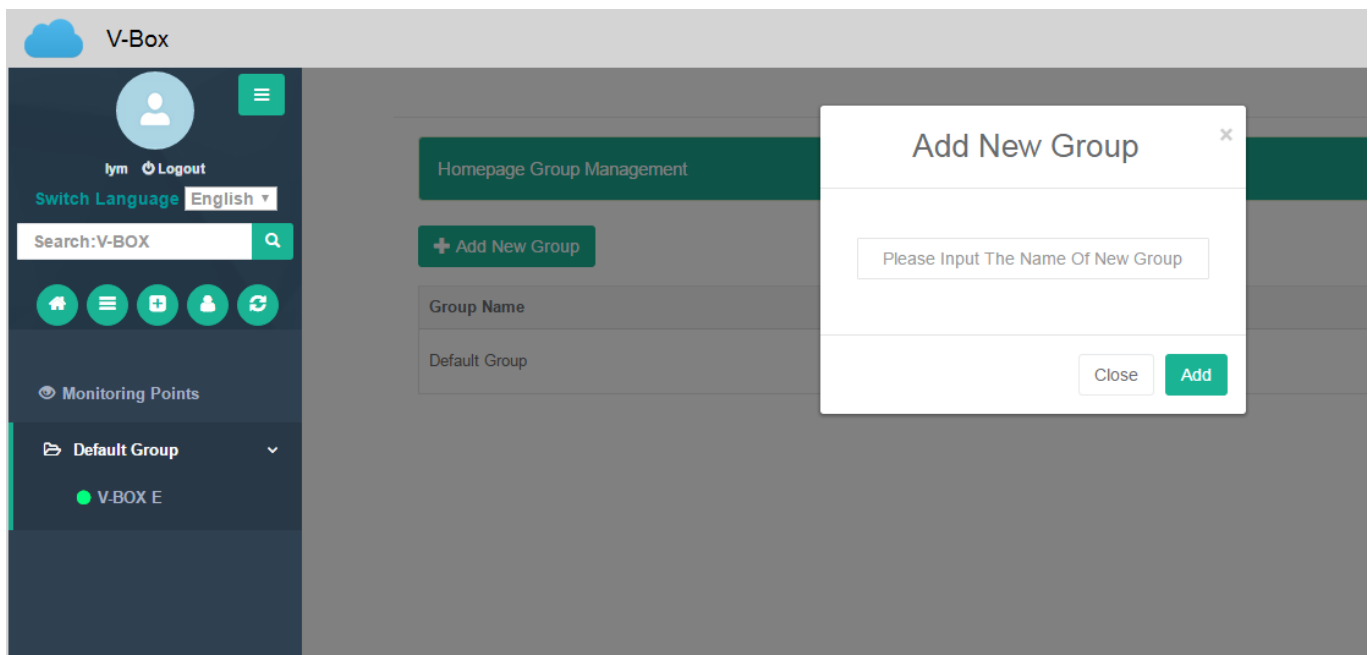

Figure 4-12

Update group： To modify the group, user needs to key in the new name of the group, as shown in
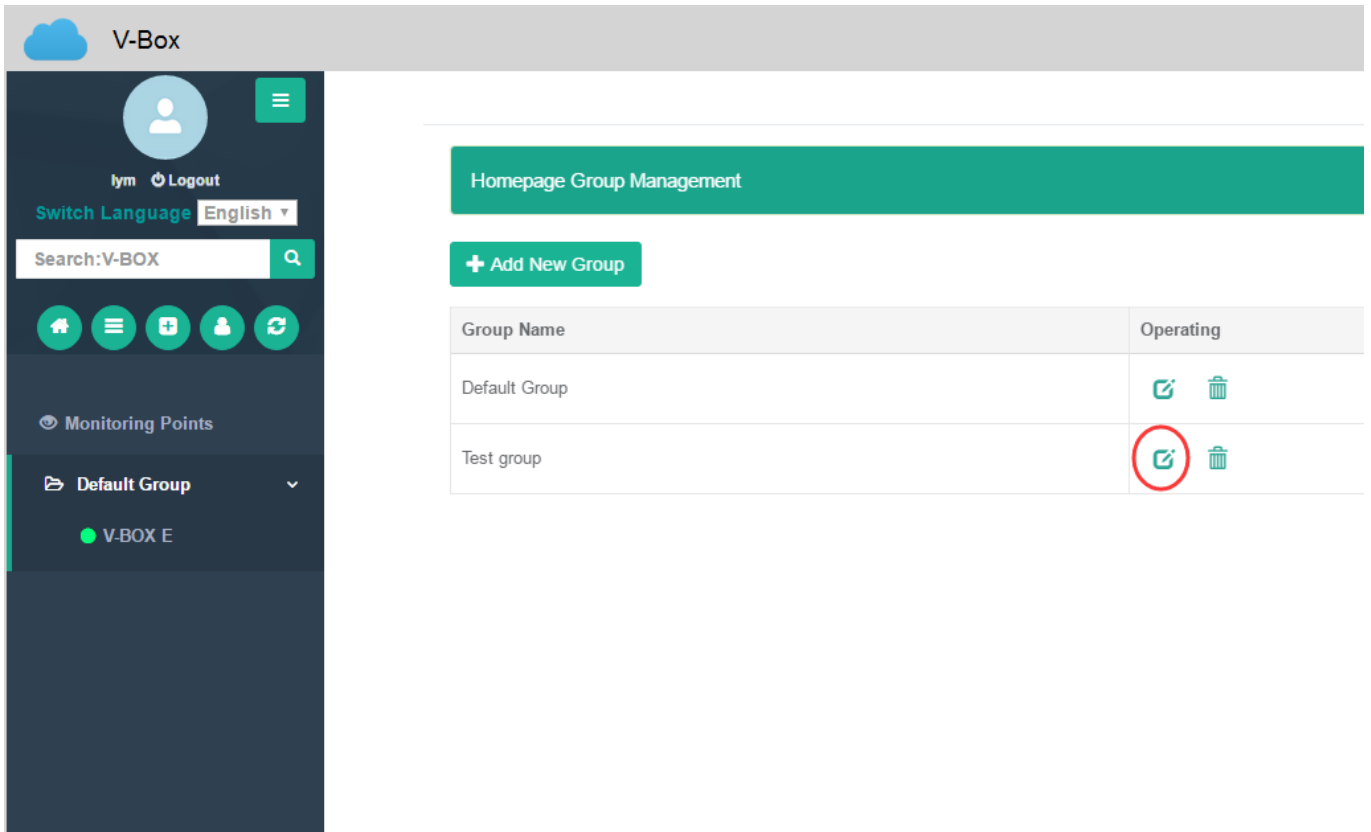
figure 4-13.

Figure 4-13

Delete groups. In order to ensure the reliability of the operation and the security of the data, a prompt box will be popped to confirm the continuation of the operation, as shown in figure 4-14.
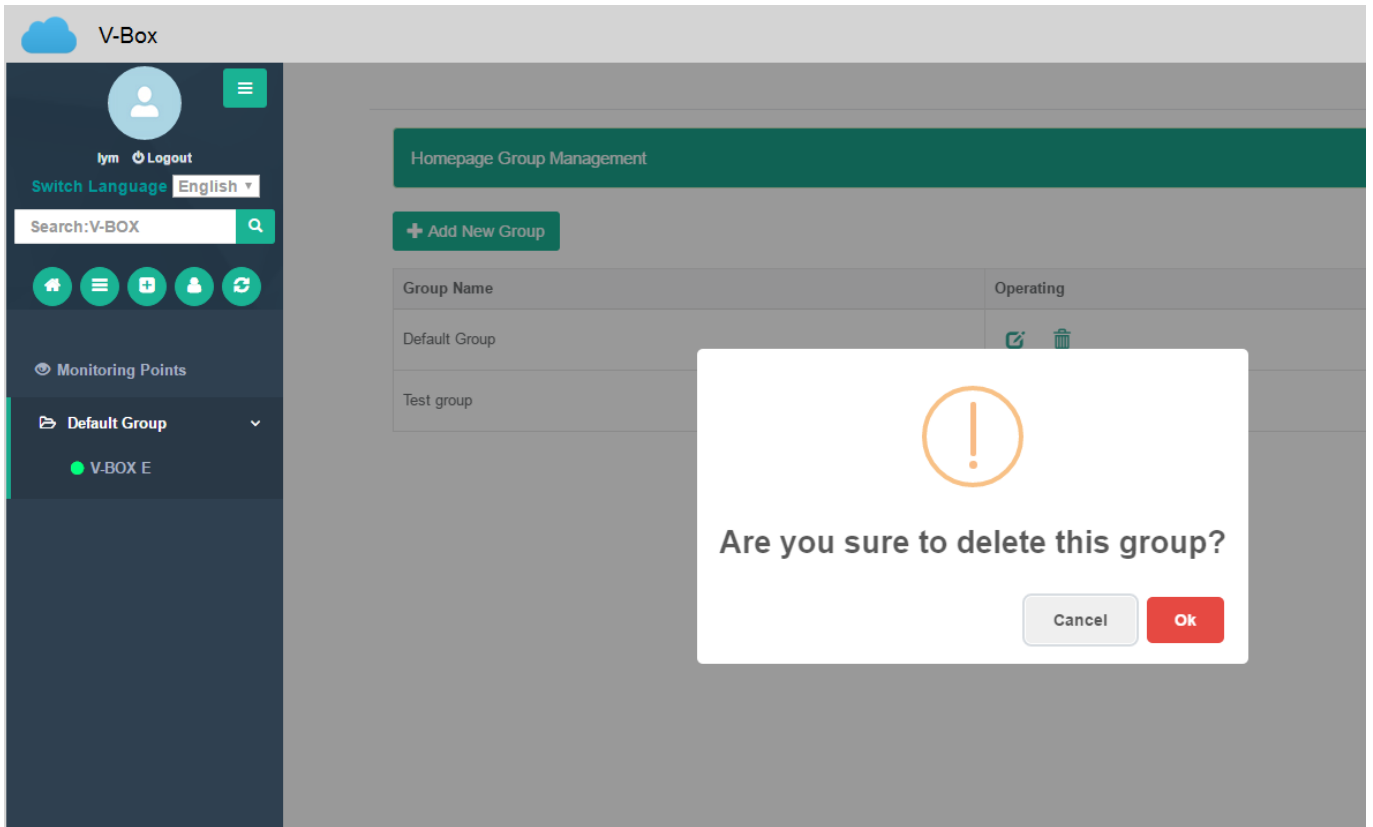
Figure 4-14

4.3. Data monitoring

4.3.1. Real-time monitoring point configuration

In the "Data monitoring" interface, User can modify the real-time monitor location. Adding real-time monitoring point need to be selected or input real time monitoring point name, connecting device (communication port), address type, register type. As shown in Figure 4-15.
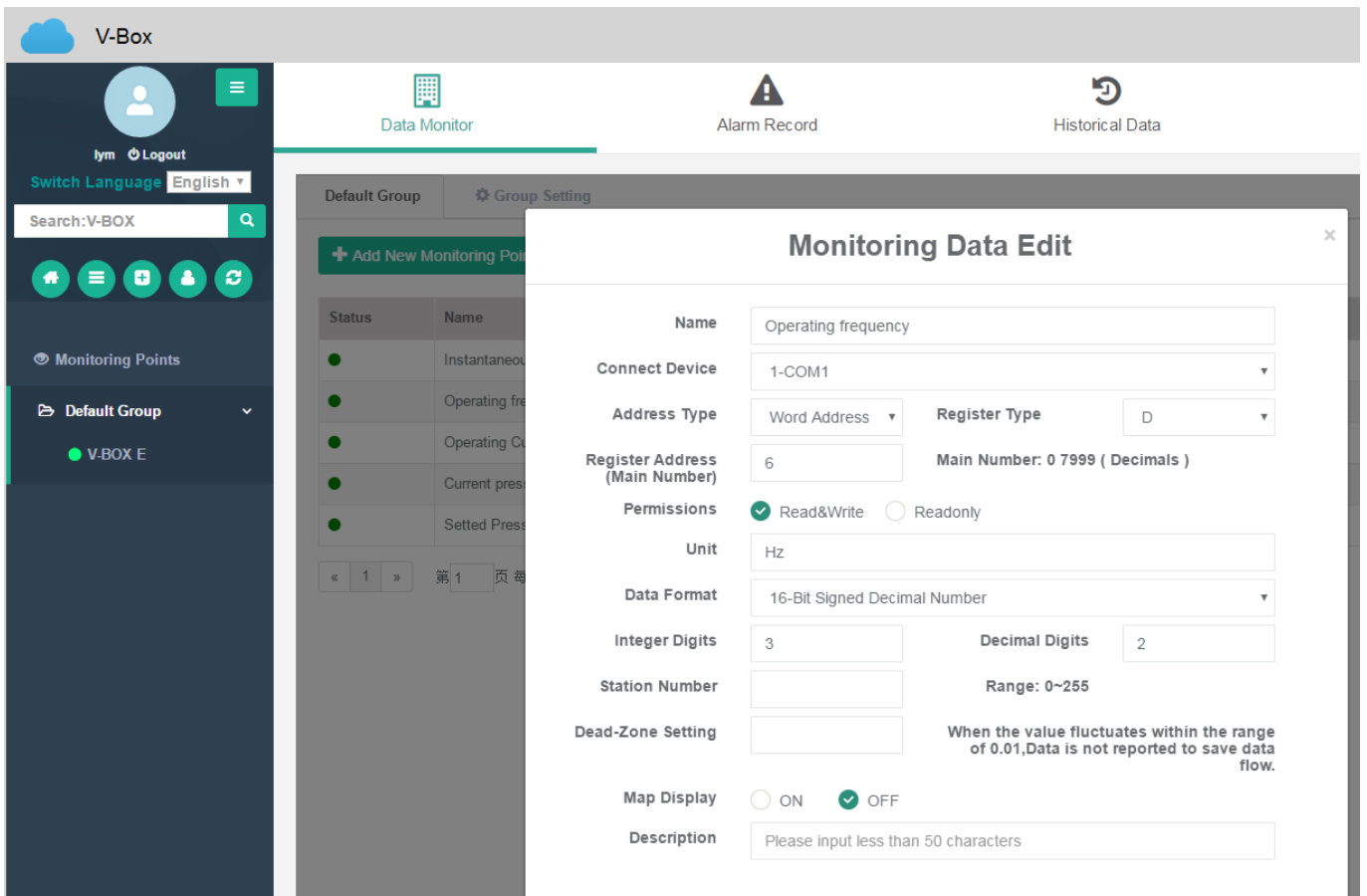
Figure 4-15

Add in batches: To facilitate adding multiple real-time monitoring point with the same configuration, the system provides batch adding functions as shown in Figure 4-16.
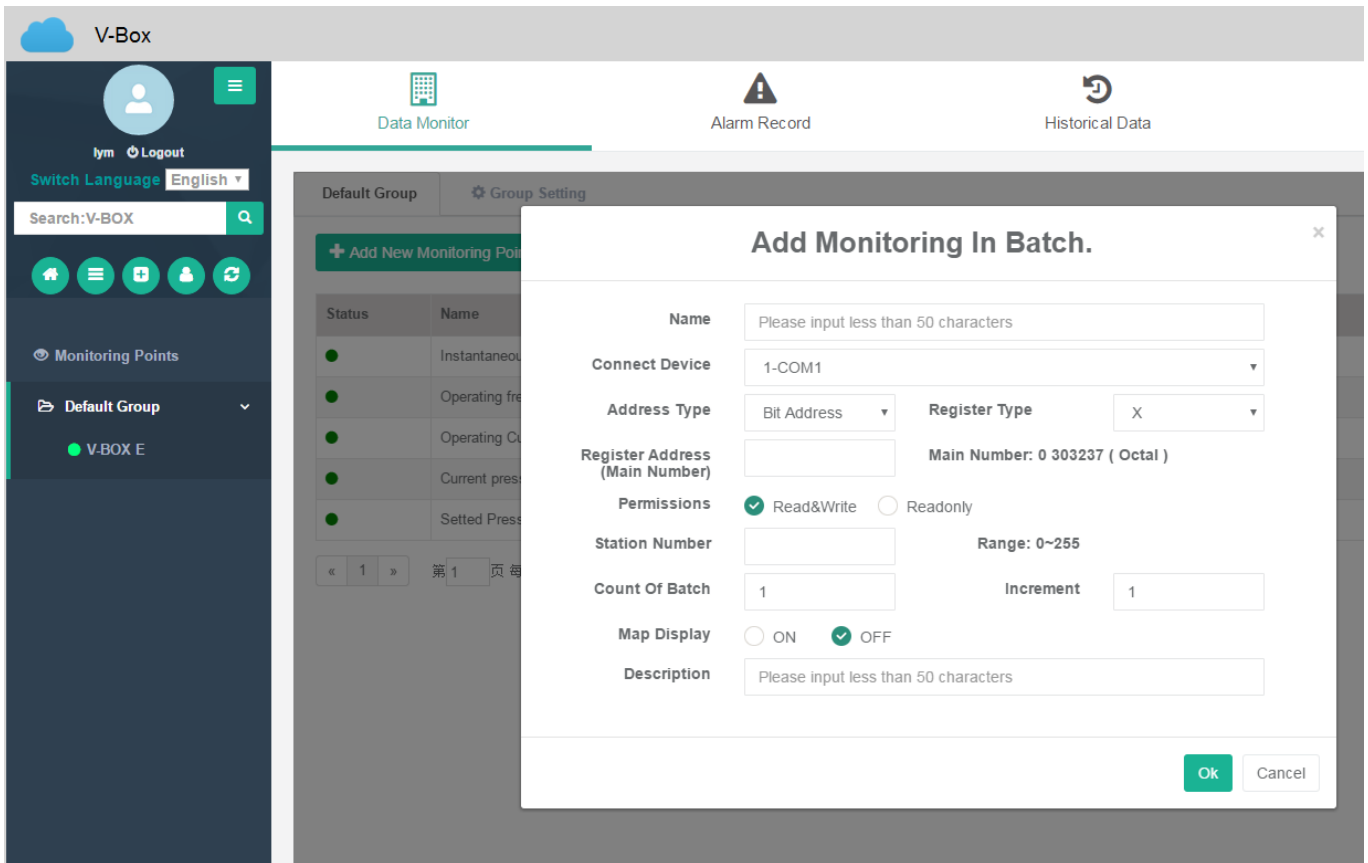
Figure 4-16

4.3.2. Monitoring point group management

In the V-Box , User can grouping manage the real-time monitoring point, monitoring point can be move to different group, in the "group setting" sub-page, Adding groups, modify groups, delete groups and other operations can be done,

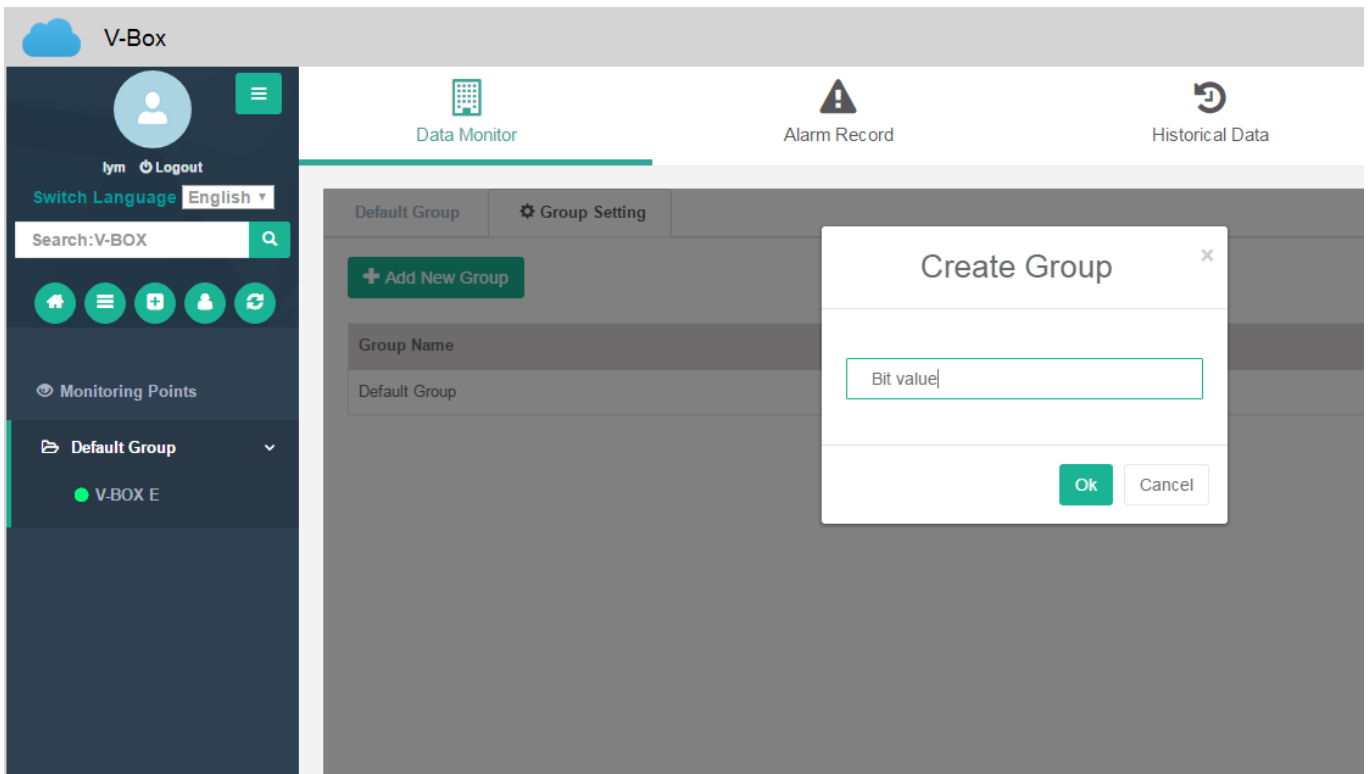**Adding groups**: Groups name need to be added when adding groups. As shown in Figure 4-17.

Figure 4-17

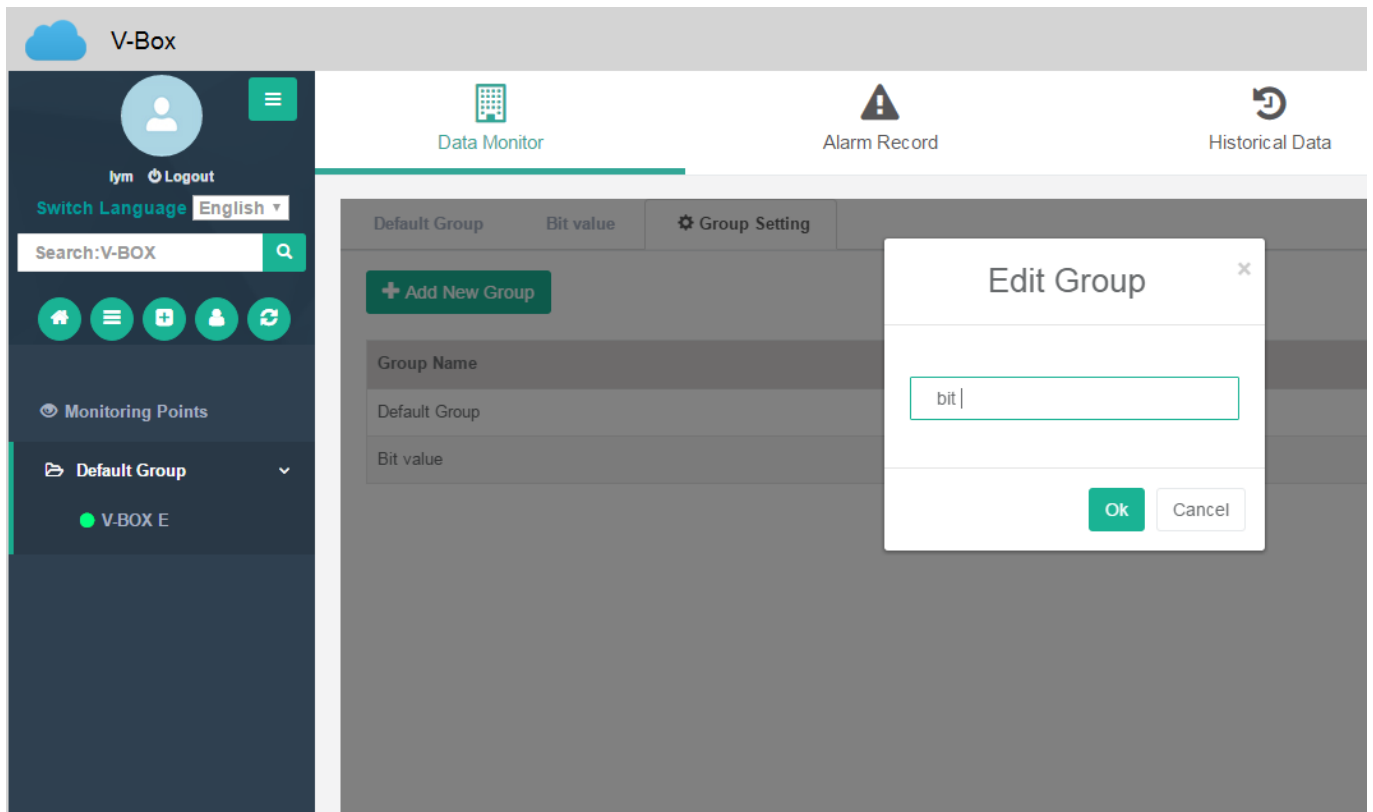**Modifying Groups:** Groups name need to be added when modify groups. As shown in Figure 4-18.

Figure 4-18

Deleting groups: When you deleting a group, confirm the deleting in a prompt dialog box , as shown in Figure 4-19.
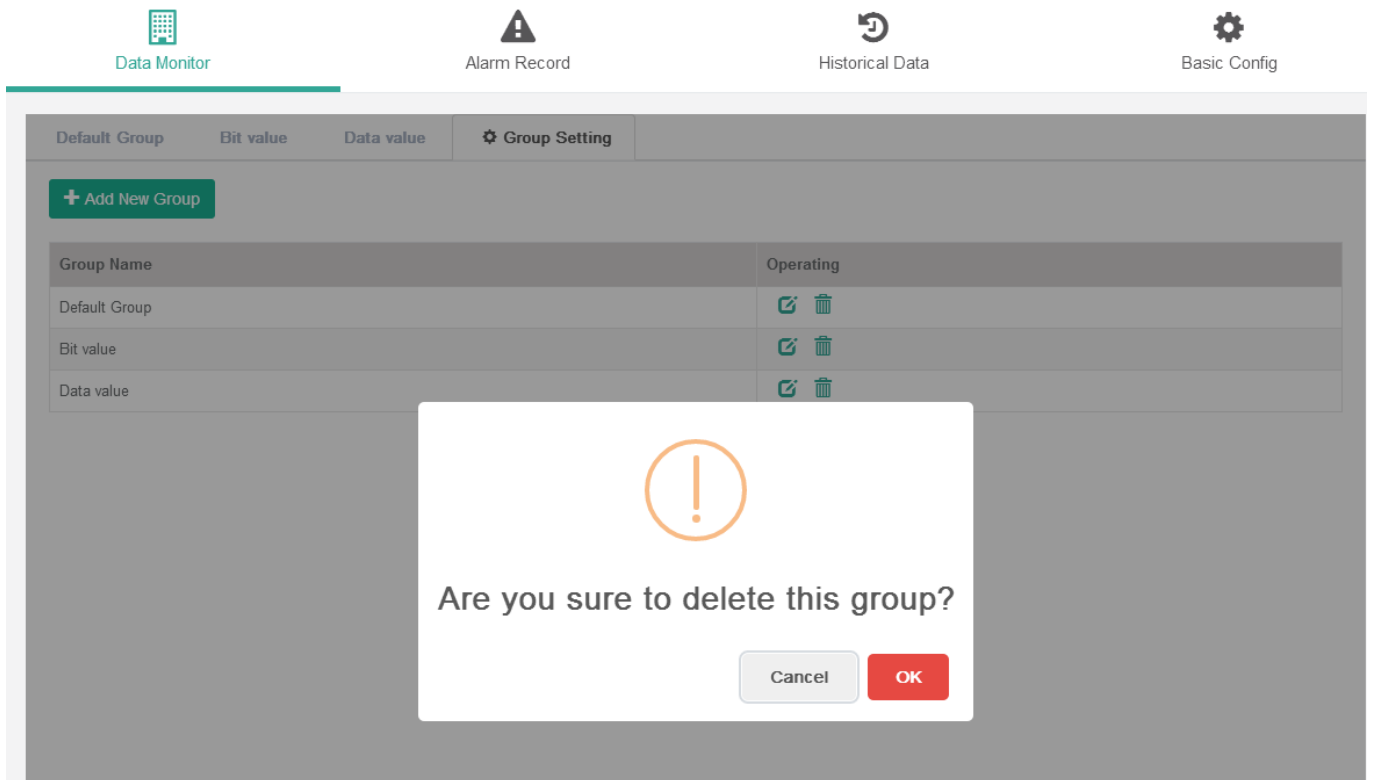
Figure 4-19

4.3.3. Current data modify

In the "Data monitoring" interface, user can modify monitoring point's current data. Enter the monitoring point's modify status by clicking the text box in the "Value" column in the list. Clicking "√" icon to change the value; Clicking "X"icon to cancel the change. As shown in figure 4.20.
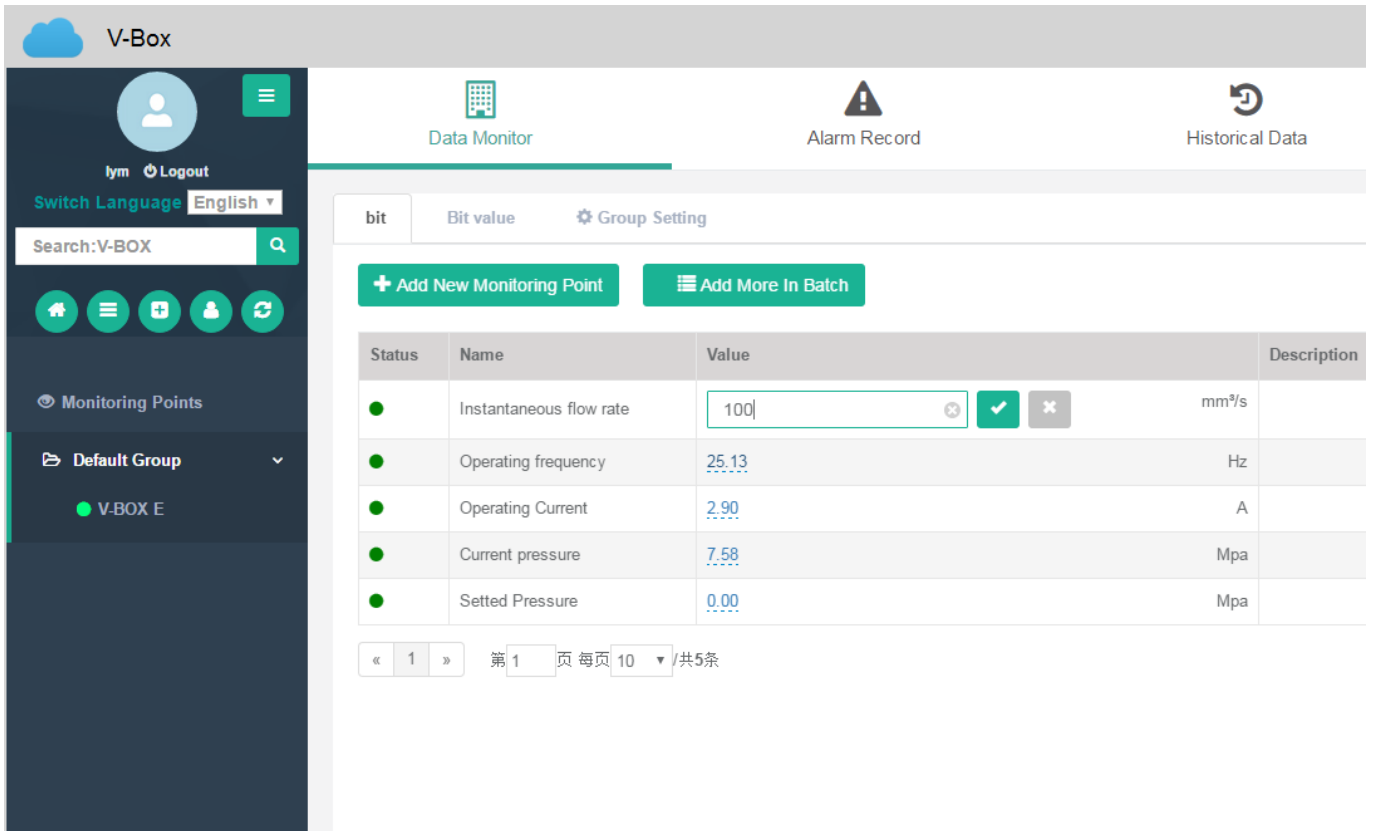
Figure 4-20

4.4. History data modification

Adding the monitoring addresses in the【History data】, collecting data according to conditions and form a data list for searching and monitoring.

4.4.1. Data Registration

In the "Data registration" sub-page under "History data" interface, User can modify history data, the required data include name, connection device(communication ports), address type and register type, as shown in figure 4-21.
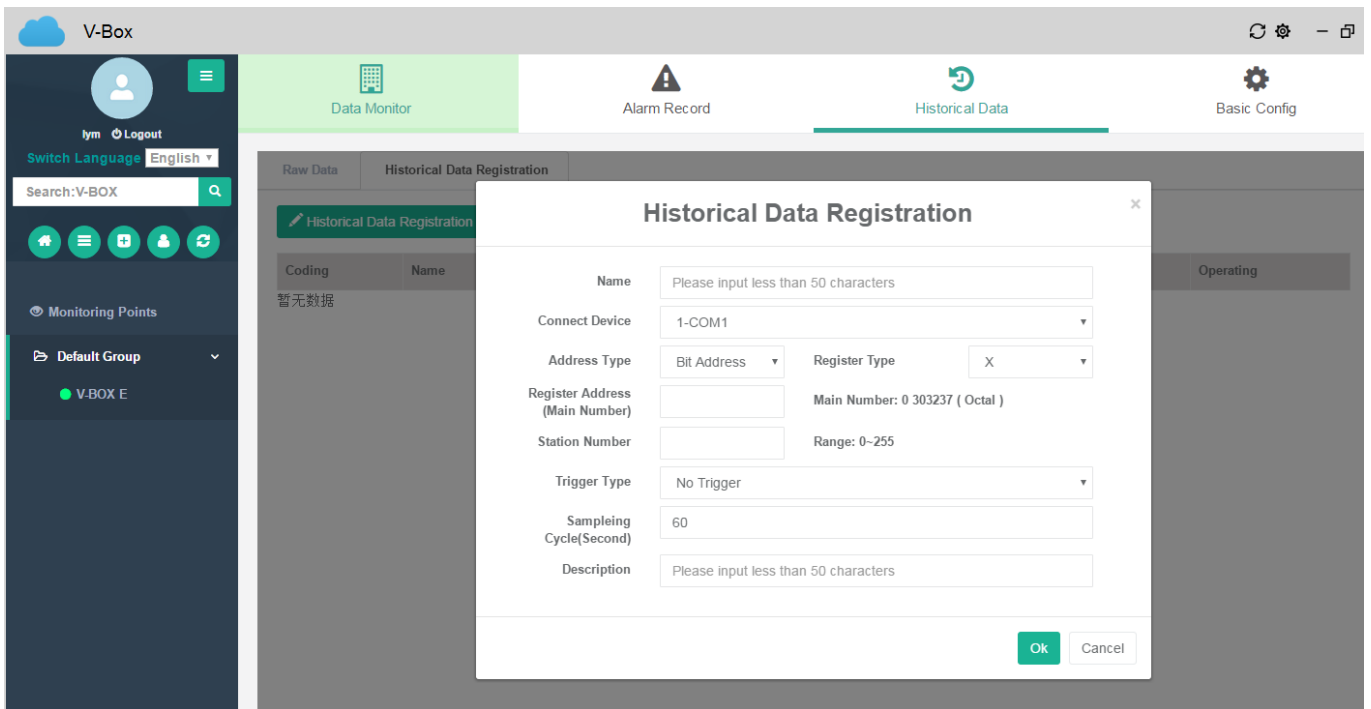
Figure 4-21

4.4.2. Data query

In the "Original data" sub-page, user can query and delete history data. When querying data user need input the monitoring point, starting and ending date and other conditions. History data can be displayed through list and curves.
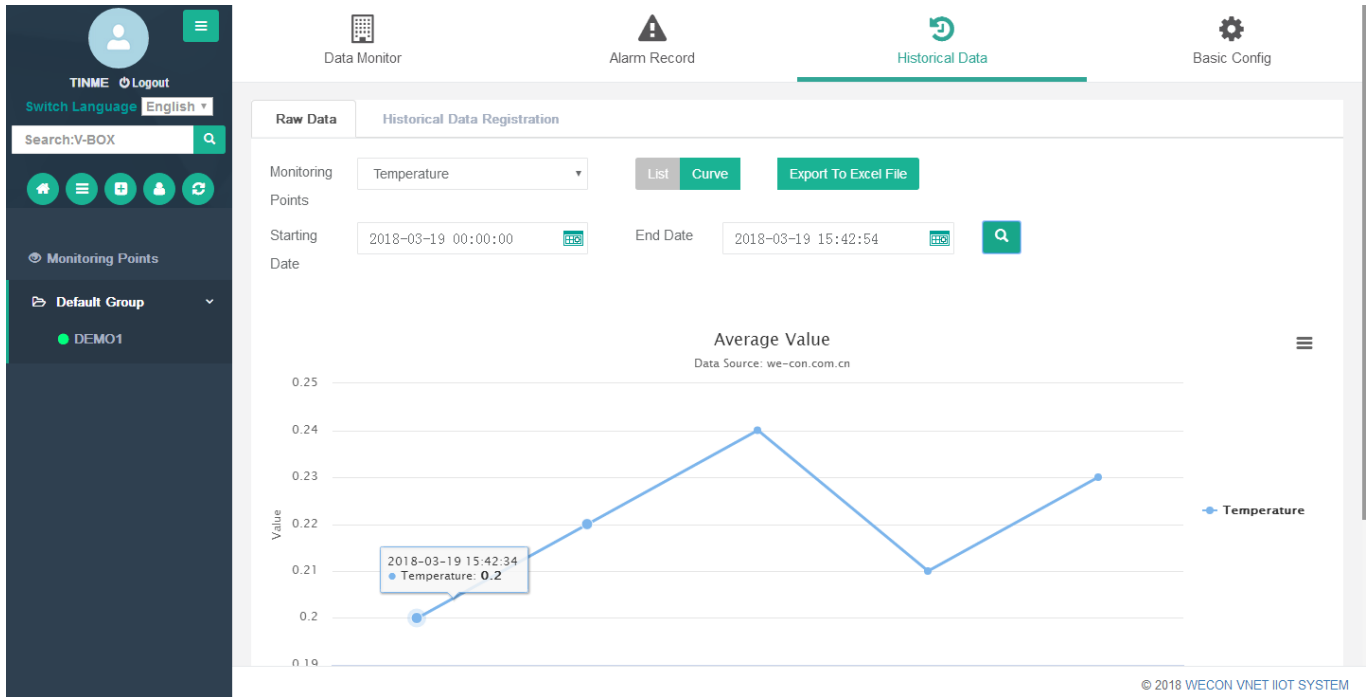
Figure 4-22

Collected data sheet can be saved as Excel file and saved in PC through【Export Excel】button.

4.5. Modifying alarm data

User can modify the alarm conditions in【Alarm record】and query current alarm data and history alarm record information. Alarm record can be divided to current alarm and history alarm according to administrator to confirm the status.

4.5.1. Alarm Registration

In the "Alarm registration" sub-page under "Alarm data" interface, alarm data can be added. When adding alarm records, you need to select or enter the name, group, connection device (communication port) and address type, as shown in Figure 4-23.
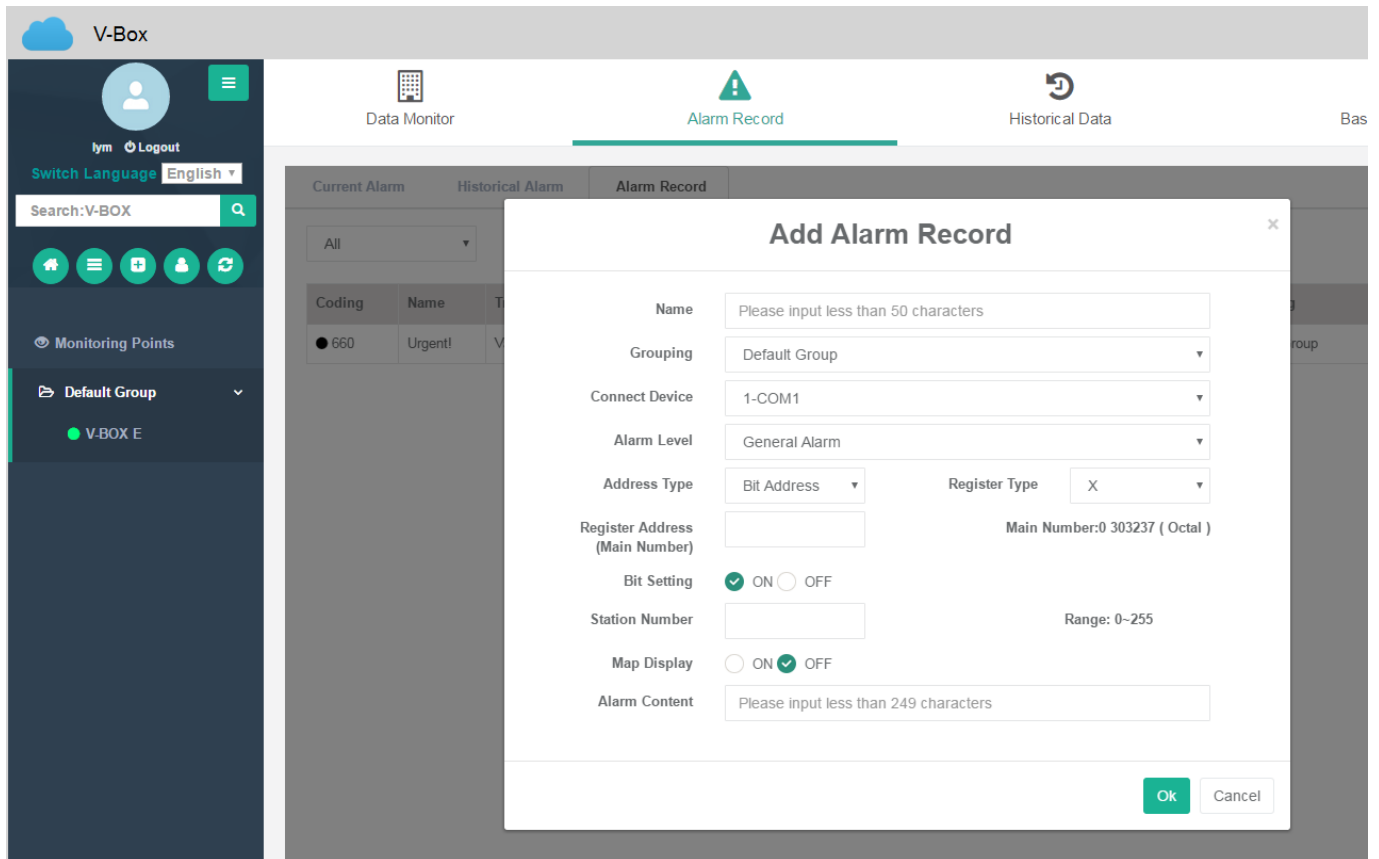
Figure 4-23

4.5.2. Current alarm

The data in "current alarm" sub-screen is the operating record that not be confirmed, administrator can change the status of alarm record by "confirm" them. The "confirmed" alarm record will become history alarm record and will be transferred to "history alarm" sub-screen, in "history alarm" sub-screen, User can search the alarm data base on series number, name, starting and ending date and some other conditions. As shown in figure 4-24.
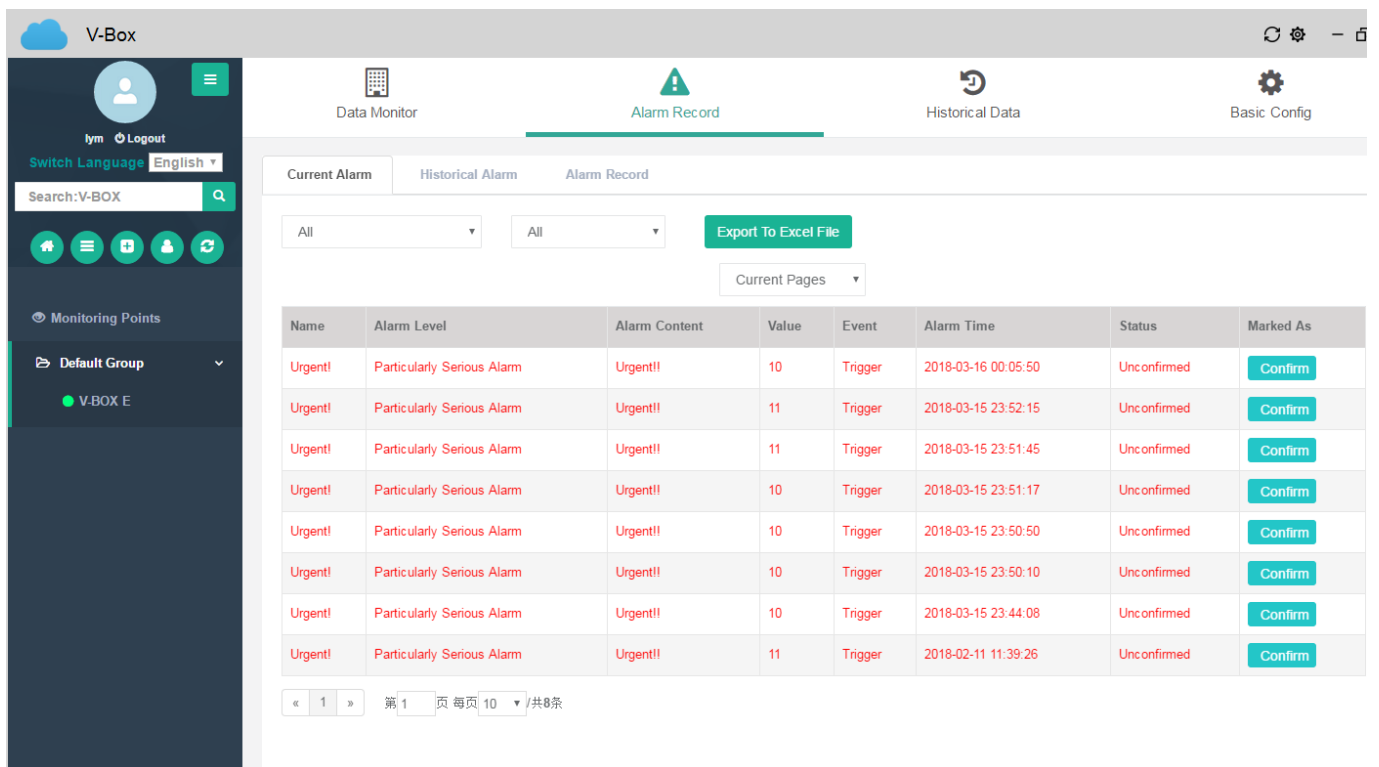
Figure 4-24

5. V-BOX account management

When the account is logged in, you can bind the V-Box to the account by adding the V-Box information. The account bound to the V-BOX is called "administrator account" (relative sub-account). A V- Box can only bind an account, that is, the administrator account is unique.

5.1. Account management

One administrator account can be configured with multiple sub-accounts, and the sub-account can be assigned to monitor the V- Box, as well as read and write authority on V-Box data. As shown in Figure 5-1:
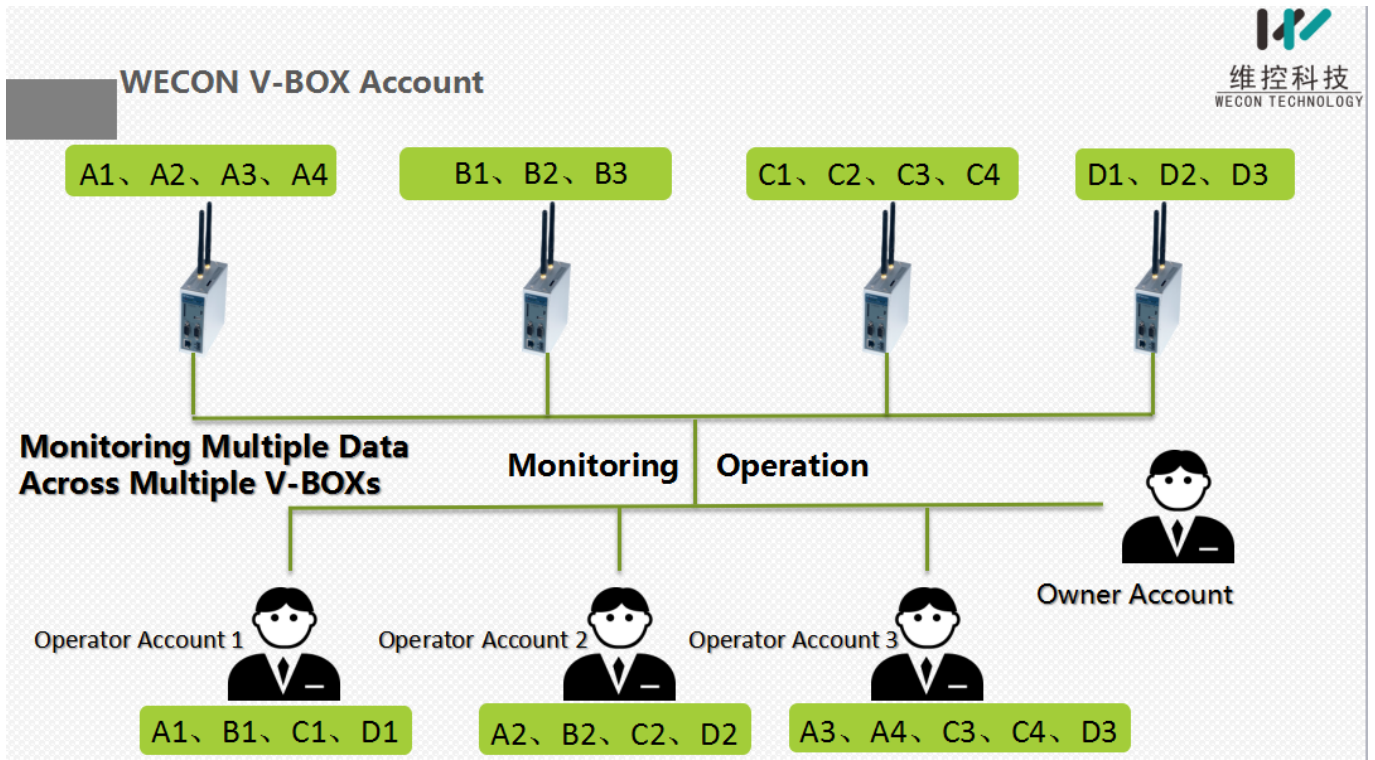
Figure 5-1

One administrator account tie to four V-BOX(A,B,C,D), each V-BOX have the operational data (A1,A2,A3….) , set three sub-accounts in one administrator account, and assign permissions for each sub-account. For example, as figure shown above, sub-account 1 can monitor and operate one of the data(A1,B1,C1,D1) in four V-BOXS(A,B,C,D). Sub-account 3 can monitor and operate the data (A3,A4,C3,C4,D3) in three V-BOXS (A,B,C).

5.2. Sub-account management

Enter the sub-account management interface by clicking "sub-account management" button in the left side button group. User can do the operating like adding , forbidding, and authority management and so on. Authority management include the management for current monitoring points, history monitoring points, alarm monitoring points. As shown in Figure 5-2.

Figure 5-2

(1) "Sub-account" have two status : "enable" and "disable". When adding a sub-account, you need to fill in the account number and password of the sub-account, or you can select whether to enable the sub-account immediately, as shown in Figure 5-3.
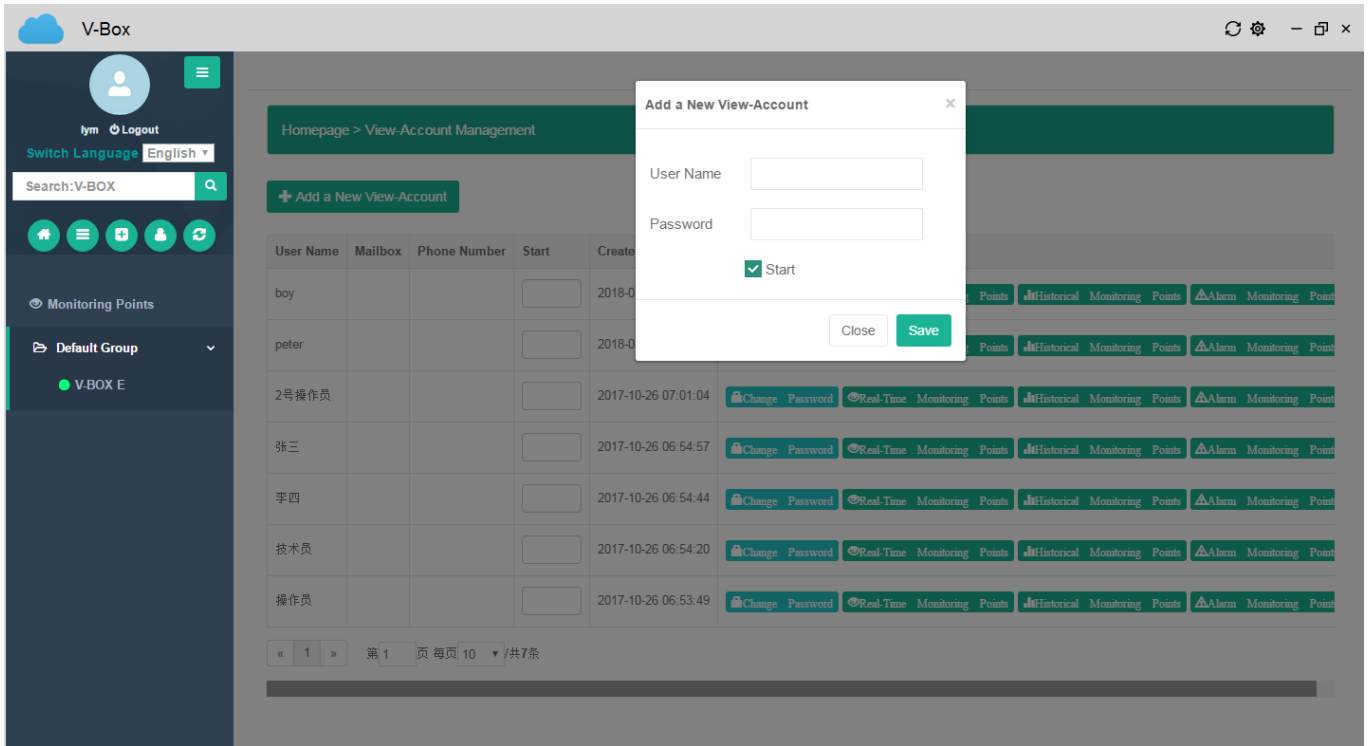
Figure 5-3

(2) Disable one sub-account by modify it directly, as shown in Figure 5-4.
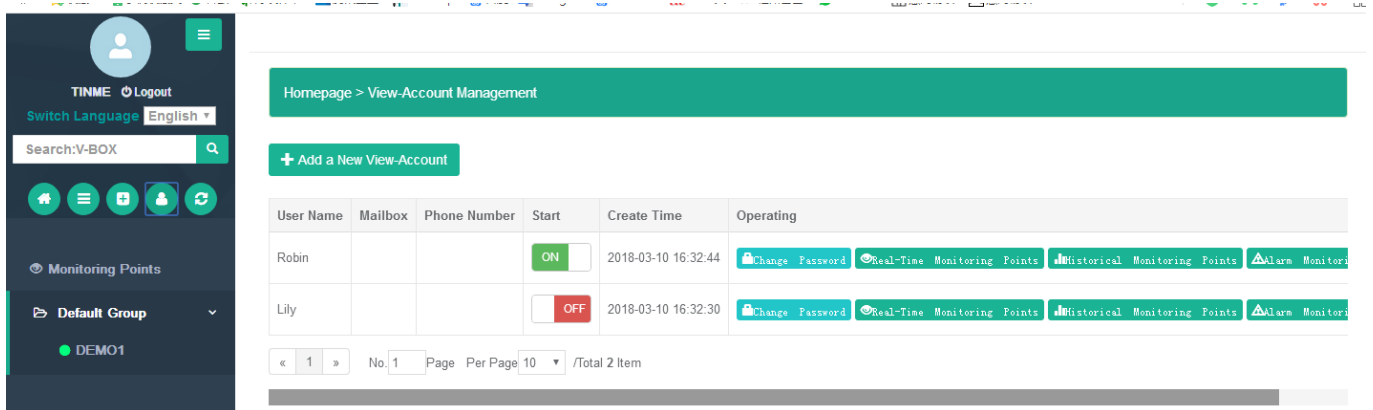

Figure 5-4

(3) Enter "Monitoring point authority list" interface, User can manage the monitoring points authority of selected sub-screen in the interface. As shown in Figure 5-5, for example to modify the authority as "Read Only" or "Read-write"; You can remove the monitoring points from the monitoring account, After the association is removed, some permissions (i.e. real-time, history and alarm) of the monitoring account to the monitoring point will be deleted.
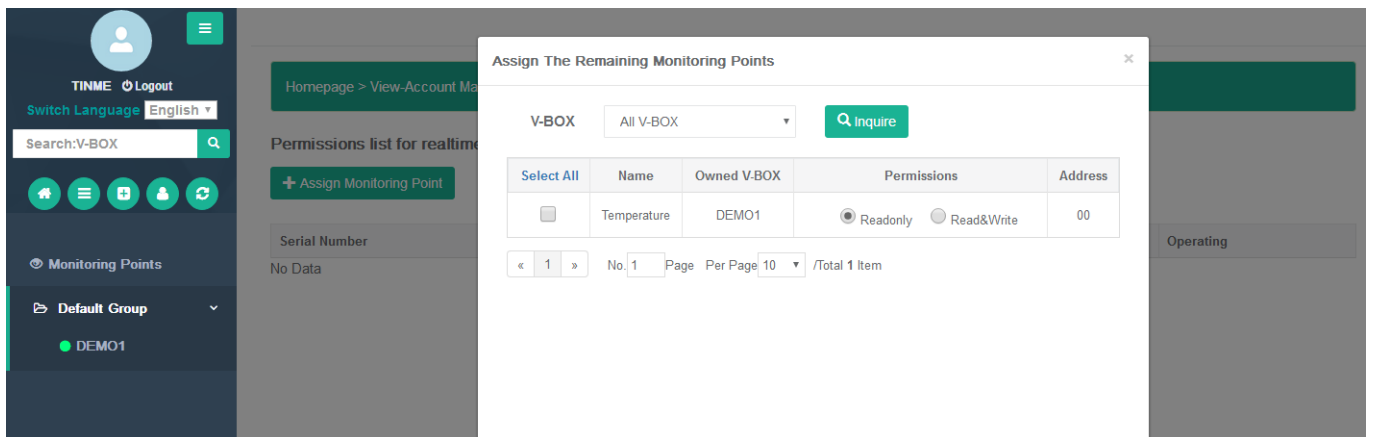
Figure 5-5

User can also assign the monitoring point to the currently selected monitoring accounts. The assigned monitoring point can be from different V-boxes. After being assigned, the sub account has some permissions to the monitoring point, as shown in Figure 5-6.
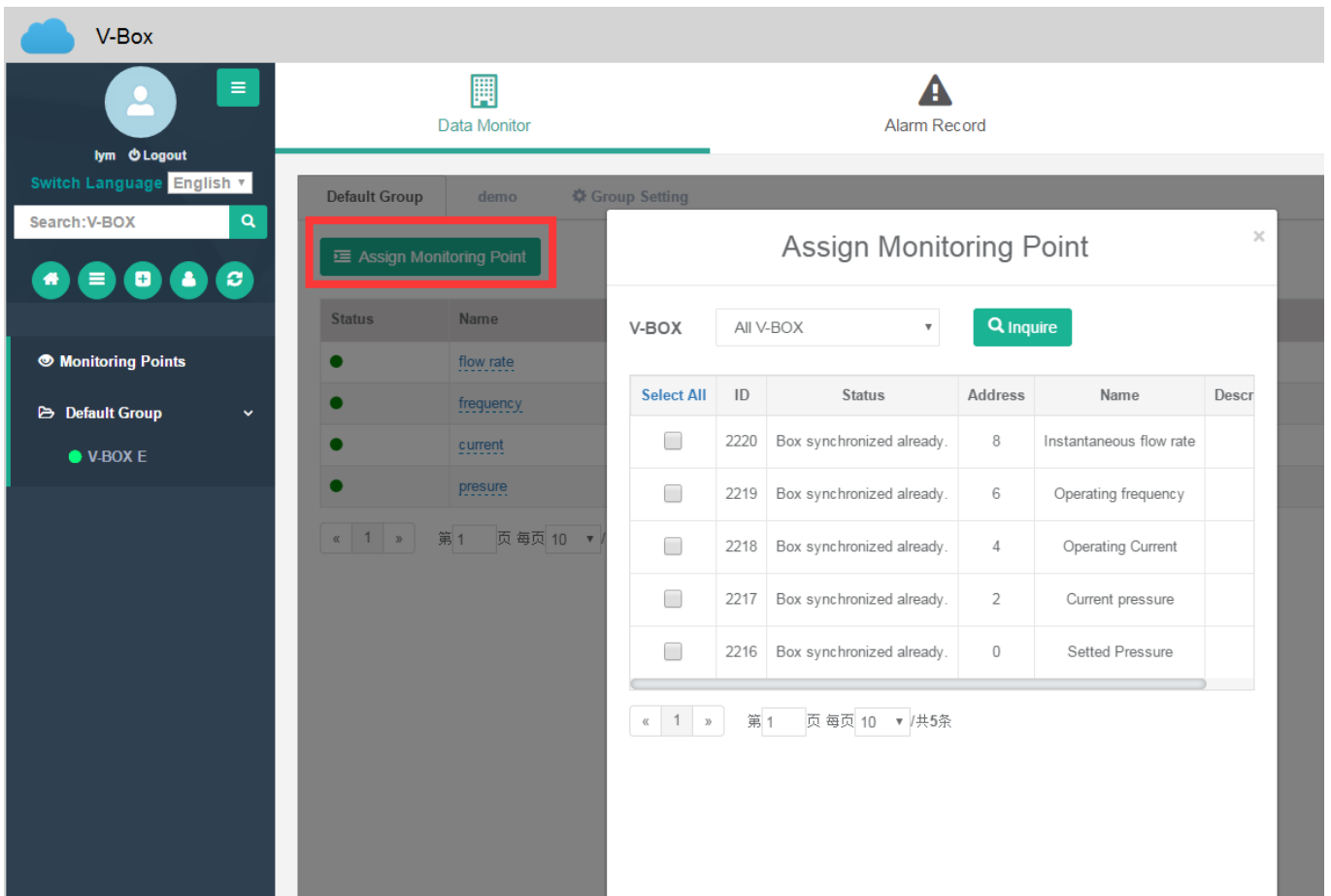
Figure 5-6

5.3. Distribution monitoring point

5.3.1. Groups Management

Loading http://v-box.net by Sub-account. Sub-account can manage monitoring point. Such as creating group, modifying group and deleting group. The group name need to be filled in the group when creating the group. As shown in figure 5-7.
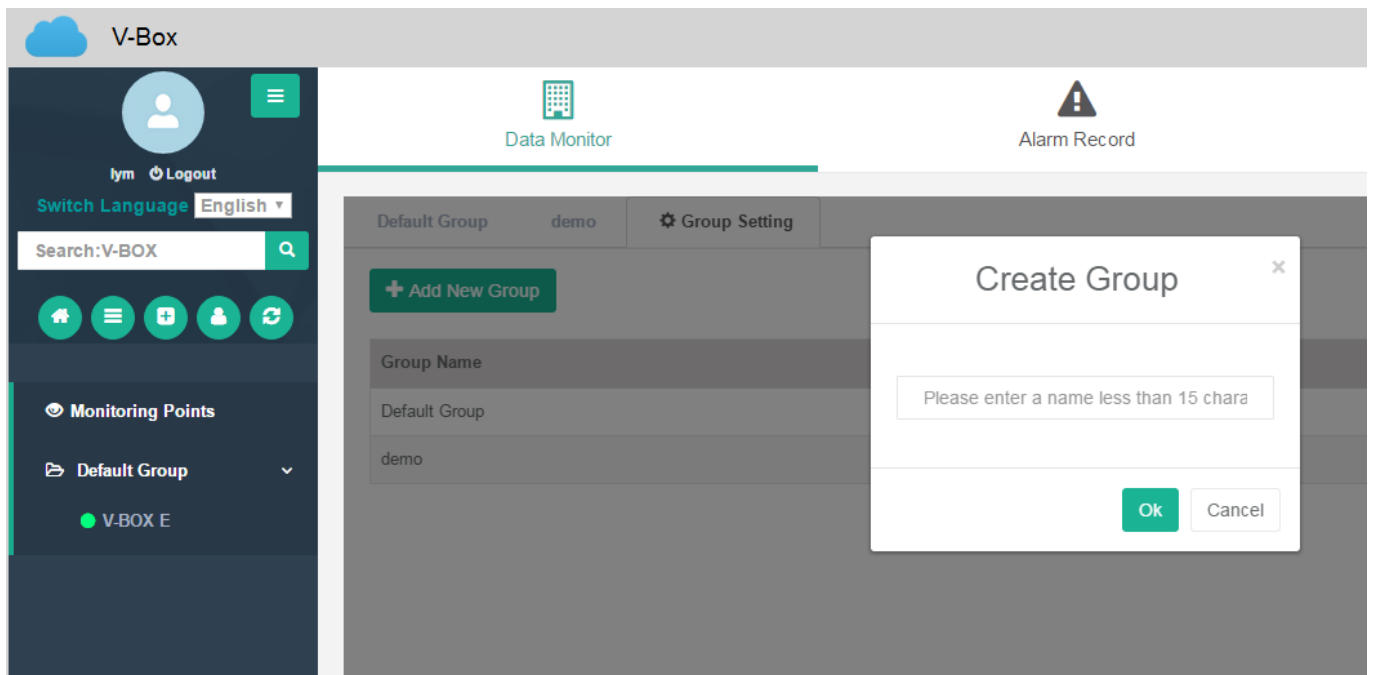
Figure 5-7

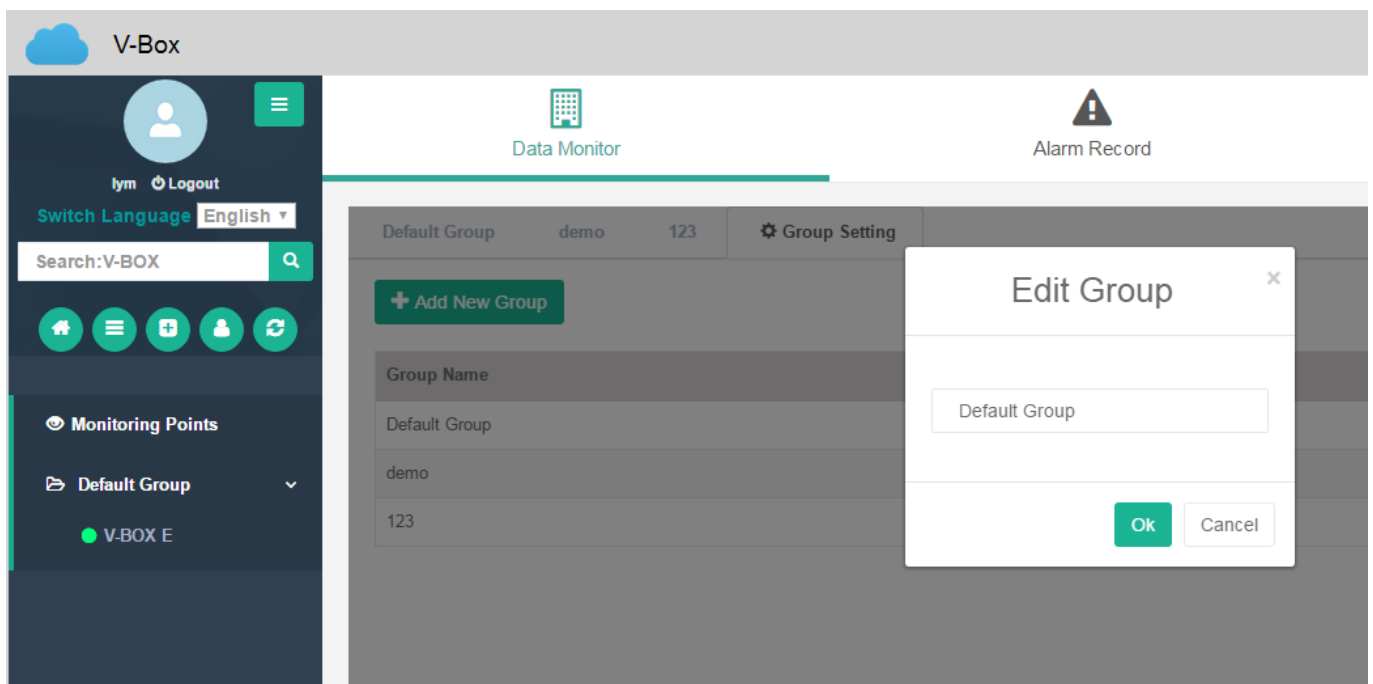The new group name need to be filled when modify the group.

Figure 5-8

When deleting a group, clicking "OK" button in the dialog box to confirm the deletion. If the deletion is confirmed, the monitoring point under the group will also be removed with the group, as shown in Figure 5-9.
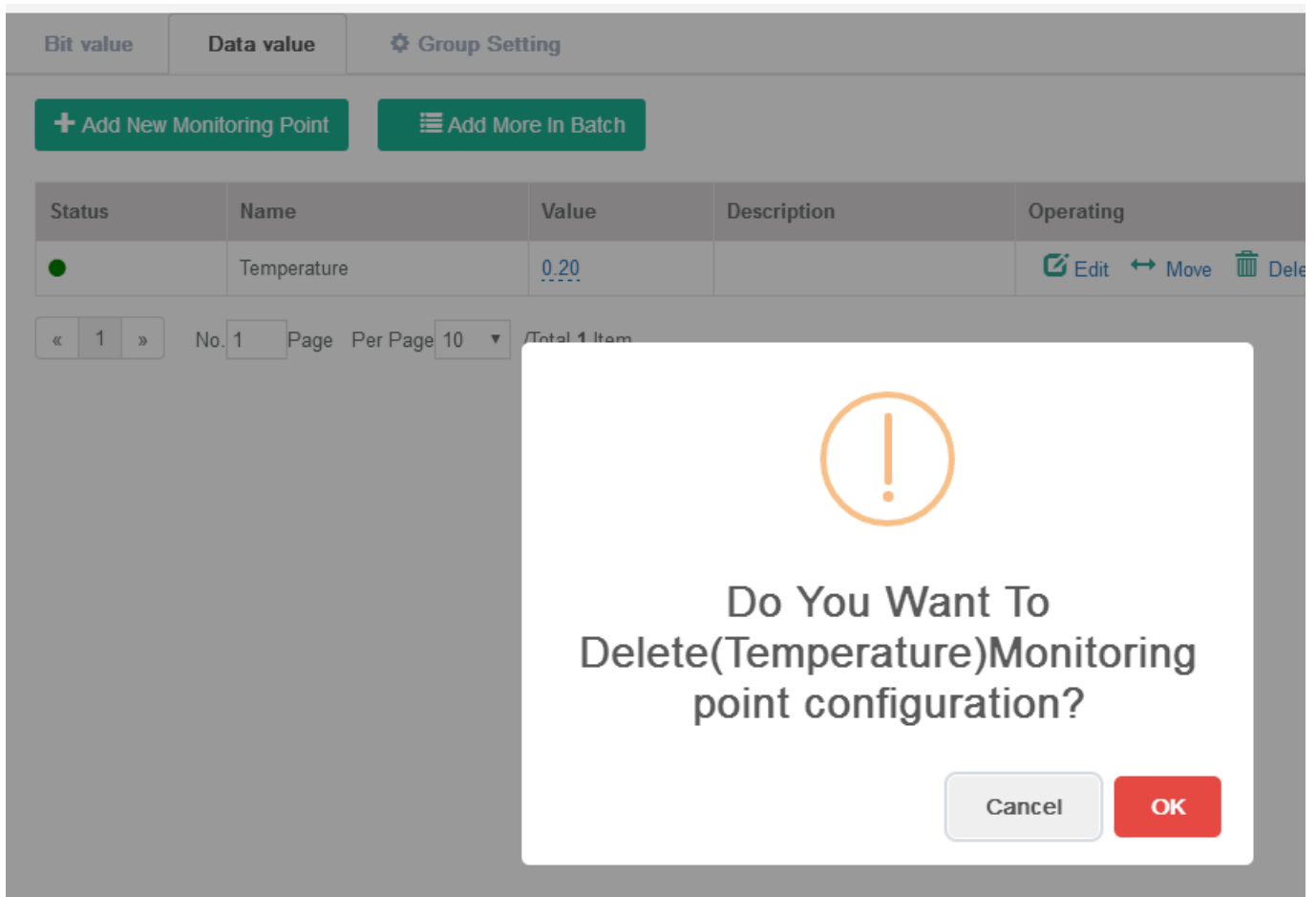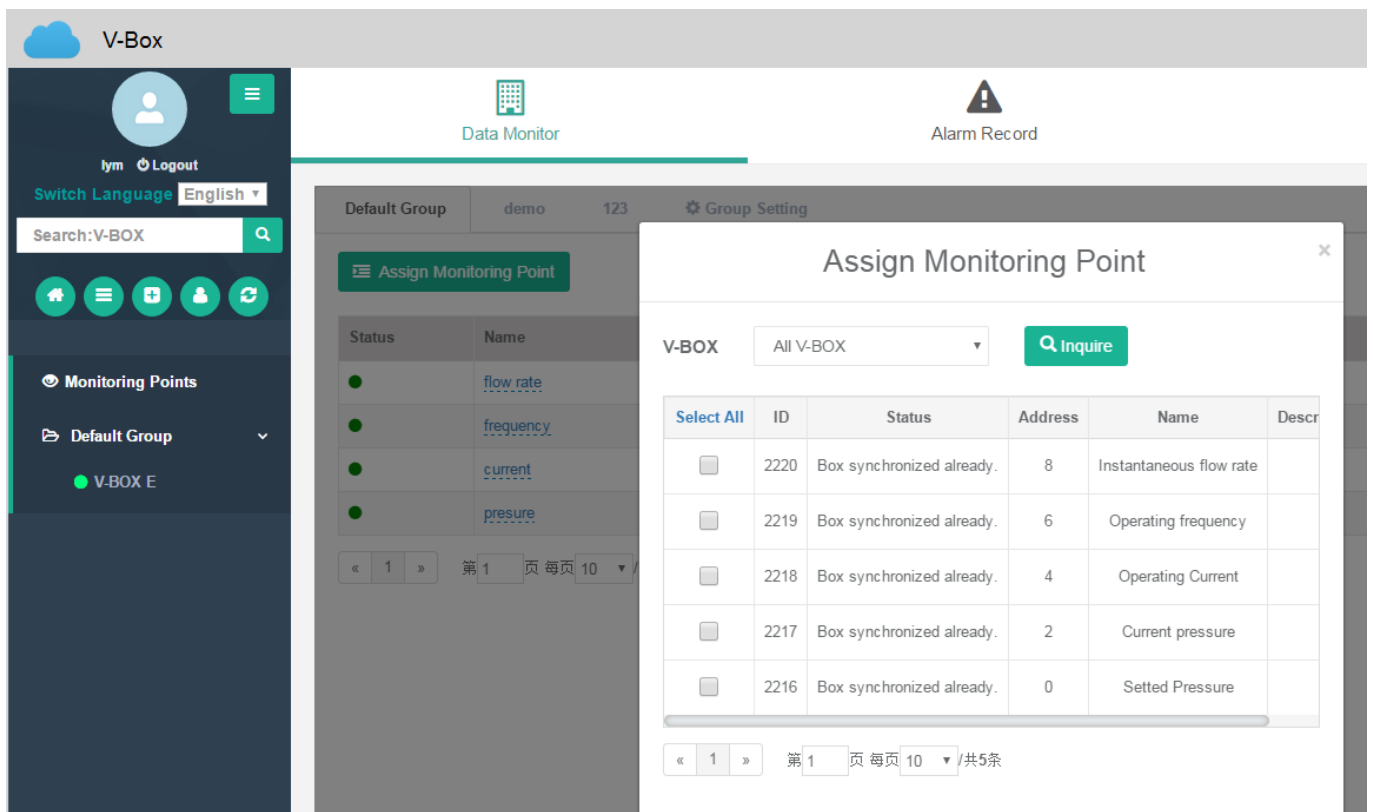
Figure 5-9

Figure 5-10

5.3.2. Data monitoring

Sub-account have not the concept of "box", data input have three types: current data, alarm data and history data. After administrator allocate the monitoring point of sub-account, in "data monitoring" interface, sub-account allocate the monitoring point to different grouping, as shown in Figure 5.10.

Same monitoring point can be exited in different grouping. After allocated, User can search the real-time data in current group, If the sub-account has reading and writing permissions, you can modify the real-time data of the monitoring point, otherwise it can only query.

5.3.3. Confirm the current alarm

After the administrator allocates the alarm monitoring point to the sub-account, the sub-account can monitor the alarm data of the monitoring point assigned by the administrator on the "alarm record" interface. The interface includes two sub-pages, "current alarm" and "historical alarm ". Alarm data have "confirmed" and "unconfirmed" two status. "unconfirmed" status's alarm data is displayed in "Current alarm" sub-screen. "confirmed" status's alarm data is displayed in "historical alarm" sub-screen. If the sub-account has read-write permission, you can confirm the unconfirmed alarm data by clicking "√" in the "Operation" column, otherwise only the query function will be performed. After confirmation, the corresponding current alarm data will be displayed in the " History Alarm "sub-page, as shown in Figure 5-11:
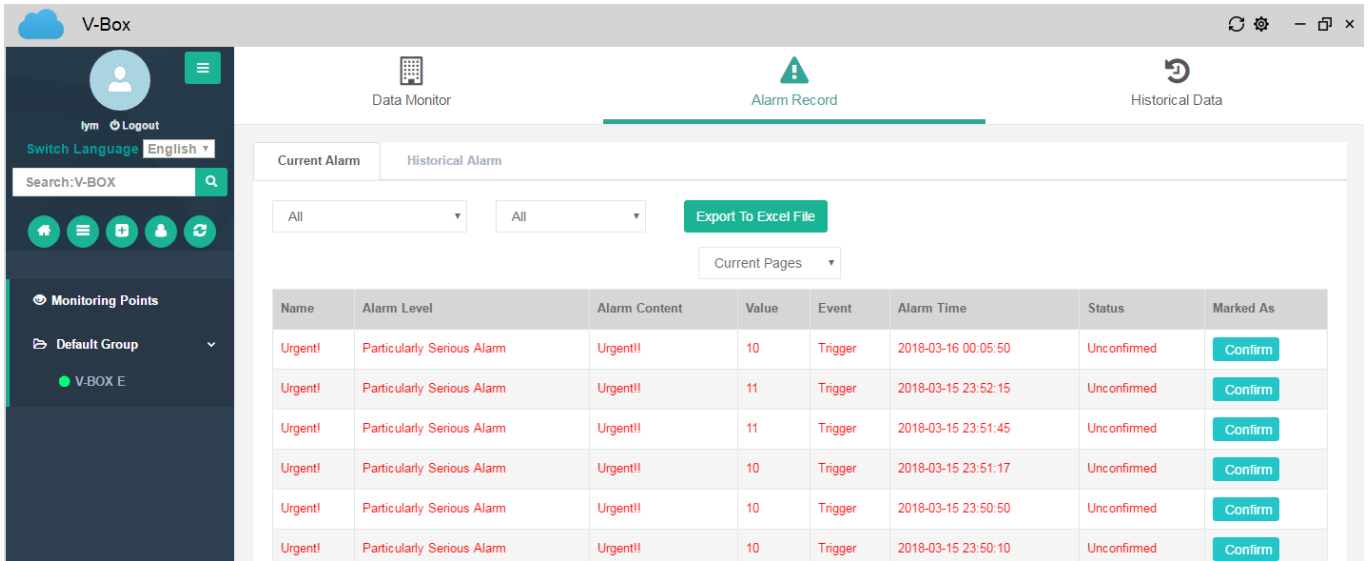
Figure 5-11

5.3.4. Alarm data inquire

In the "history alarm" interface, User can inquire the alarm data base on series number, name, starting and ending date and other conditions. As shown in figure 5-12.
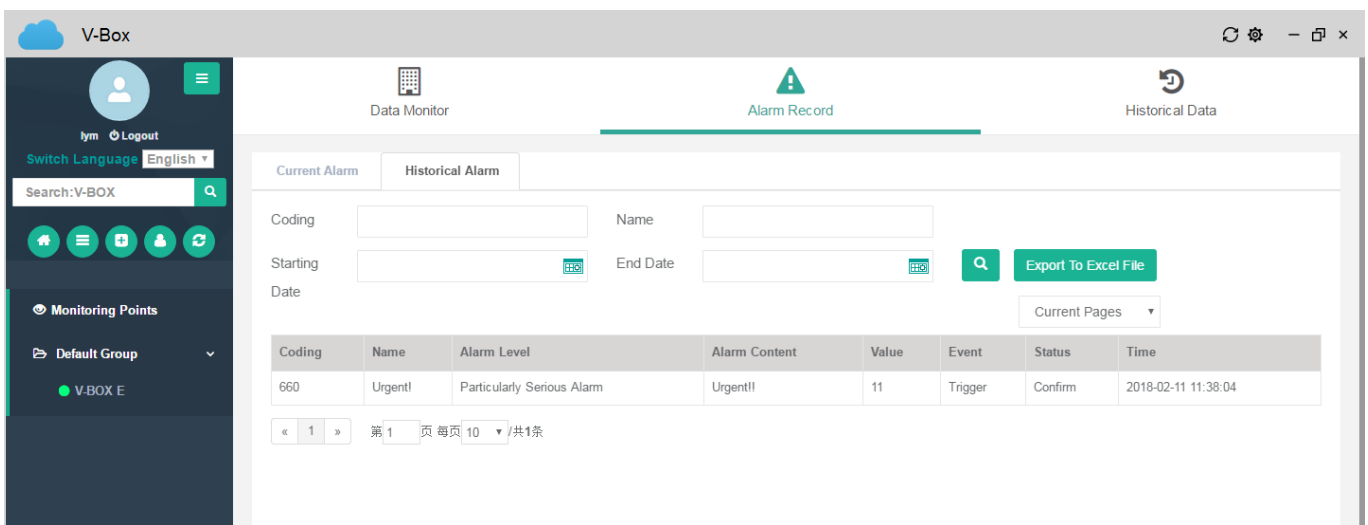

Figure 5-12

5.3.5. History record inquire

In "history record" interface, sub-account can inquire the history data base on the monitoring point and starting and ending dates or other conditions(only support inquire function). As shown in Figure 5-13;
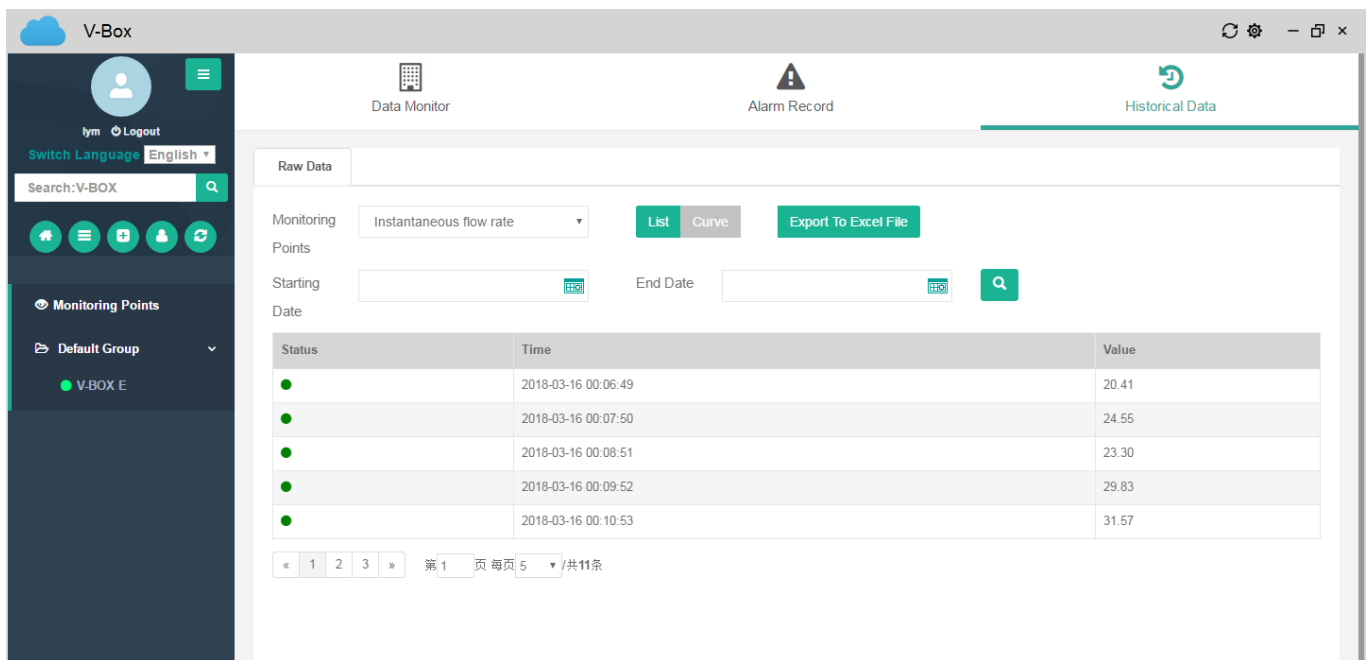

Figure 5-13

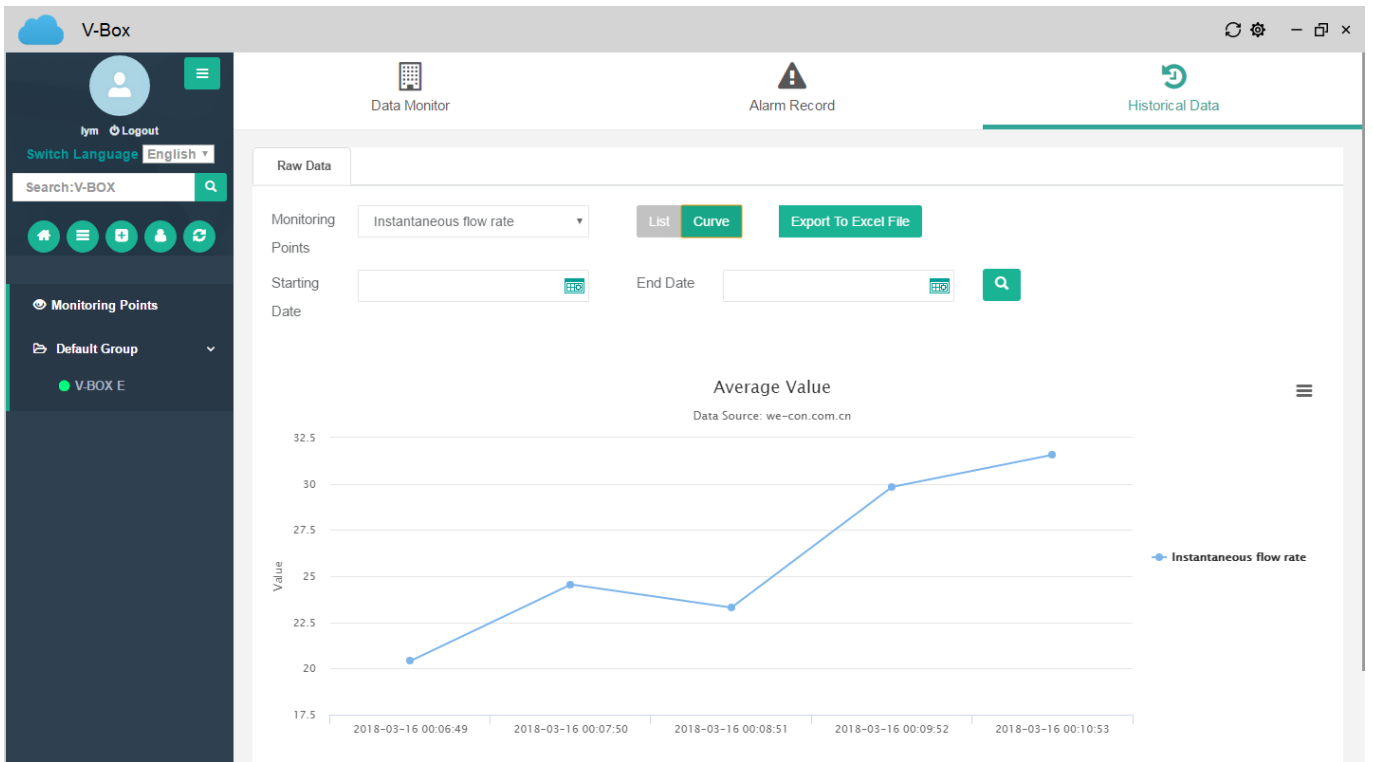History data can be displayed both in list and in curve. As shown in Figure 5-14.

Figure 5-14