

Welcome



AUX

**Technology Leads
Intelligent Life**
ALL DC Inverter VRF

Wide Operation Range
❄️ **-15°C-55°C** ☀️ **-25°C-24°C**

⚙️ Innovative ⚡️ Energy-saving 🛋️ Comfortable 🔄 Flexible 🛡️ Reliable

The advertisement features a row of four white AUX VRF outdoor units in the foreground. The background shows a modern cityscape with tall buildings and a wide staircase leading up to one of them. The overall aesthetic is clean and professional, emphasizing the technology's integration into a modern urban environment.

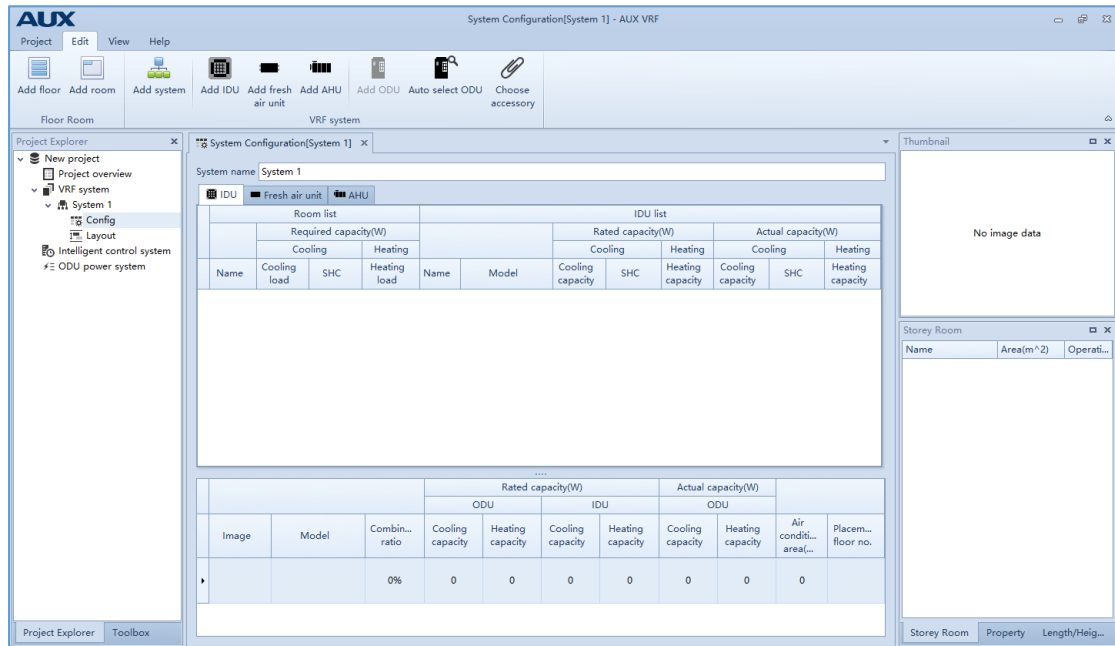
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Introduction

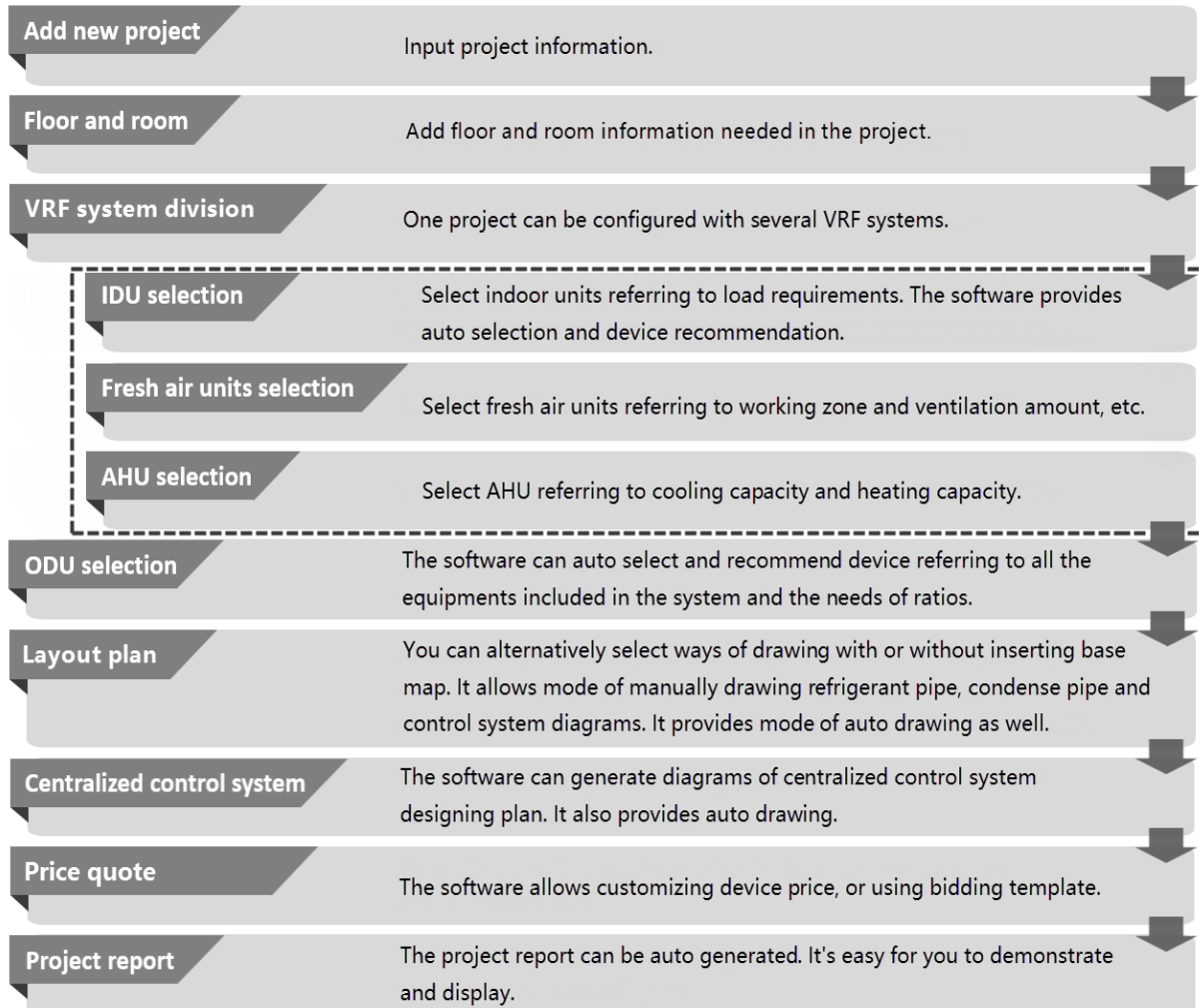
1.1. About software



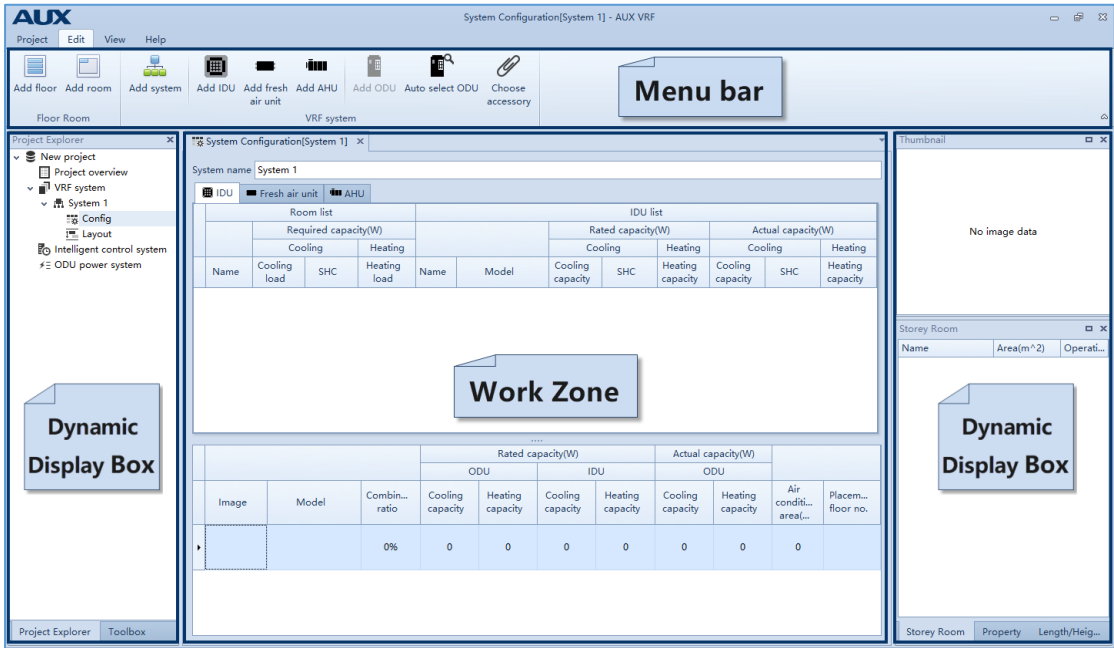
- The software is a Windows-based program. Support Windows 7 and above operating systems;
- This software is multi-language supported. It is convenient to operate;
- This software supports on-line test and product database update. It is easy for you to get newly updated product information;
- This software includes intelligent selection. It helps you to make accurate selection;
- This software can auto generate device piping and wiring diagram. It allows manually drawing as well.
- This software is compiled with various correcting paths at the background. It can assist device selection.

1.2. Introduction of using procedures

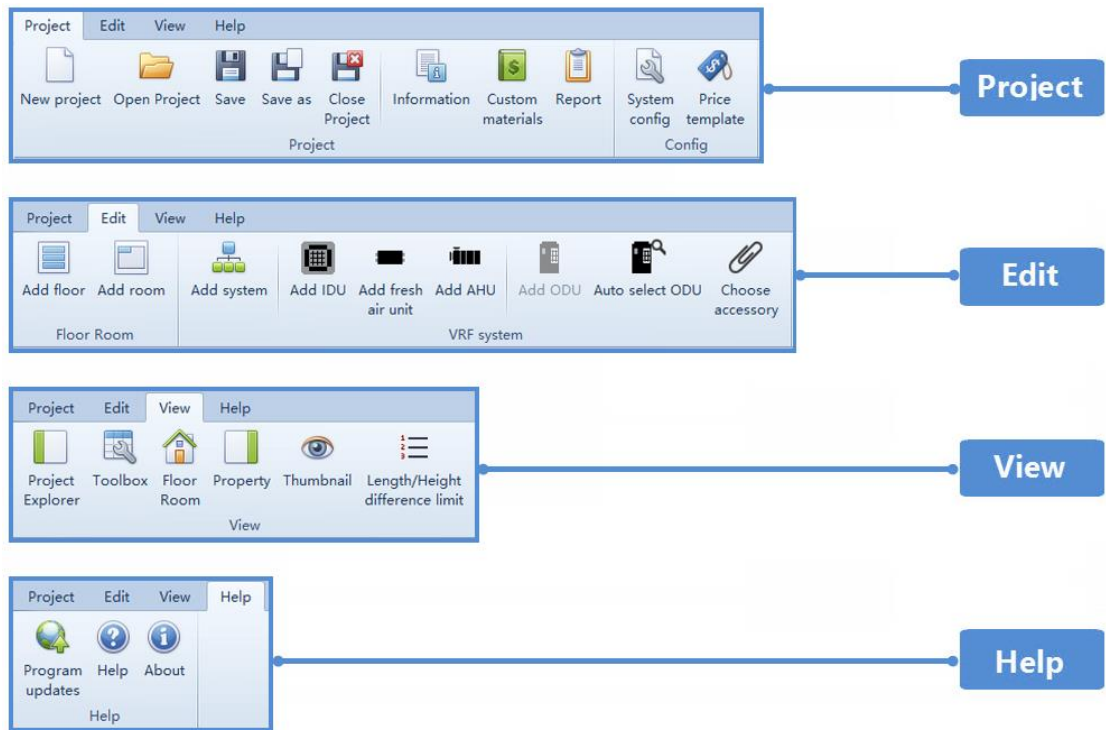
Diagram



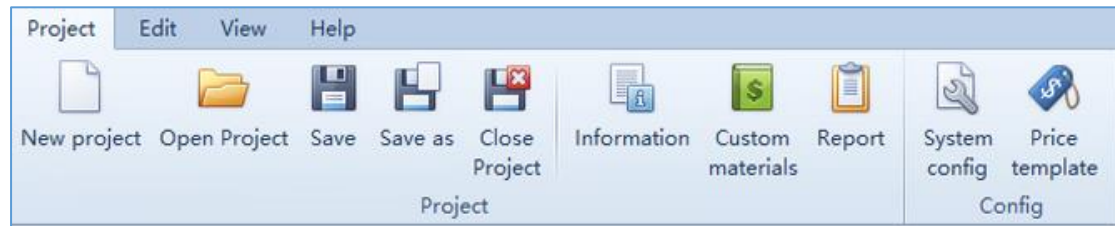
1.3. Software layout introduction



1.3.1. Menu bar



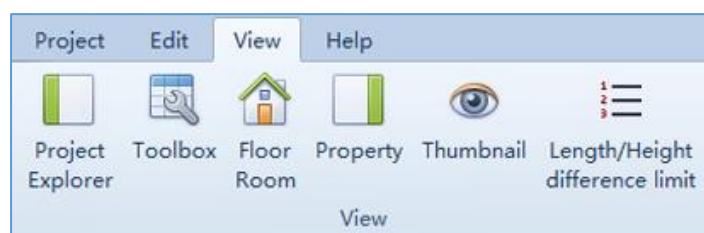
Project: Click to add project, browse project, run project management and project config.



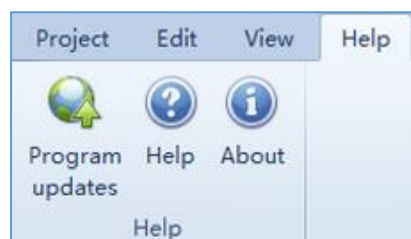
Edit: Click to edit floor, room, and project system config information. A corresponding dynamic menu will appear in the edit menu as more procedures conducted.



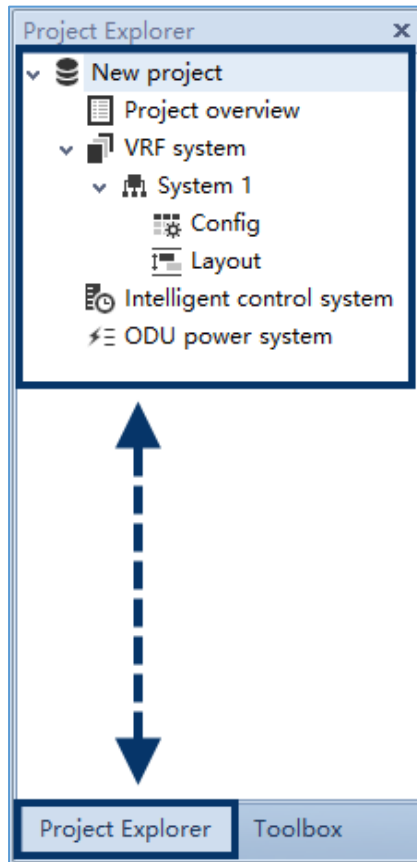
View: Click to manage all dynamic menu tab interfaces. The dynamic box can be dragged to any place you want. If it is accidentally closed, click corresponding button in View menu to make it appear.



Help: Click to update the program, update product database, manage help interface.



Project explorer: Click to open current project's management list.



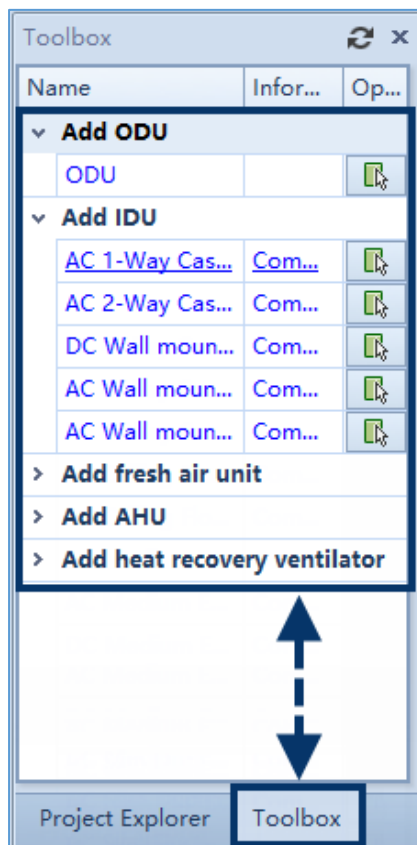
Project overview : Double click to open and browse all the information of the current project.

System 1 : Double click to edit current system config and selection.

Layout : Double click to edit current system plan drawing.

Intelligent control system : Display current system's centralized controller design and plan diagram.

ODU power system : Current ODU power system layout.



Tool box:

It includes all the device managers of all products.

Drag selected device to interface to set up.

Storey Room

Name	Area(m^2)	Operati...
Floor 1	0	
Room 1	0	
Room 2	0	
Room 3	0	
Room 4	0	



Storey Room

Property

Length/Heig...

Floor and room:

Click to input floor and room information.



: Room area measuring tools.

Property

Normal	
Combination ratio	104%
Model	ARV-H120/NR1
Modular combina	
Cooling capacity (	12300
Heating capacity (	13200
Installation height	0
ODU actual coolin	12185
ODU actual heatin	9636
ODU corrected cc	12222
ODU corrected he	9665
Minimum allowab	50%
Maximum combin	130%
Placement floor n	
> System information	
> Other	
> System energy effici	
> ODU energy efficien	

Storey Room Property Length/Heig...

Property:

Open property option to check chosen device's parameters.

Length/Height difference limit

Item	Current value	Limit value
Total pipe length		
	0m	150m
Length between ODU and the farthest IDU		
	0m	100m
The pipe length ODU to the outside first bra		
	0m	
Length between IDU's 1st branch joint and f		
	0m	40m
Length difference between farthest IDU and		
	0m	
Height difference		
IDU-IDU height di...	0m	15m
ODU-IDU height ...	0m	50m
IDU-ODU height ...	0m	40m

Storey Room Property Length/Heig...

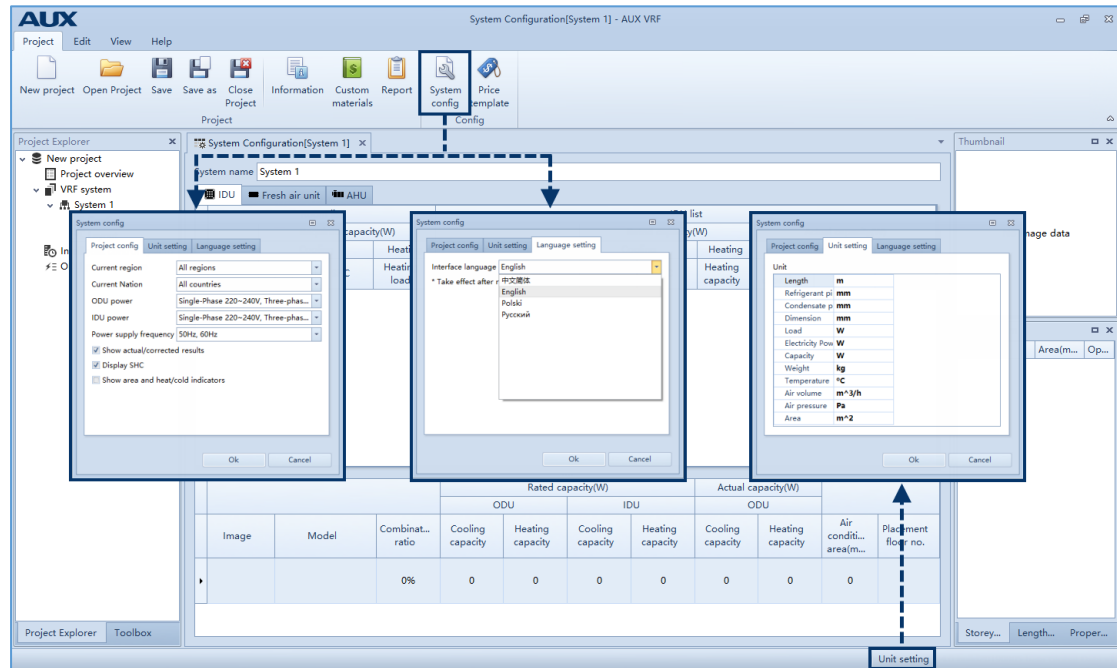
Pipe length/ Height difference limit:

Click to browse or configure parameters of pipe length/ Height difference.

How to use

2.1. System config

You need to configure the system first before creating new project.



1、Project setting:

Set up the power supply type needed.

Set up corresponding calculate correction parameters.

2、Unit setting: Set up all the units.

3、Other setting: Choose the languages needed.

2.2.2. Design condition

You can correct manually the indoor and outdoor parameters depending on the actual circumstances. The parameters will affect the correction calculating.

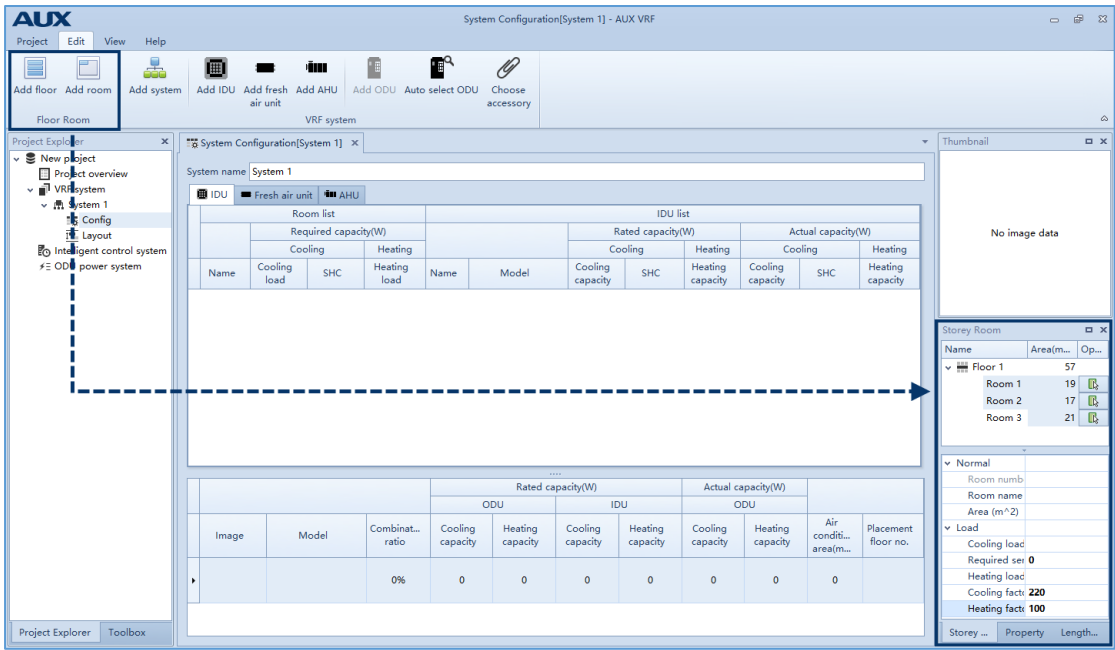
The screenshot shows a software window titled 'Information' with three tabs: 'Project information', 'Design condition' (which is selected and highlighted with a dashed border), and 'Comment'. The 'Design condition' tab contains the following fields and controls:

- Altitude(m)**: A text input field containing the value '54'.
- Summer** section:
 - Atmospheric Pressure(Pa)**: A text input field containing '101325'.
 - Outdoor** sub-section:
 - DB(°C)**: A text input field containing '33.6'.
 - Indoor** sub-section:
 - DB(°C)**: A text input field containing '26'.
 - RH**: A text input field containing '50.0%'.
 - WB(°C)**: A text input field containing '18.6'.
- Winter** section:
 - Atmospheric Pressure(Pa)**: A text input field containing '101325'.
 - Outdoor** sub-section:
 - DB(°C)**: A text input field containing '9.8'.
 - RH**: A text input field containing '48%'.
 - WB(°C)**: A text input field containing '5.1'.
 - Indoor** sub-section:
 - DB(°C)**: A text input field containing '20'.
- Calculation correction** section:
 - ☐ **Altitude correction**

At the bottom right of the dialog are 'Ok' and 'Cancel' buttons.

2.3. Floor and room

Add all floor and room information needed.

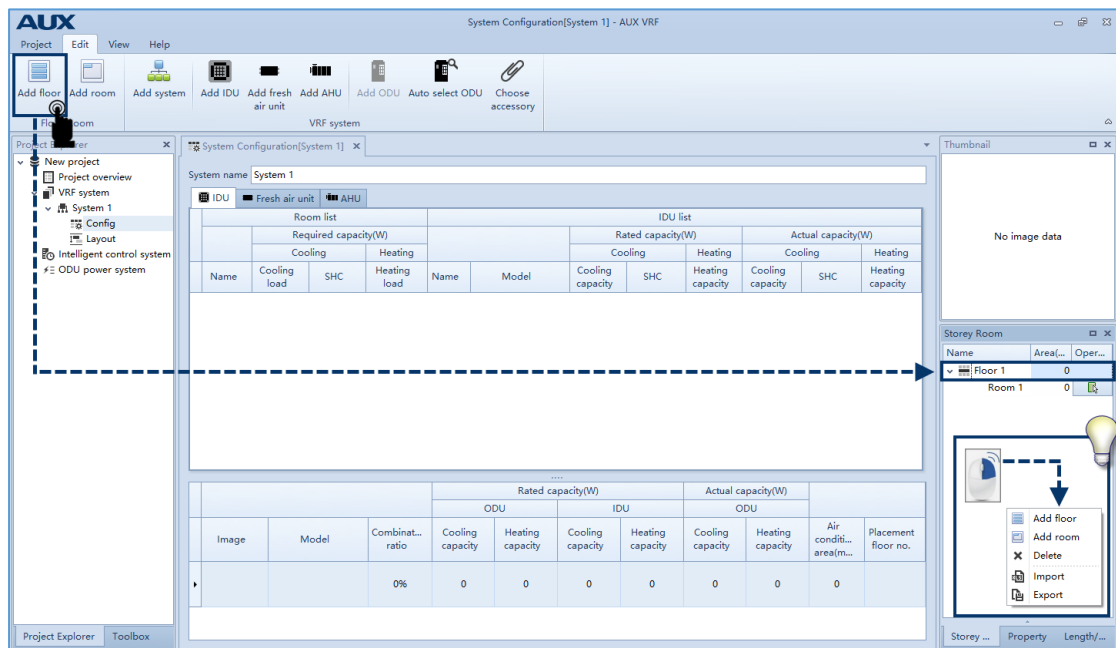


2.3.1. Add floor

Click Add Floor, it will create a new floor in the dynamic box, or right click the menu to add floor in the Floor and Room dynamic box.

★Tip:

You can input manually the area of the floor, or choose auto calculation of the room area sum of the current floor.



2.3.2. Add room

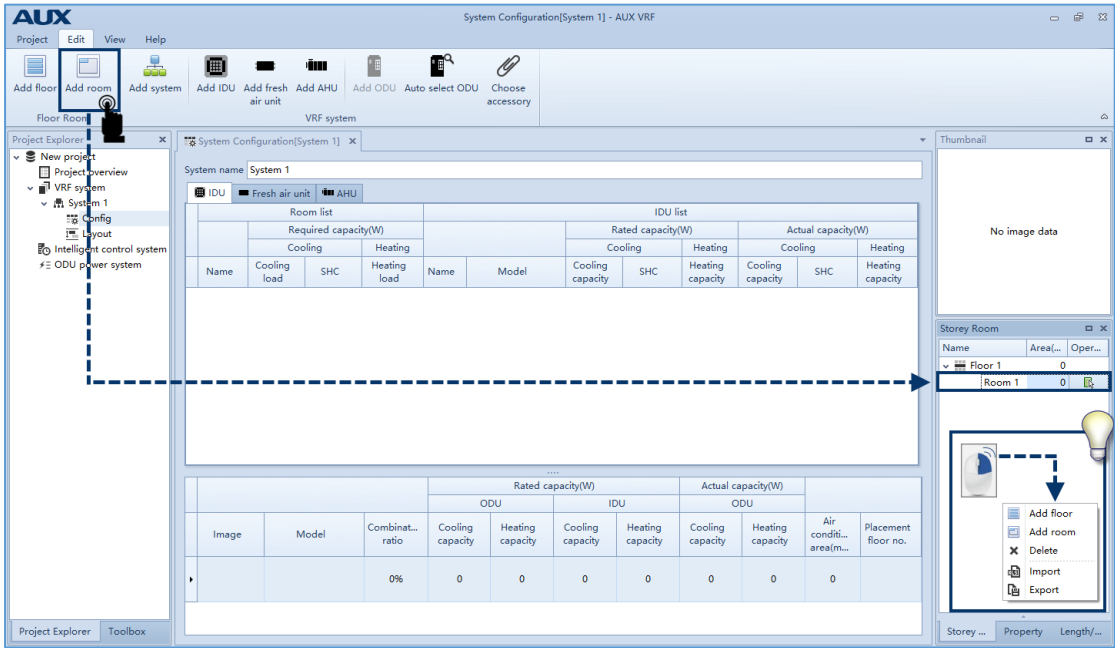
Click Add Room, it will create a room on a chosen floor, or right click the menu to add room in the Floor and Room dynamic box.

★Tip:

If you didn't create a room, it will automatically generate a room to locate the IDU after the selection.

★Tip:

If you didn't input the area of the rooms, it will not automatically generate the statistics of the air conditioners' working area in the project report.



★Tip:



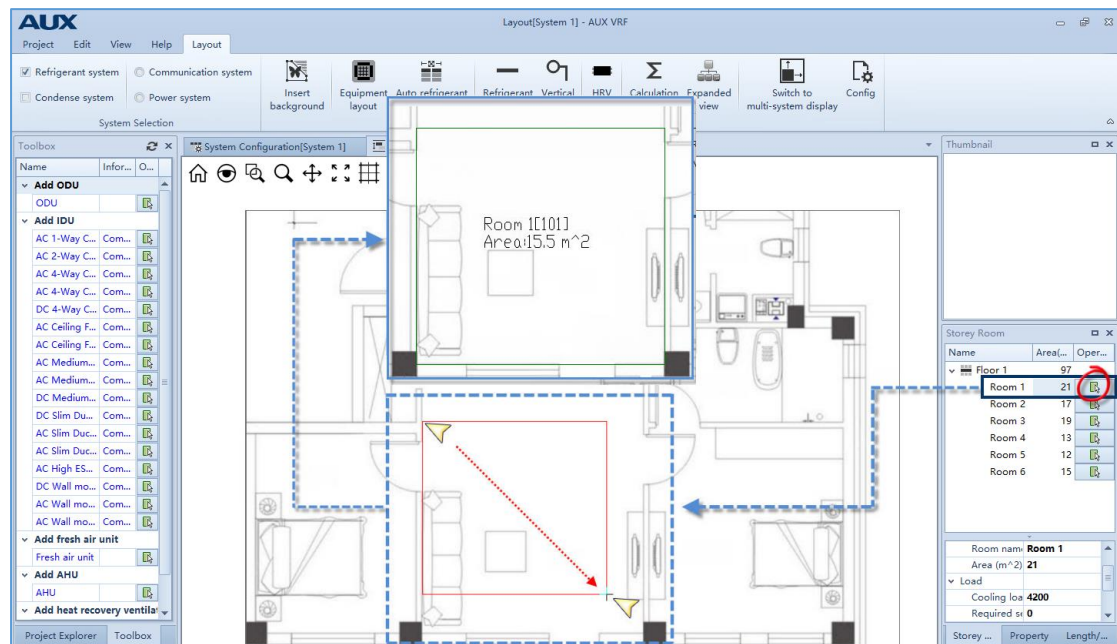
: The software supports EXCEL files of Room lists editing, input and output.

	A	B	C	D	E	F	G	H
1	Floor name	Room name	Area m ²	Cooling factor W/m ²	Heating factor W/m ²	Cooling load W	Heating load W	Required sensible cooling load W
2	Floor 1	Room 1	21	200	90	4200	1890	0
3	Floor 1	Room 2	17	200	90	3400	1530	0
4	Floor 1	Room 3	19	200	90	3800	1710	0
5	Floor 1	Room 4	13	200	90	2600	1170	0
6	Floor 1	Room 5	12	200	90	2400	1080	0
7	Floor 1	Room 6	15	200	90	3000	1350	0

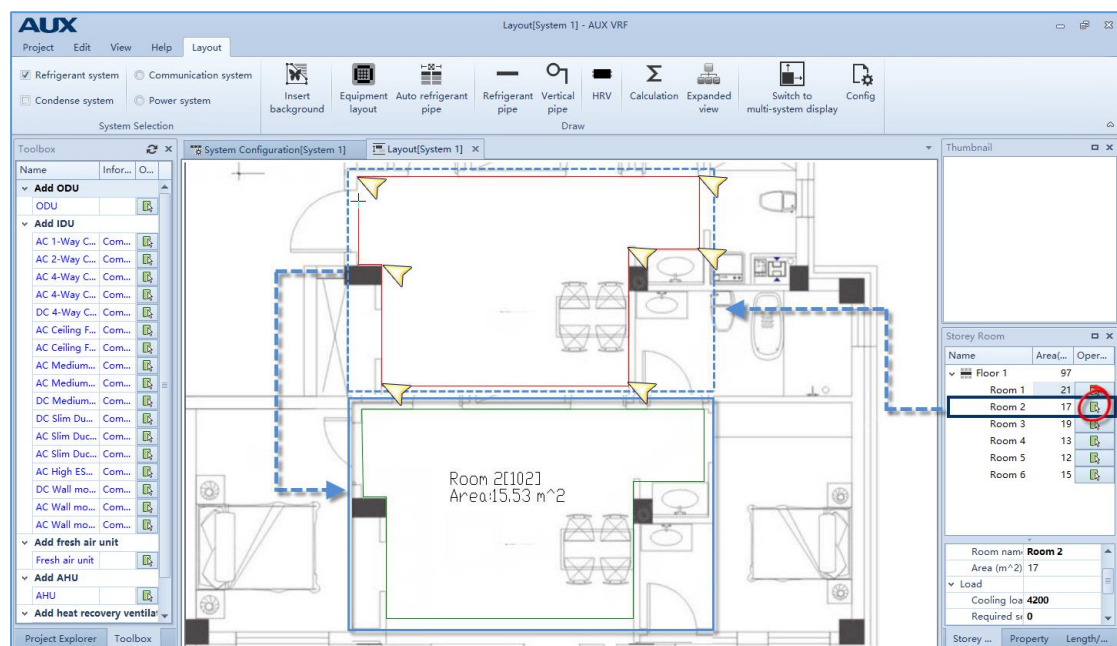
2.3.3. Measure room area

Click  **Layout** to measure the room area. Click  to measure the room area referring to the base map inserted. Base map must be inserted before the measurement. Please refer to 2.6.1.

Measure rectangle room area:

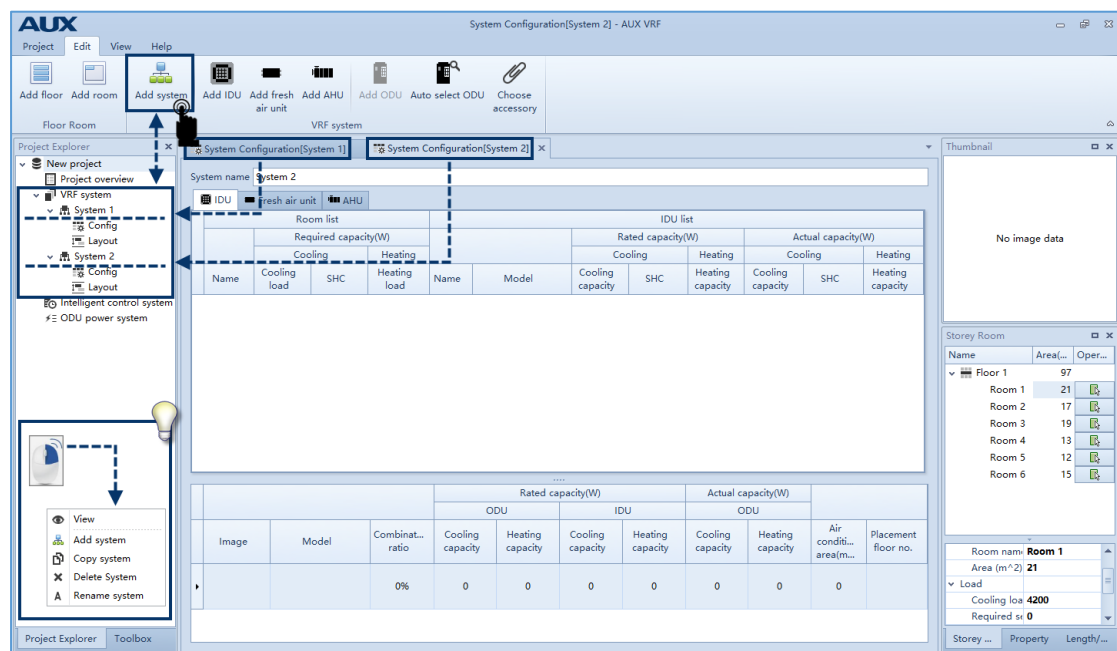


Measure polygon room area:



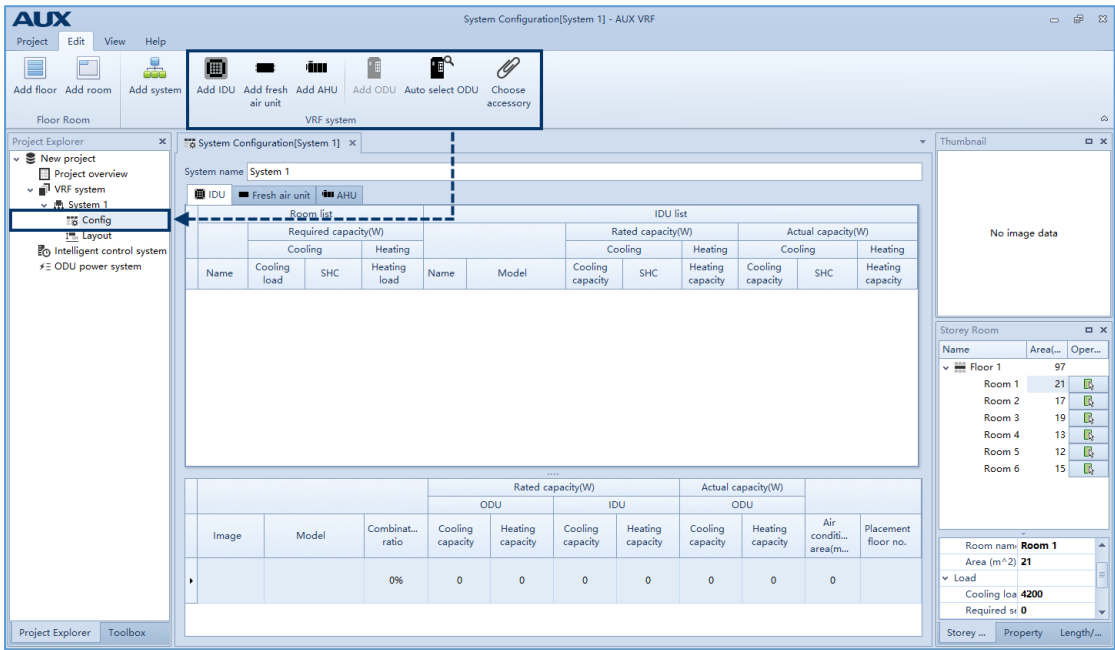
2.4. VRF system division

One project can be configured with several VRF systems. Click Add System to create a VRF system, or right click the Project explorer to add VRF system in the dynamic box.



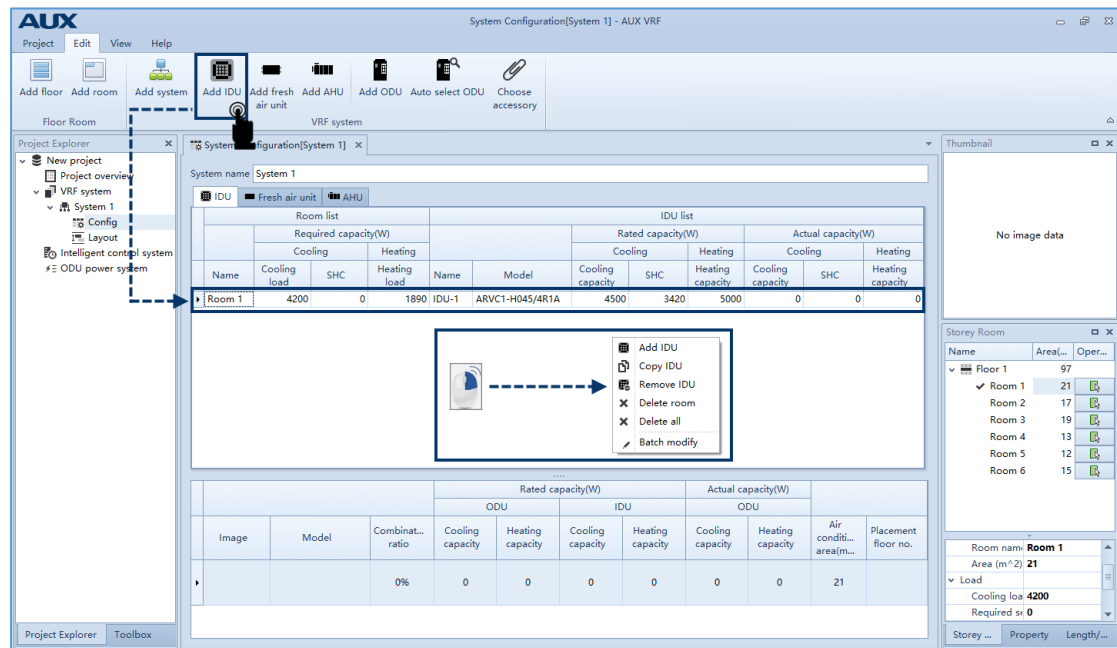
2.5. System building

Click to configure all the device selection and match.



2.5.1. IDU selection

Click Add IDU to add a new IDU in the current VRF system, or right click menu to add IDU at the working zone.



★Tip:

You can pick alternative ways of selection, either Select based on IDU or Select based on room. The first is to select according to the load capacity per IDU, the latter is to select according to the gross load capacity per room space, multi IDU can be recommended to match.

☐ Auto select by required cooling load
☐ Select IDU manually

Required cooling load(W) 4200 Corrected cooling capacity(W) 0
 Required sensible cooling load(W) 0 Corrected sensible cooling capacity(W) 0
 Required heating load(W) 1890 Corrected heating capacity(W) 0

Selected IDU

☐ Auto select by required cooling load
☐ Select IDU manually

Type AC 1-Way Cassette-50Hz

Model	Cooli... capa...	Corrected cooling capacity(W)	Heati... capa...	Corrected heating capacity(W)	Stan... static pres...		
ARVC1-H028/4R1A	2800	2702	3200	3200	0	2	+
ARVC1-H036/4R1A	3600	3475	4000	4300	0	2	+
ARVC1-H045/4R1A	4500	4342	5000	5000	0	1	+
ARVC1-H056/4R1A	5600	5404	6300	6275	0	1	+
ARVC1-H071/4R1A	7100	6863	8000	7975	0	1	+

Ok Cancel

Procedures:

1. Select ways

2. Input load capacity

3. Select IDU name

4. Select IDU type

Floor: Floor 1
 Room: Room 1
 Installation height(m): 0
 Required cooling load(W): 4200
 Required sensible cooling load(W): 0
 Required heating load(W): 1890
 Corrected cooling capacity(W): 4342
 Corrected sensible cooling capacity(W): 2740
 Corrected heating capacity(W): 5000

☒ Auto select by required cooling load
☐ Select IDU manually

Selected IDU:

Name	Model	Type	Area (m²)	Cooling factor	Heating factor	Cooling capacity	SHC (W)	Heating capacity	Rated cooling	Rated heating	Actual cooling	Actual sensible	Actual heating	Corrected cooling	Corrected sensible	Corrected heating	Static pressure	System information	Accessories	Work conditions
ARVC1-H028/AR1A	2800	2702	3200	3200	0	0	+													
ARVC1-H036/AR1A	3600	3475	4000	4300	0	0	+													
ARVC1-H045/AR1A	4500	4342	5000	5000	0	0	+													
ARVC1-H056/AR1A	5600	5404	6300	6275	0	0	+													
ARVC1-H071/AR1A	7100	6863	8000	7975	0	0	+													

Type: AC 1-Way Cassette-50Hz
 Name: IDU-1
 Model: ARVC1-H045/AR1A
 Series: Common
 Type: AC 1-Way Casset...
 Area (m²): 21
 Cooling factor: 200
 Heating factor: 90
 Cooling capacity: 4300
 SHC (W): 3420
 Heating capacity: 5000
 Rated cooling: 214
 Rated heating: 238
 Installation height: 0
 Actual cooling: 4342
 Actual sensible: 2740
 Actual heating: 5000
 Corrected cooling: 4342
 Corrected sensible: 2740
 Corrected heating: 5000
 System information: ODU

Ok Cancel

Floor: Floor 1
 Room: Room 1
 Installation height(m): 0
 Required cooling load(W): 4200
 Required sensible cooling load(W): 0
 Required heating load(W): 1890
 Corrected cooling capacity(W): 4342
 Corrected sensible cooling capacity(W): 2740
 Corrected heating capacity(W): 5000

☐ Auto select by required cooling load
☒ Select IDU manually

Selected IDU:

Name	Model	Type	Area (m²)	Cooling factor	Heating factor	Cooling capacity	SHC (W)	Heating capacity	Rated cooling	Rated heating	Actual cooling	Actual sensible	Actual heating	Corrected cooling	Corrected sensible	Corrected heating	Static pressure	System information	Accessories	Work conditions
ARVC1-H028/AR1A	2800	2702	3200	3200	0	0	+													
ARVC1-H036/AR1A	3600	3475	4000	4300	0	0	+													
ARVC1-H045/AR1A	4500	4342	5000	5000	0	0	+													
ARVC1-H056/AR1A	5600	5404	6300	6275	0	0	+													
ARVC1-H071/AR1A	7100	6863	8000	7975	0	0	+													

Type: AC 1-Way Cassette-50Hz
 Name: IDU-1
 Model: ARVC1-H045/AR1A
 Series: Common
 Type: AC 1-Way Casset...
 Area (m²): 21
 Cooling factor: 200
 Heating factor: 90
 Cooling capacity: 4300
 SHC (W): 3420
 Heating capacity: 5000
 Rated cooling: 214
 Rated heating: 238
 Installation height: 0
 Actual cooling: 4342
 Actual sensible: 2740
 Actual heating: 5000
 Corrected cooling: 4342
 Corrected sensible: 2740
 Corrected heating: 5000
 System information: ODU

Ok Cancel

Floor: Floor 1
 Room: Room 1
 Installation height(m): 0
 Required cooling load(W): 4200
 Required sensible cooling load(W): 0
 Required heating load(W): 1890
 Corrected cooling capacity(W): 4342
 Corrected sensible cooling capacity(W): 2740
 Corrected heating capacity(W): 5000

☐ Auto select by required cooling load
☒ Select IDU manually

Selected IDU:

Name	Model	Type	Area (m²)	Cooling factor	Heating factor	Cooling capacity	SHC (W)	Heating capacity	Rated cooling	Rated heating	Actual cooling	Actual sensible	Actual heating	Corrected cooling	Corrected sensible	Corrected heating	Static pressure	System information	Accessories	Work conditions
ARVC1-H028/AR1A	2800	2702	3200	3200	0	0	+													
ARVC1-H036/AR1A	3600	3475	4000	4300	0	0	+													
ARVC1-H045/AR1A	4500	4342	5000	5000	0	0	+													
ARVC1-H056/AR1A	5600	5404	6300	6275	0	0	+													
ARVC1-H071/AR1A	7100	6863	8000	7975	0	0	+													

Type: AC 1-Way Cassette-50Hz
 Name: IDU-1
 Model: ARVC1-H045/AR1A
 Series: Common
 Type: AC 1-Way Casset...
 Area (m²): 21
 Cooling factor: 200
 Heating factor: 90
 Cooling capacity: 4300
 SHC (W): 3420
 Heating capacity: 5000
 Rated cooling: 214
 Rated heating: 238
 Installation height: 0
 Actual cooling: 0
 Actual sensible: 0
 Actual heating: 0
 Corrected cooling: 4342
 Corrected sensible: 2740
 Corrected heating: 5000
 System information: System 10

Ok Cancel

Floor: Floor 1
 Room: Room 1
 Installation height(m): 0
 Required cooling load(W): 4200
 Required sensible cooling load(W): 0
 Required heating load(W): 1890
 Corrected cooling capacity(W): 4342
 Corrected sensible cooling capacity(W): 2740
 Corrected heating capacity(W): 5000

☐ Auto select by required cooling load
☒ Select IDU manually

Selected IDU:

Name	Model	Type	Area (m²)	Cooling factor	Heating factor	Cooling capacity	SHC (W)	Heating capacity	Rated cooling	Rated heating	Actual cooling	Actual sensible	Actual heating	Corrected cooling	Corrected sensible	Corrected heating	Static pressure	System information	Accessories	Work conditions
ARVC1-H028/AR1A	2800	2702	3200	3200	0	0	+													
ARVC1-H036/AR1A	3600	3475	4000	4300	0	0	+													
ARVC1-H045/AR1A	4500	4342	5000	5000	0	0	+													
ARVC1-H056/AR1A	5600	5404	6300	6275	0	0	+													
ARVC1-H071/AR1A	7100	6863	8000	7975	0	0	+													

Type: AC 1-Way Cassette-50Hz
 Name: IDU-1
 Model: ARVC1-H045/AR1A
 Series: Common
 Type: AC 1-Way Casset...
 Area (m²): 21
 Cooling factor: 200
 Heating factor: 90
 Cooling capacity: 4300
 SHC (W): 3420
 Heating capacity: 5000
 Rated cooling: 214
 Rated heating: 238
 Installation height: 0
 Actual cooling: 0
 Actual sensible: 0
 Actual heating: 0
 Corrected cooling: 4342
 Corrected sensible: 2740
 Corrected heating: 5000
 System information: System 10

Ok Cancel

★Tip:

Pick Select based on IDU, it will recommend IDU type after auto configuring to meet the load capacity at the background.

1 Auto select by required cooling load

2 Required cooling load(W) 4200, Required sensible cooling load(W) 0, Required heating load(W) 1890

3 Selected IDU

Name	Model	System information	Actual	Work... condi...
IDU-1	ARVC1-H045/4R1A		Edit	Edit

Model	Cooli... capa...	Corrected cooling capacity(W)	Heati... capa...	Corrected heating capacity(W)	Stan... static pres...		
ARVC1-H028/4R1A	2800	2702	3200	3200	0	0	+
ARVC1-H036/4R1A	3600	3475	4000	4300	0	0	+
ARVC1-H045/4R1A	4500	4342	5000	5000	0	0	+
ARVC1-H056/4R1A	5600	5404	6300	6275	0	0	+
ARVC1-H071/4R1A	7100	6863	8000	7975	0	0	+

Type: AC 1-Way Cassette-50Hz

Normal	
Name	IDU-1
Model	ARVC1-H045/4R1A
Series	Common
Type	AC 1-Way Casset...
Area (m^2)	21
Cooling factor	200
Heating factor	90
Cooling capac...	4500
SHC (W)	3420
Heating capac...	5000
Rated cooling	214
Rated heating	238
Installation hei	0
Actual cooling	4342
Actual sensible	2740
Actual heating	5000
Corrected coo	4342
Corrected sen	2740
Corrected hea	5000
System informati	
ODU	

Ok Cancel

★Tip:

Pick Select based on room, it will recommend multi IDU needed after auto configuring to meet the load capacity at the background.

The screenshot shows the 'IDU' configuration window. It includes input fields for 'Floor' (Floor 1), 'Room' (Room 1), and 'Installation height(m)' (0). There are two radio buttons: 'Auto select by required cooling load' (selected) and 'Select IDU manually'. Below these are load and capacity fields: Required cooling load (4200), Required sensible cooling load (0), Required heating load (1890), Corrected cooling capacity (4342), Corrected sensible cooling capacity (2740), and Corrected heating capacity (5000). A 'Selected IDU' table lists 'IDU-1' with model 'ARVC1-H045/4R1A'. A 'Type' dropdown is set to 'AC 1-Way Cassette-50Hz'. A table at the bottom lists various models with their capacities. A right-hand panel shows detailed specifications for 'IDU-1'. Numbered callouts: 1 points to the radio buttons; 2 points to the 'Installation height(m)' field; 3 points to the bottom table; 4 points to the 'Selected IDU' table.

Selected IDU

Name	Model	System information	Acce...	Work... condi...
✓ IDU-1	ARVC1-H045/4R1A		Edit	Edit

Type: AC 1-Way Cassette-50Hz

Model	Cooli... capa...	Corrected cooling capacity(W)	Heati... capa...	Corrected heating capacity(W)	Stan... static pres...		
ARVC1-H028/4R1A	2800	2702	3200	3200	0	2	+
ARVC1-H036/4R1A	3600	3475	4000	4300	0	2	+
▶ ARVC1-H045/4R1A	4500	4342	5000	5000	0	1	+
ARVC1-H056/4R1A	5600	5404	6300	6275	0	1	+
ARVC1-H071/4R1A	7100	6863	8000	7975	0	1	+

Normal

Name	IDU-1
Model	ARVC1-H045/4R1A
Series	Common
Type	AC 1-Way Casset...
Area (m^2)	21
Cooling factor	200
Heating factor	90
Cooling capac	4500
SHC (W)	3420
Heating capac	5000
Rated cooling	214
Rated heating	238
Installation hei	0
Actual cooling	4342
Actual sensible	2740
Actual heating	5000
Corrected coo	4342
Corrected sens	2740
Corrected hea	5000
System informati	
ODU	

Ok Cancel

★Tip:

Introduction: Add, Delete.

Add:

IDU

Floor: Floor 1
Room: Room 1
Installation height(m): 0 ?

☐ Auto select by required cooling load
☒ Select IDU manually

Required cooling load(W): 4200 Corrected cooling capacity(W): 4342
Required sensible cooling load(W): 0 Corrected sensible cooling capacity(W): 2740
Required heating load(W): 1890 Corrected heating capacity(W): 5000

Selected IDU

☒	Name	Model	System information	Acce...	Work... condi...
☒	IDU-1	ARVC1-H045/4R1A		Edit	Edit

Type: AC 1-Way Cassette-50Hz

Model	Cooli... capa...	Corrected cooling capacity(W)	Heati... capa...	Corrected heating capacity(W)	Stan... static pres...	
ARVC1-H028/4R1A	2800	2702	3200	3200	0	2 +
ARVC1-H036/4R1A	3600	3475	4000	4300	0	2 +
ARVC1-H045/4R1A	4500	4342	5000	5000	0	1 +
ARVC1-H056/4R1A	5600	5404	6300	6275	0	1 +
ARVC1-H071/4R1A	7100	6863	8000	7975	0	1 +

Add

Normal

Name	IDU-1
Model	ARVC1-H045/4R1A
Series	Common
Type	AC 1-Way Casset...
Area (m^2)	21
Cooling factor	200
Heating factor	90
Cooling capac	4500
SHC (W)	3420
Heating capac	5000
Rated cooling	214
Rated heating	238
Installation hei	0
Actual cooling	4342
Actual sensible	2740
Actual heating	5000
Corrected coo	4342
Corrected sen	2740
Corrected hea	5000
System informati	
ODU	

Ok Cancel

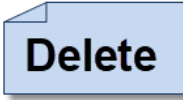
Delete:

Floor
 Room
 Installation height(m)
☐ Auto select by required cooling load
 ☐ Select IDU manually

Required cooling load(W)
 Corrected cooling capacity(W)
 Required sensible cooling load(W)
 Corrected sensible cooling capacity(W)
 Required heating load(W)
 Corrected heating capacity(W)

Selected IDU

☒	Name	Model	System information	Acce...	Work... condi...
☒	IDU-1	ARVC1-H045/4R1A		Edit	Edit



Type

Model	☐	Name	Model	System information	Acce...	Work... condi...
ARVC1-H045/4R1A	☒	IDU-1	ARVC1-H045/4R1A		Edit	Edit
ARVC1-H071/4R1A	☐		7100	6863 8000	7975 0	1



Normal

Name **IDU-1**

Model ARVC1-H045/4R1A

Series Common

Type AC 1-Way Casset...

Area (m^2) 21

Cooling factor 200

Heating factor 90

Cooling capac 4500

SHC (W) 3420

Heating capac 5000

Rated cooling 214

Rated heating 238

Installation hei 0

Corrected cooling 4342

Corrected sensible 2740

Corrected heating 5000

Corrected cooling 4342

Corrected sensible 2740

Corrected heating 5000

System information

ODU

★Tip:

After IDU selection, you can pick accessories and working conditions.

The screenshot displays the 'IDU' configuration window. At the top, there are input fields for 'Floor' (Floor 1), 'Room' (Room 1), and 'Installation height(m)' (0). Below these are radio buttons for 'Auto select by required cooling load' and 'Select IDU manually'. A table shows 'Required' and 'Corrected' values for cooling and heating loads. The 'Selected IDU' table lists 'IDU-1' with model 'ARVC1-H045/4R1A'. Two buttons, 'Accessories' and 'Working conditions', are highlighted with blue boxes. Arrows point from these buttons to two sub-windows: 'Select accessories' and 'Special working conditions'. The 'Select accessories' window shows a list of accessories with 'Remote controller' set to 'YK-K'. The 'Special working conditions' window shows 'Use designed conditions in project setting' checked, with 'Cooling' selected and values for Design temperature (26°C), Relative humidity (50%), and Wet bulb temperature (18.6°C).

Wired controller: [Dropdown]
Remote controller: YK-K
Wireless receiver: [Dropdown]
External pump: [Dropdown]
Filter: [Dropdown]
Air-flow panel: [Dropdown]

Ok Cancel

Special working conditions

☒ Use designed conditions in project setting

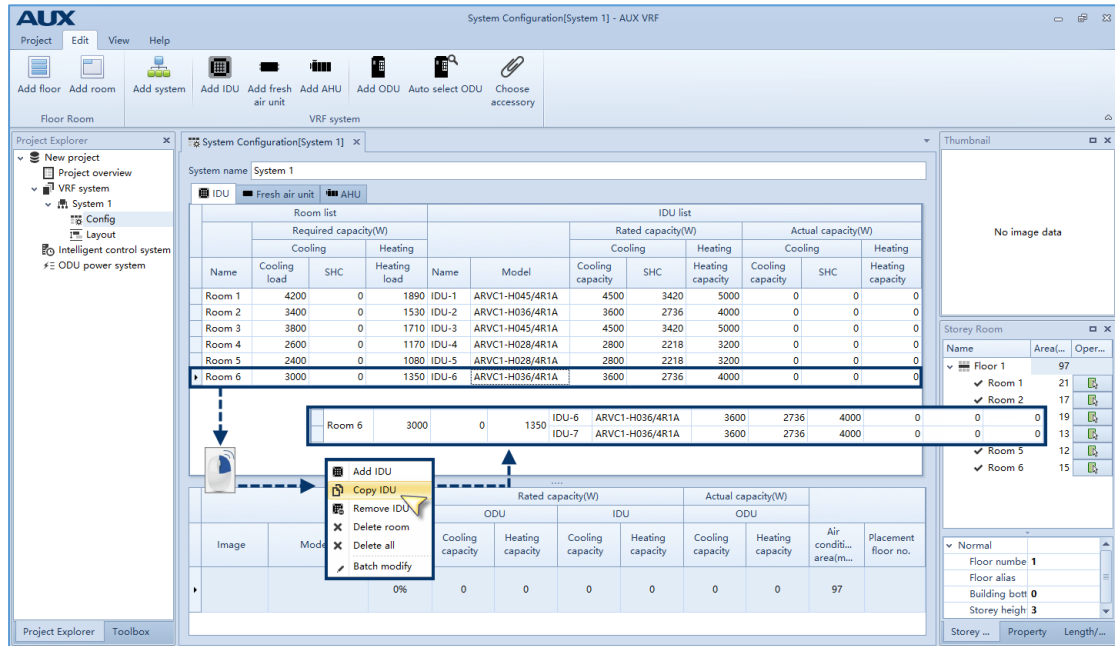
Cooling Heating

Design temperature(°C): 26
Relative humidity: 50%
Wet bulb temperature(°C): 18.6

Ok Cancel

★Tips

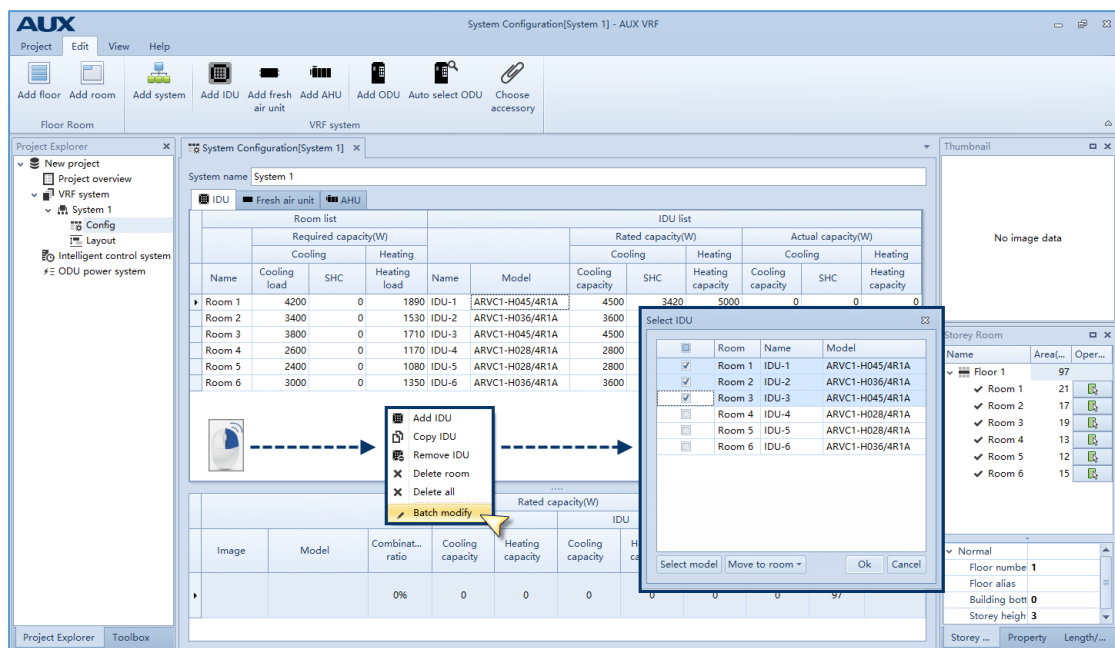
In IDU list, Copy IDU button could replicate specific room IDU data.



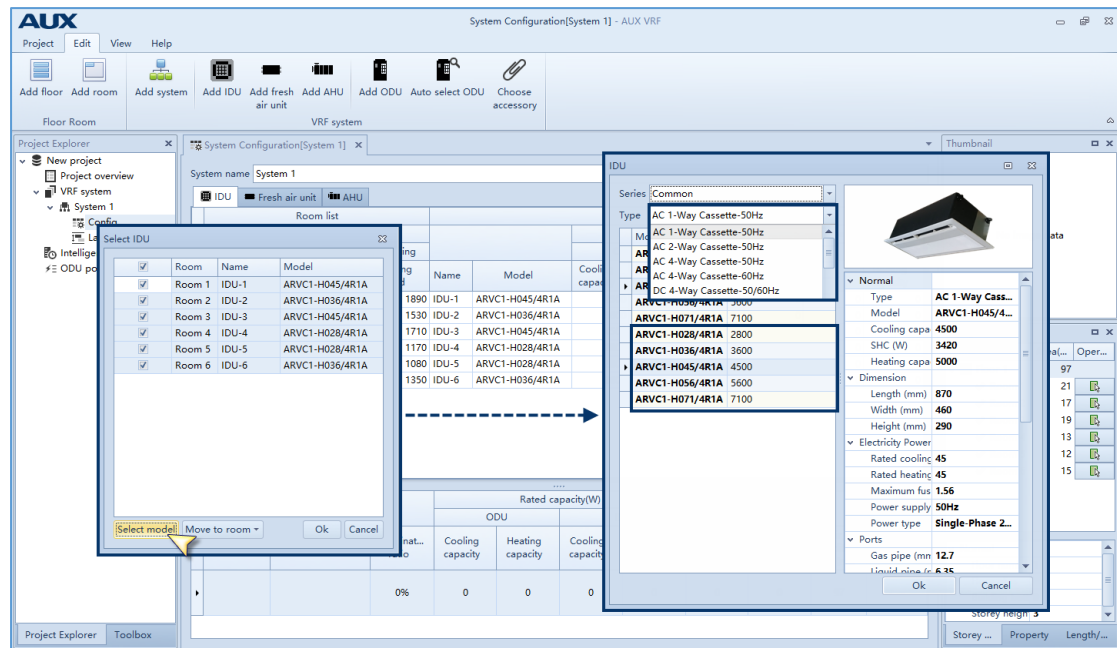
★Tips

In IDU list, Batch modify button could batch modify selected IDU system data.

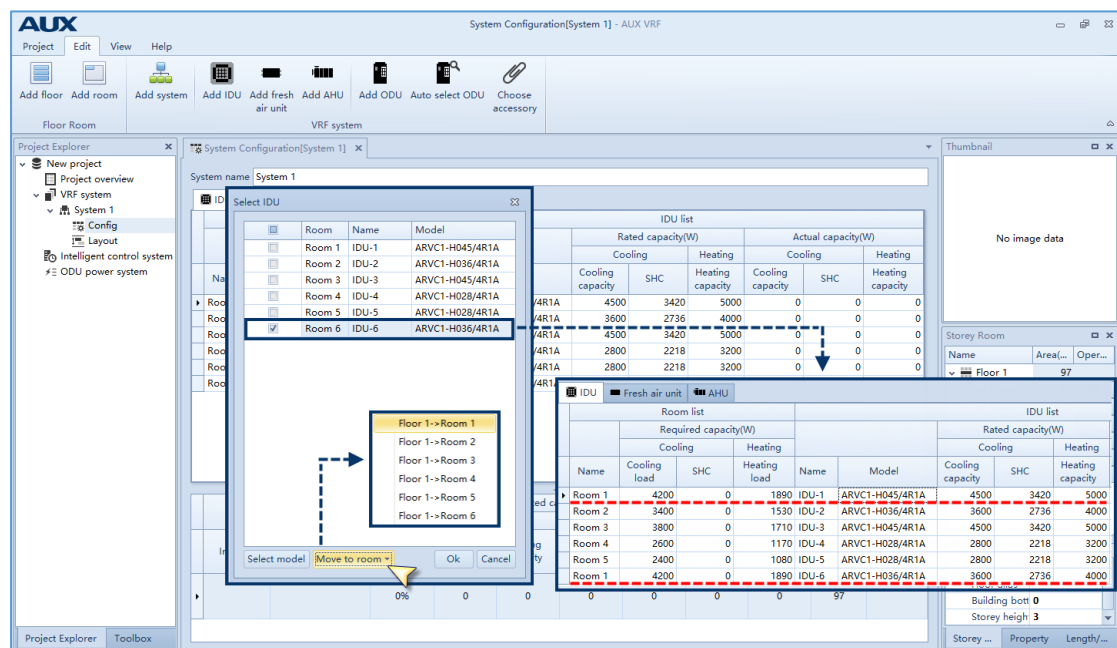
Meanwhile move selected facilities to the specific room.



Batch modify selected IDU system and model types:

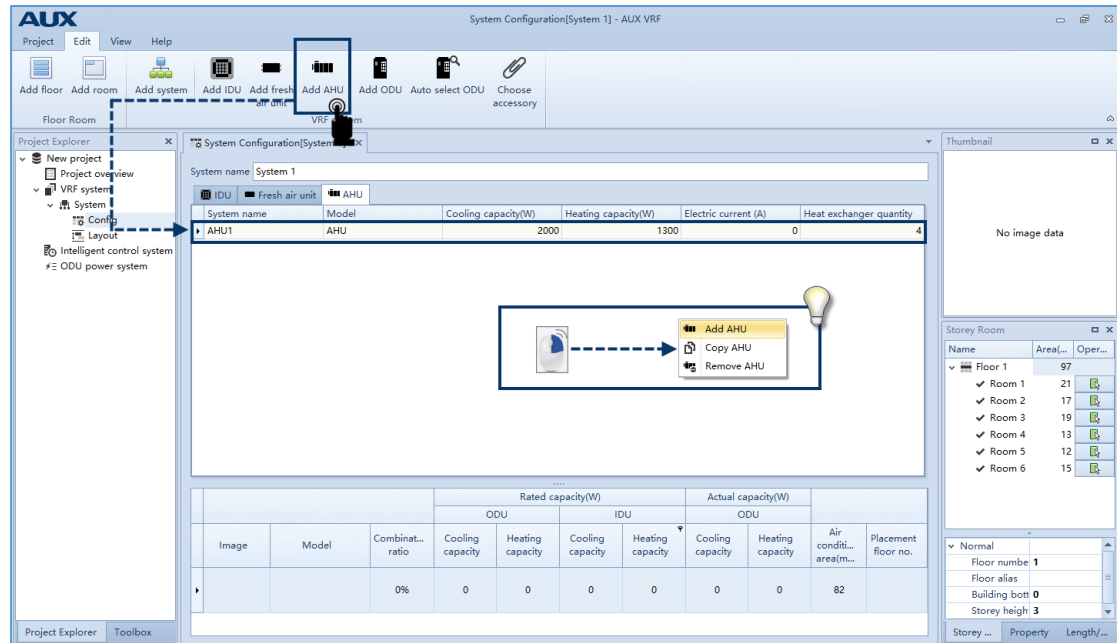


Move IDU system to a specific room:

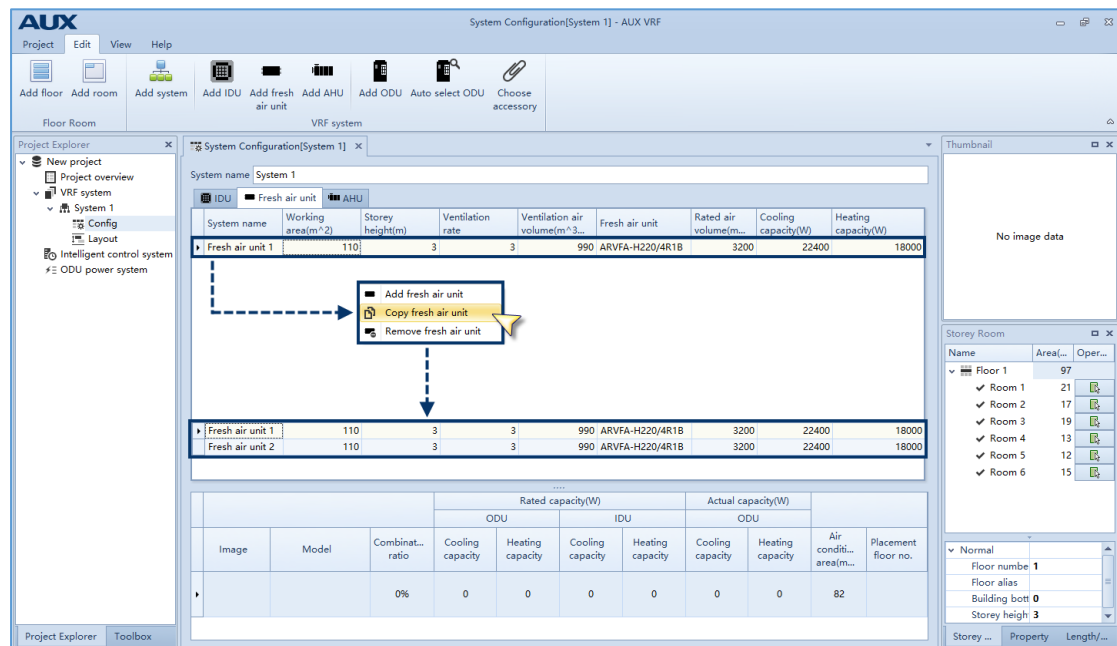


2.5.2. Fresh air unit selection

Click Add to tag a fresh air unit, or right click the menu in the work zone to add.



In Fresh air config, Copy Fresh air unit could replicate selected fresh air unit system.



Procedures:

1. Input working area

➔ 2. Input storey height

➔ 3. Input Rate of ventilation

➔ 4. Auto calculating ventilation volume

➔ 5. Select fresh air unit

Fresh air unit

Fresh air system name: Fresh air unit 1

Working area(m²): 110

Storey height(m): 3

Ventilation rate: 3

Ventilation volume(m³/h): 990

Placement floor number: Floor 1

Installation height(m): 3

Selected fresh air unit

ARVFA-H220/4R1B

Series: Fresh Air Unit

Model	High speed air volume(m ³ /h)
ARVFA-H220/...	3200
ARVFA-H280/...	3200

Product details:

- Product series: Fresh Air Unit
- Model: ARVFA-H220/4R1B
- Cooling capacity (W): 22400
- Heating capacity (W): 18000
- Dimension:
 - Length (mm): 1350
 - Width (mm): 700
 - Height (mm): 460
- Electricity Power:
 - Rated cooling power: 1000
 - Rated heating power: 1000
- Power supply frequency: 50Hz
- Power type: Single-Phase 220~2...
- Ports:
 - Gas pipe (mm): 22.2
 - Liquid pipe (mm): 12.7
 - Condensate pipe (mm): 25
 - Enlarged gas pipe: 0
 - Enlarged liquid pipe: 0

Ok Cancel

★Tip:

After Fresh air unit selection, you can pick accessory config.

The screenshot shows the 'Fresh air unit' configuration window. The 'Accessories' tab is selected, and a 'Select accessories' dialog box is open. The dialog box contains the following options:

- Wired controller: XK05
- Remote controller: [Empty]
- Wireless receiver: [Empty]
- External pump: [Empty]
- Filter: [Empty]
- Air-flow panel: [Empty]

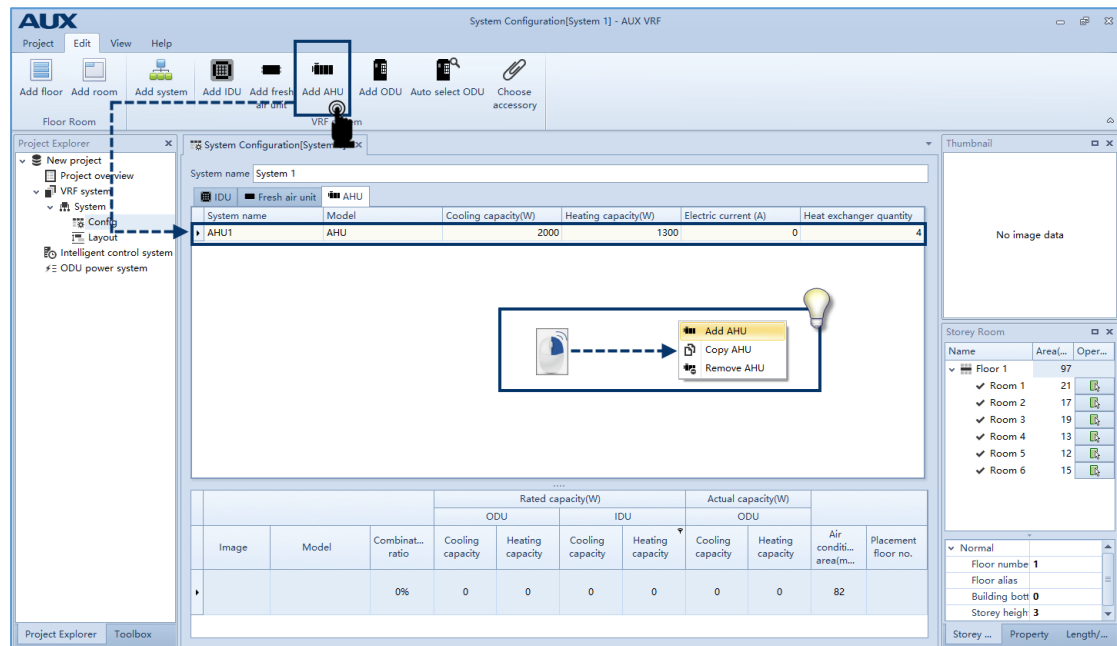
The 'Ok' and 'Cancel' buttons are at the bottom of the dialog box.

The main window displays the following configuration details:

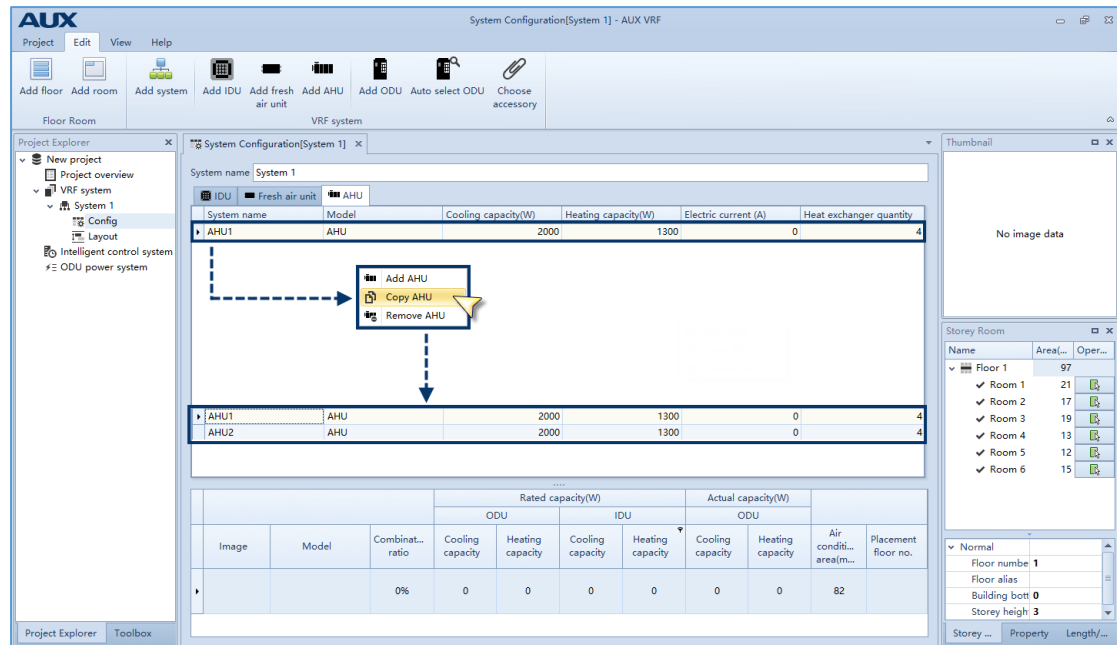
- Fresh air system name: Fresh air unit 1
- Working area(m^2): 110
- Storey height(m): 3
- Ventilation rate: 3
- Ventilation volume(m^3/h): 990
- Placement floor number: Floor 1
- Installation height(m): 3
- Selected fresh air unit: ARVFA-H220/4R1B
- Series: Fresh Air Unit
- Model: ARVFA-H220/4R1B
- High speed air volume(m^3/h): 3200
- Product series: Fresh Air Unit
- Model: ARVFA-H220/4R1B
- Cooling capacity (V): 22400
- Heating capacity (V): 18000
- Enlarged liquid pip: 0

2.5.3. AHU selection

Click Add fresh air unit to tag an AHU, or right click the menu in the work zone to add.

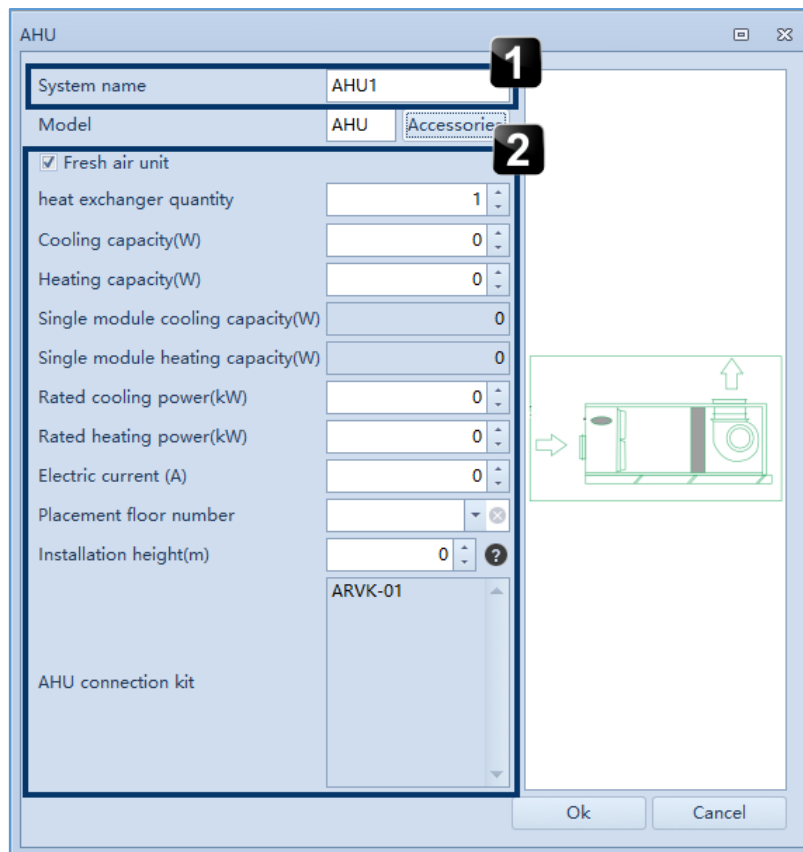


In AHU config list, Copy AHU button could replicate selected AHU facility data.



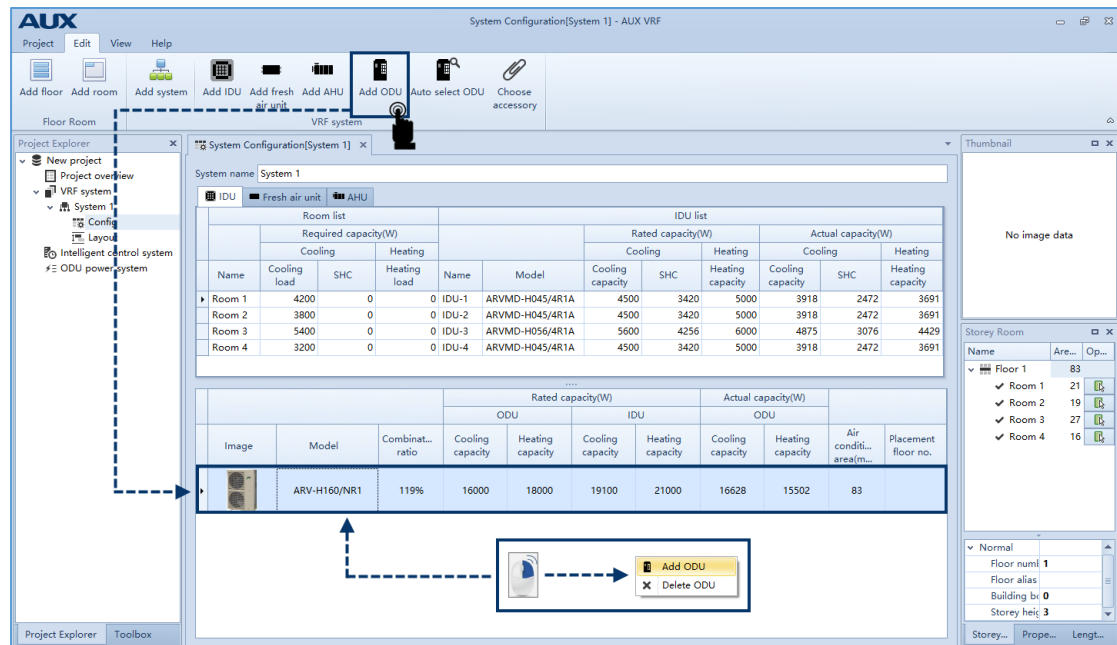
Procedures:

1. Input AHU type
2. Input AHU parameters.

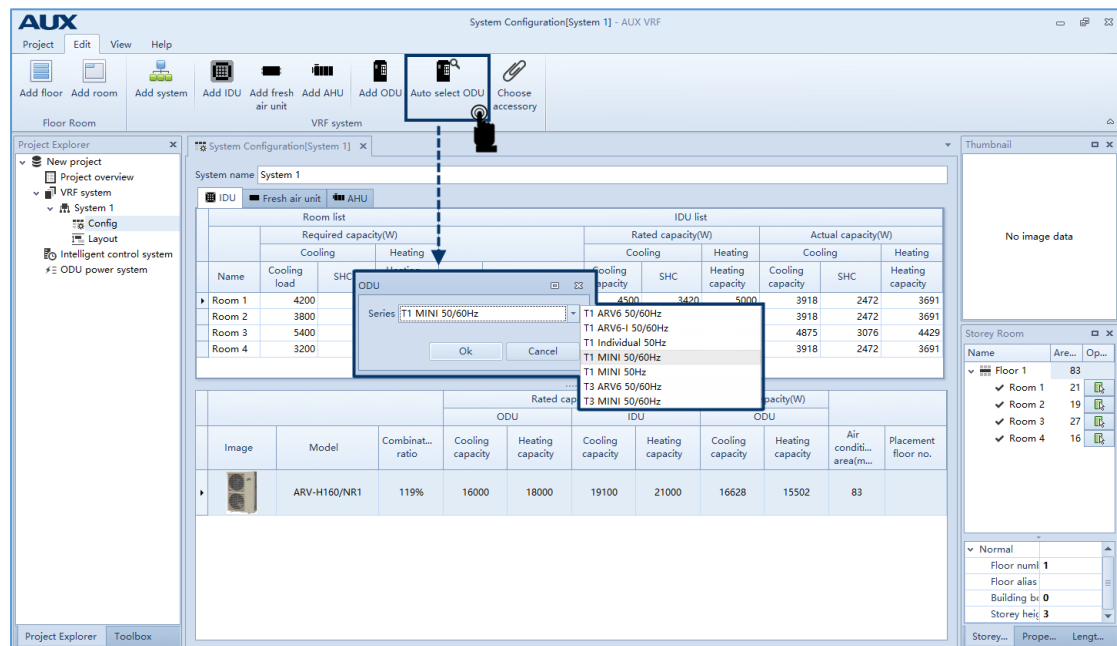


2.5.4. ODU selection

Click Add ODU to tag an ODU, or right click the menu in the work zone to add.



The software allows ODU automatic selection. Manually select series to complete.



Procedures:

1. Input Maximum Piping Length

➡ 2. Select ODU series

➡ 3. Select recommended ODU

The screenshot shows the 'ODU' selection window. It contains input fields for 'Placement floor number' (Floor 1), 'Installation height(m)' (0), 'Maximum pipe length(m)' (7.5), 'Height difference(m)' (0), and 'Same system quantities' (1). Below these are 'Selected ODU' and 'Recommended ODU' sections. The 'Selected ODU' section shows 'Series T1 MINI 50/60Hz' and a table with 'Model ARV-H160/NR1' and 'Combination ratio (%) 119%'. The 'Recommended ODU' section has a question mark icon. To the right is a detailed specification table. At the bottom are 'Ok' and 'Cancel' buttons.

Selected ODU	
Series	T1 MINI 50/60Hz
Model	ARV-H160/NR1
Combination ratio (%)	119%

Recommended ODU	
?	

Normal	
Combination ratio	119%
Model	ARV-H160/NR1
Modular combination	
Cooling capacity (W)	16000
Heating capacity (W)	18000
Installation height (m)	0
ODU actual cooling c	16628
ODU actual heating c	15502
ODU corrected coolin	16678
ODU corrected heati	15548
Minimum allowable c	50%
Maximum combinatio	130%
Placement floor no.	
System information	
Max pipe length (m)	7.5

★Tip:

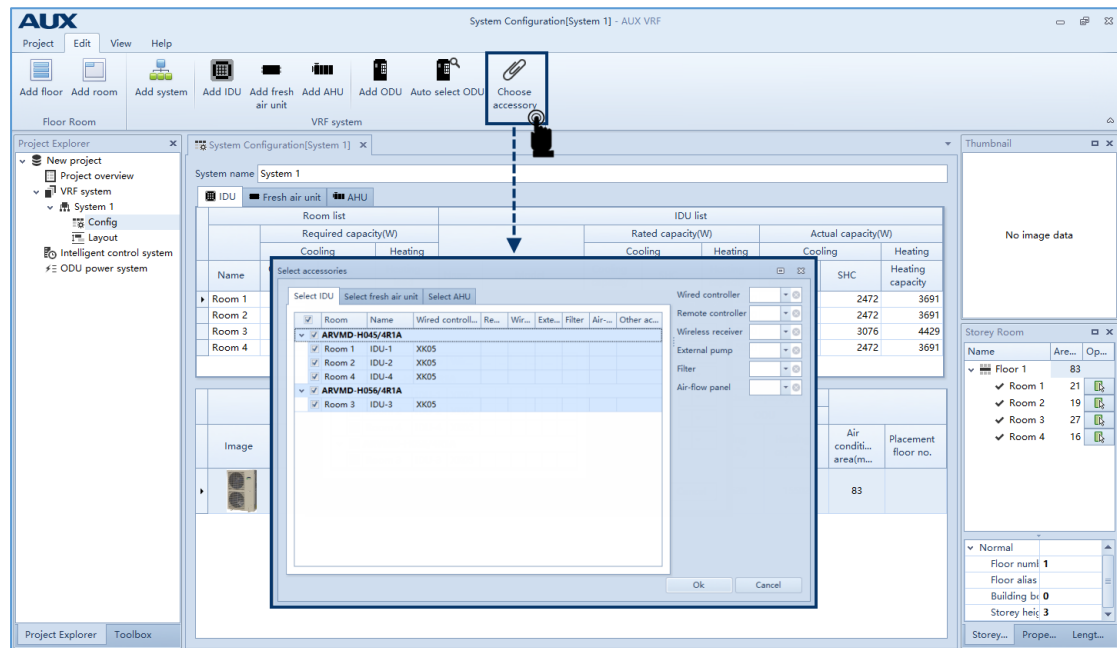
This option provides you the smallest ODU that can meet the load requirement of the system. You can adjust ODU with actual needs.

★Tip:

After ODU selection, it will probably appear a red highlight flash to hint the undermatch of a room or an IDU with the load requirement, then you need to adjust device of the system to make the correct match.

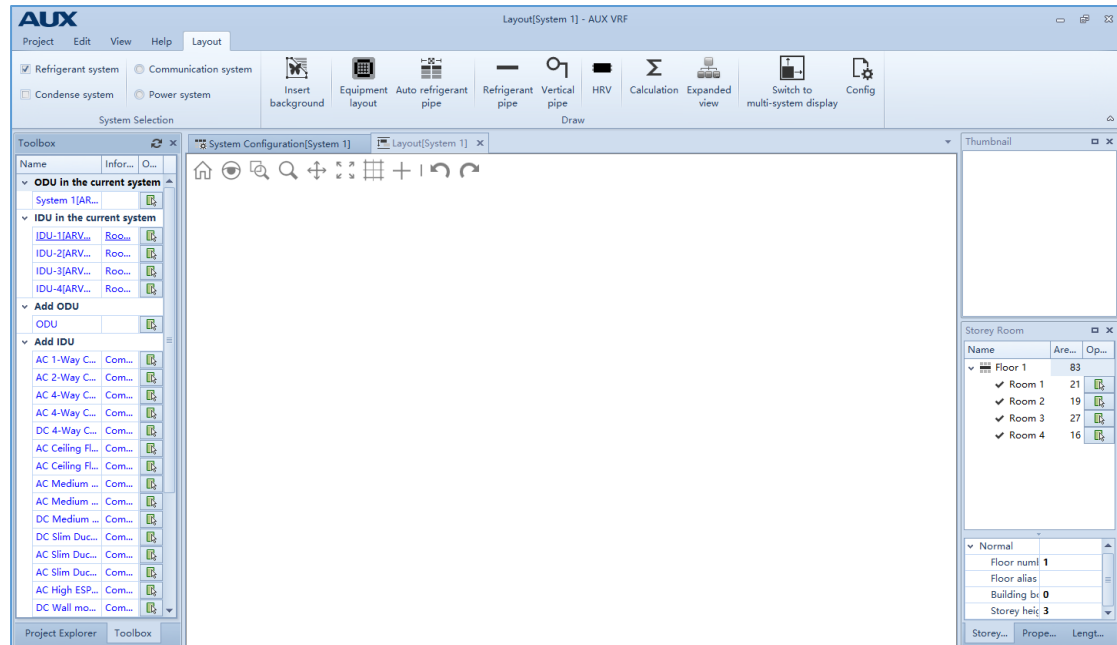
2.5.5. Choose accessory

Click Choose accessory, after system device config, it can allow the accessory selection for a corresponding system.

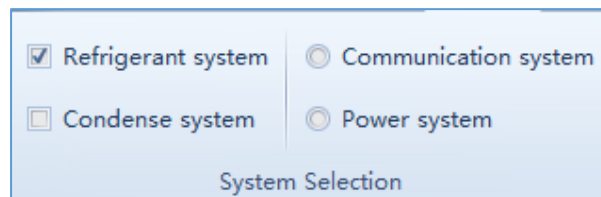
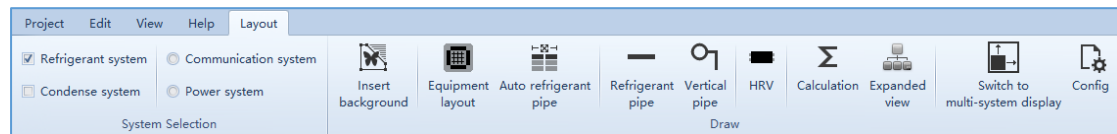


2.6. Layout plan system

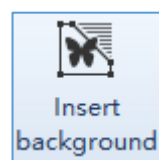
Edit plans of various systems within.



2.6.1. Function buttons introduction

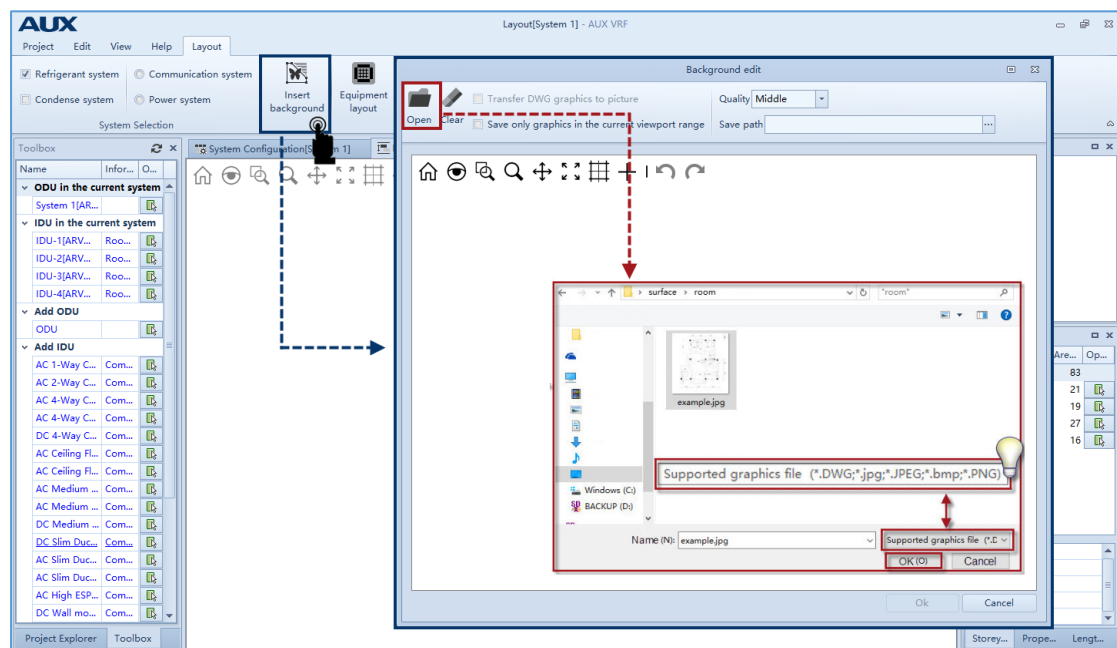


System selection: You can select and display a system plan needed.

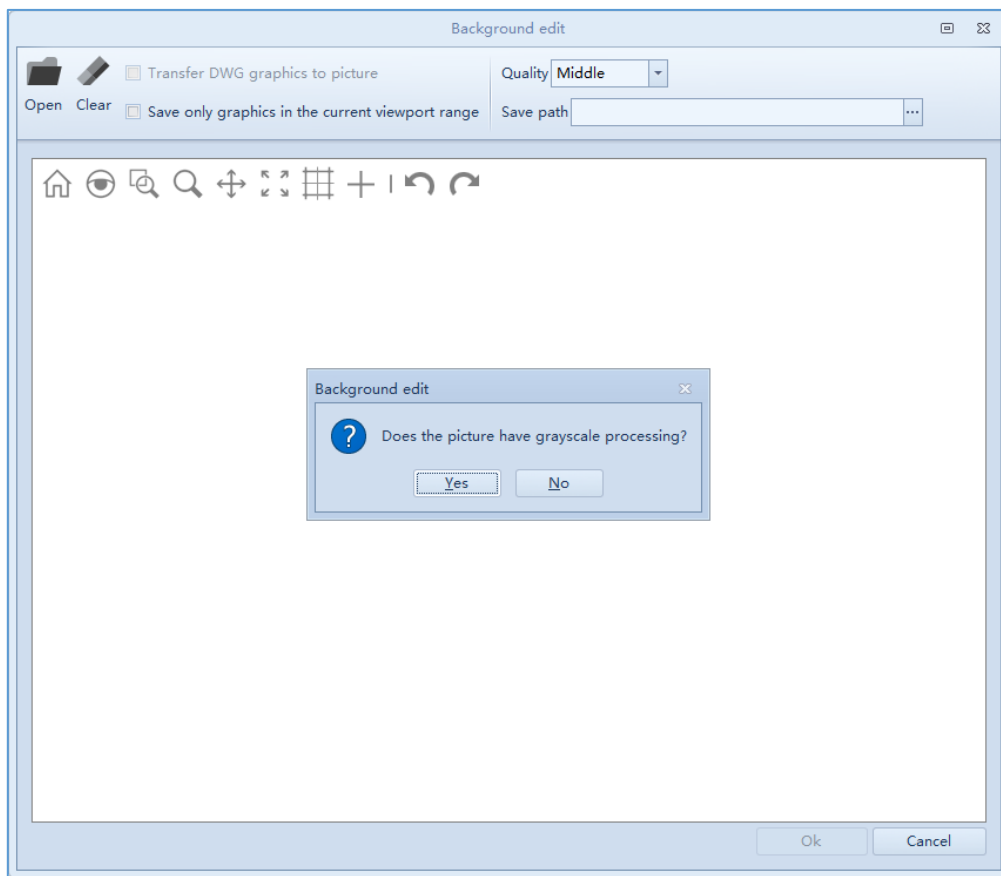


Insert base map: You can insert a base map as a reference. The format includes dwg, jpg, jpeg, bmp, PDF, png, ect.

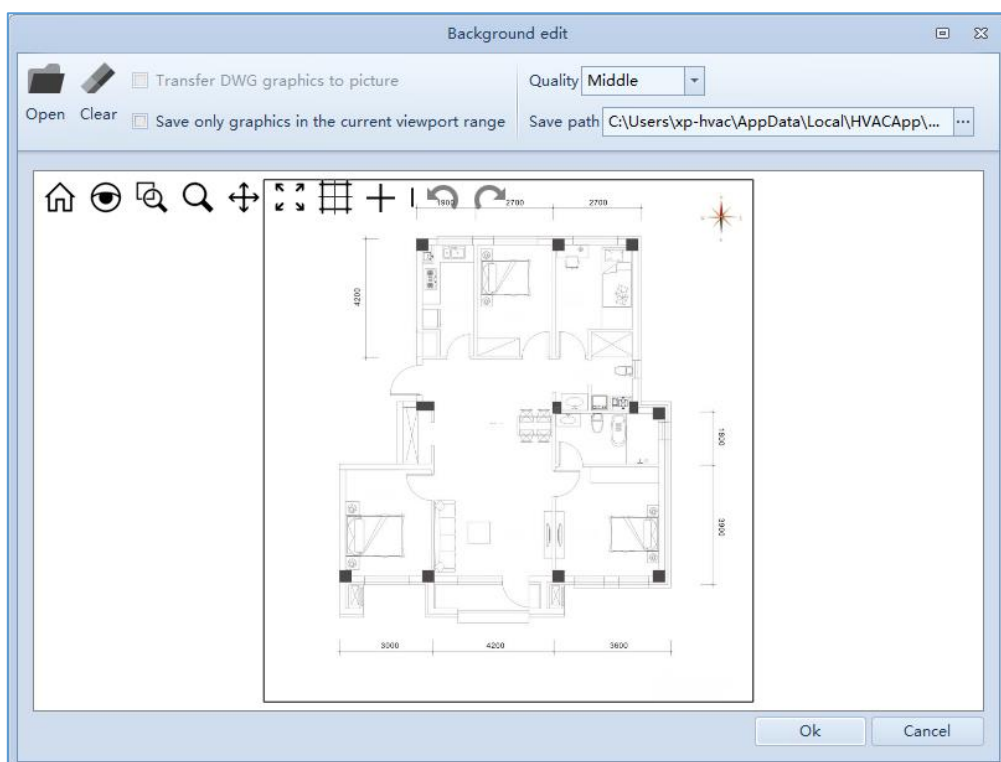
Click Insert background , select the layout map about to insert.



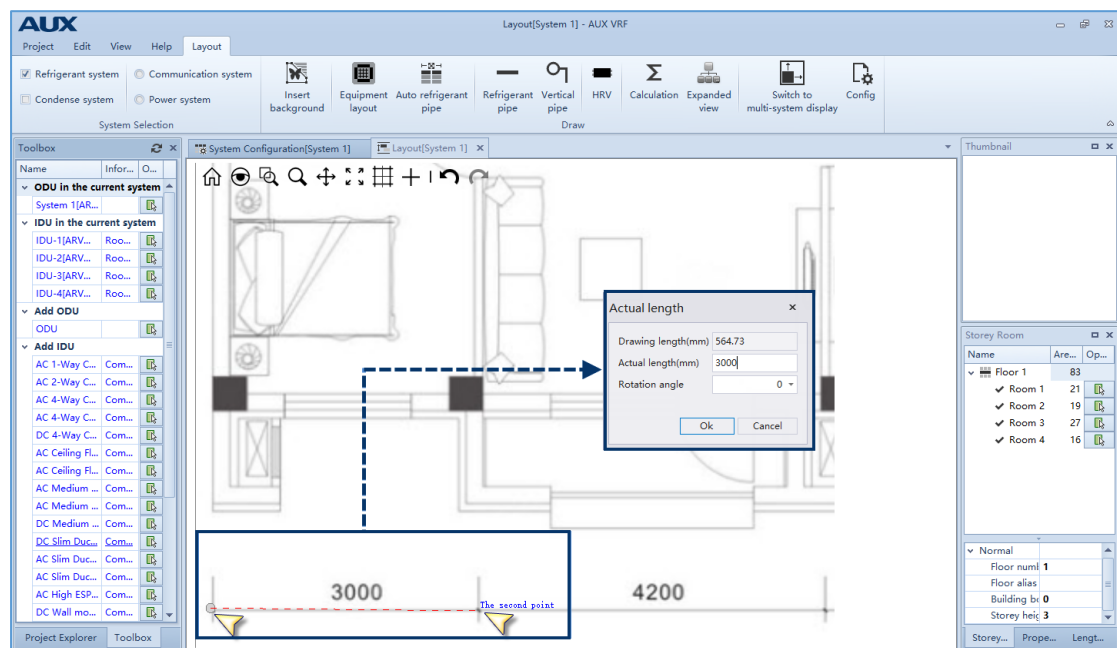
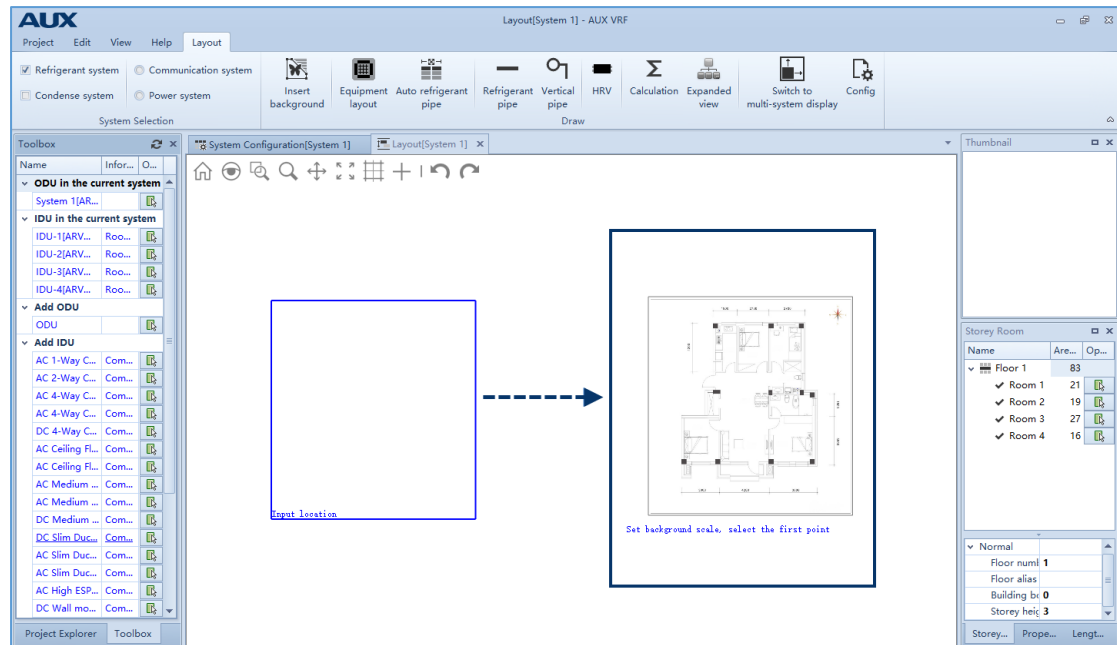
After insertion of the base map, select if running grayscale processing or not.

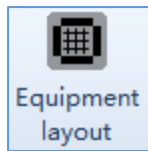


After base map insertion, lay out the base map in the configuring area.



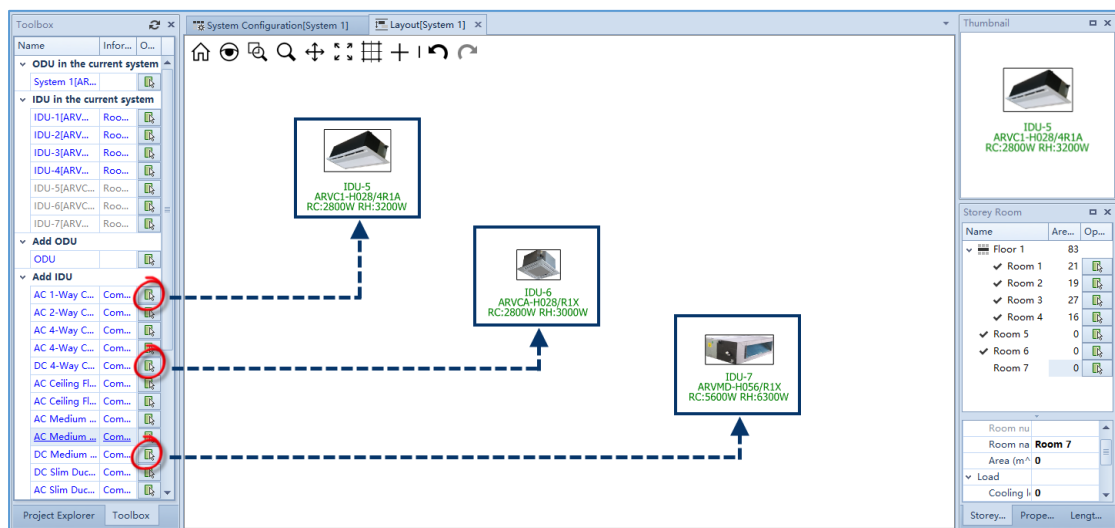
Config Layout, set up the ratio data of base map inserted.



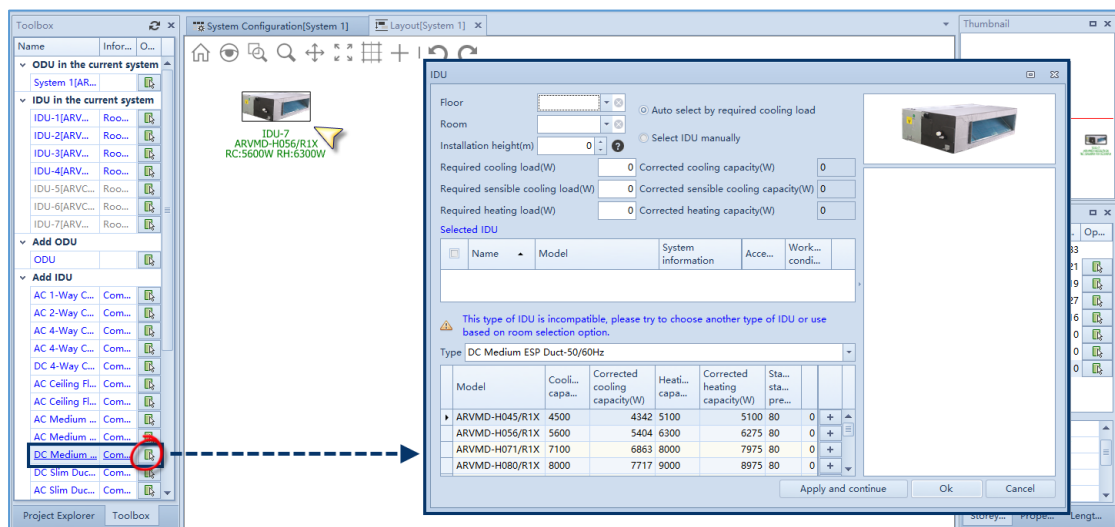


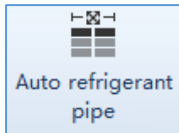
Equipment layout: You can drag the entire equipments in the system to the work interface, or put them into proper place.

★**Tips:** Double click Layout plan button to drag the facilities in the toolbox on the map. But when the facilities have already been used, the step will not be repeated, only if they are deleted from the map.

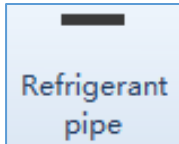


★**Tips:** Without system configuring before mapping, clients may select model types from the toolbox directly, and then pick some appropriate types from the dialog box.

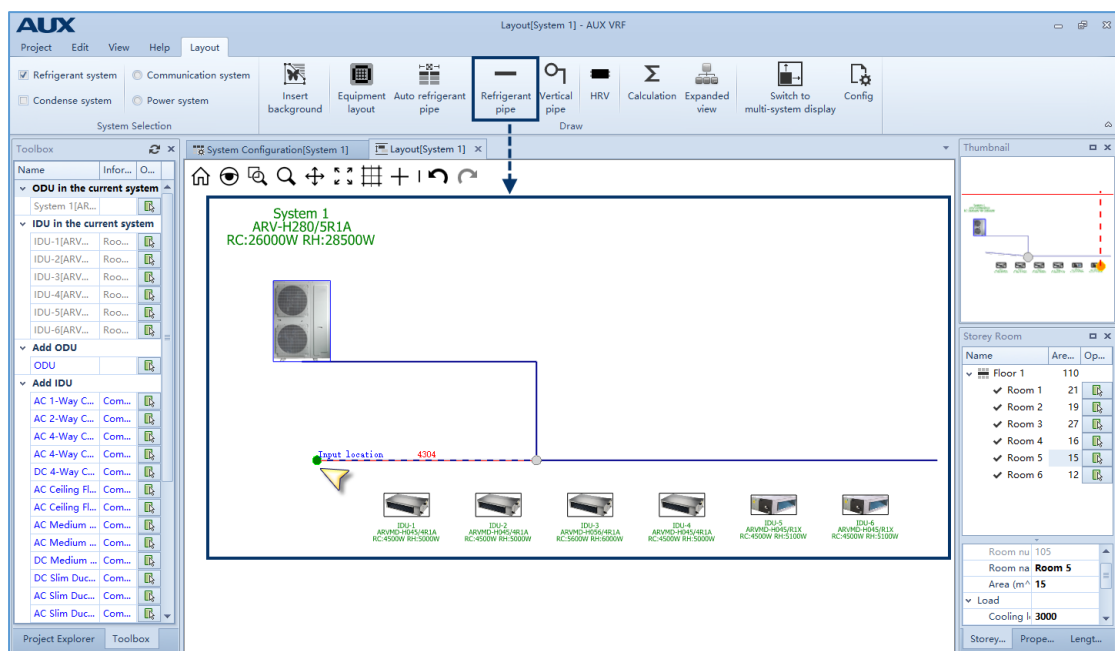
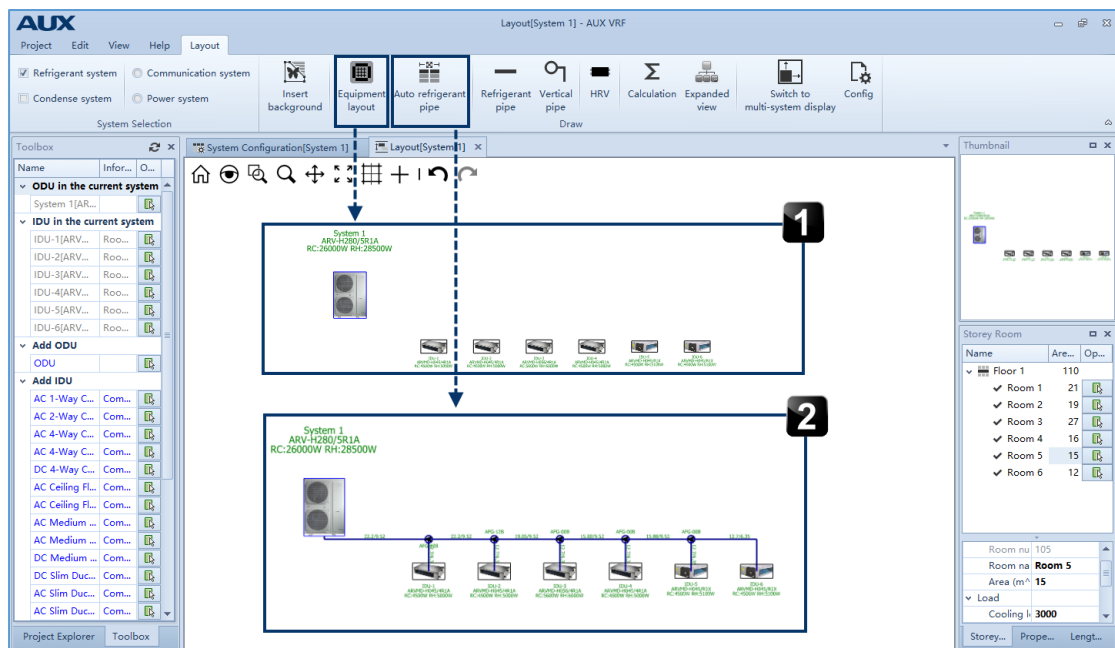




Auto piping: It will automatically connect refrigerant pipes.



Manual piping: The software supports manually drawing refrigerant pipes.

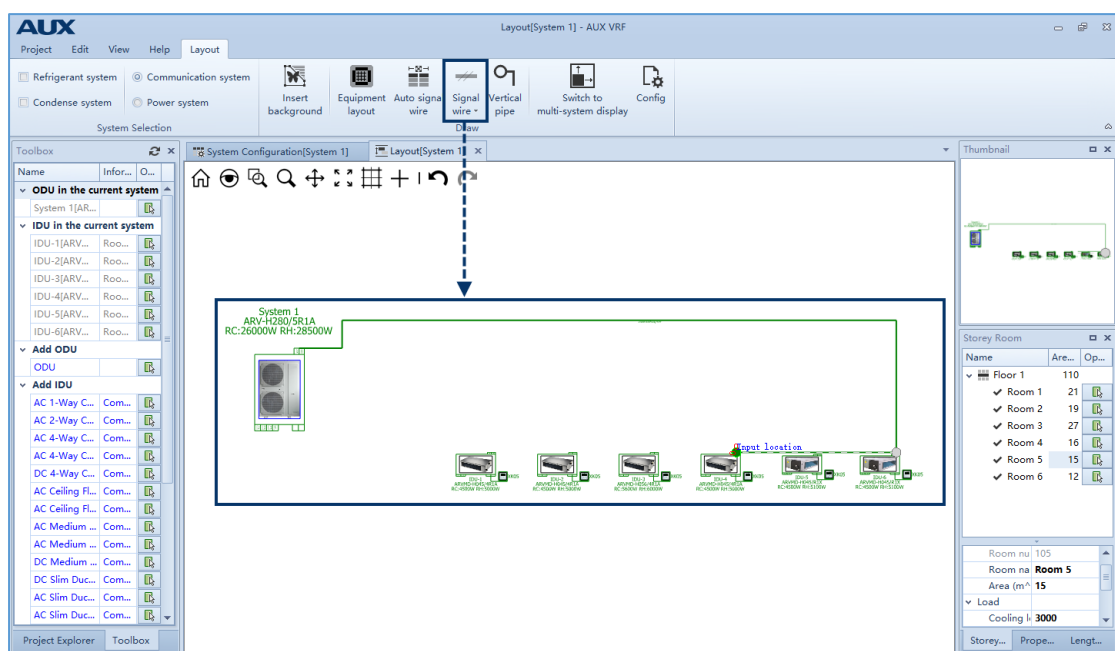
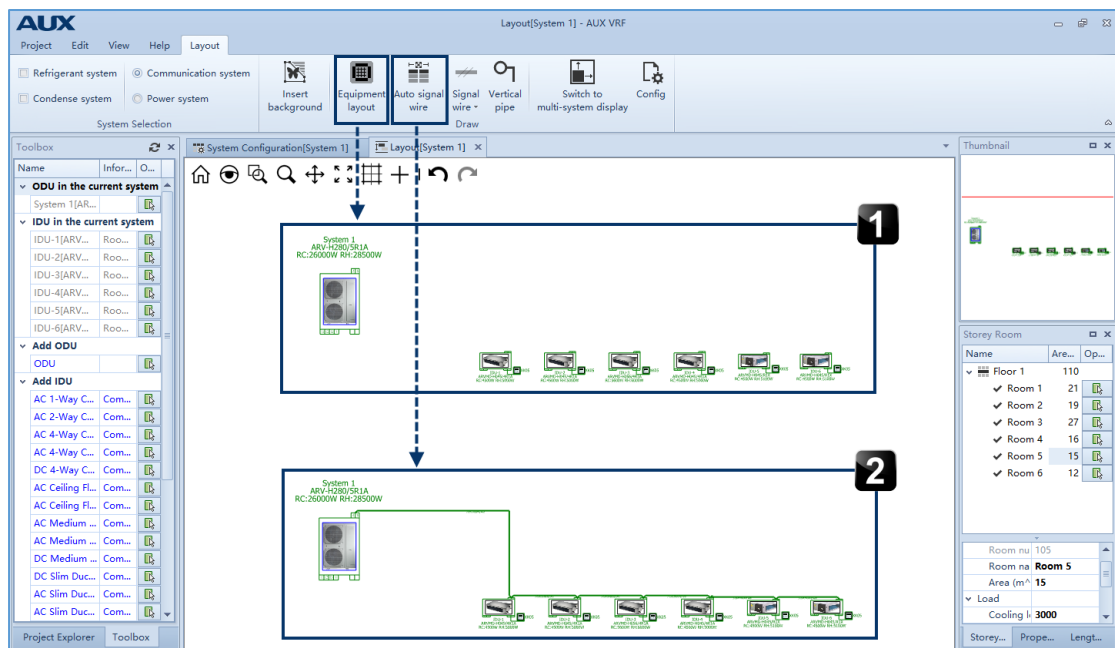


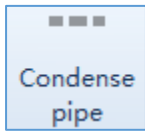


Auto piping: It will automatically connect signal line.

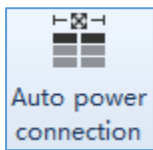
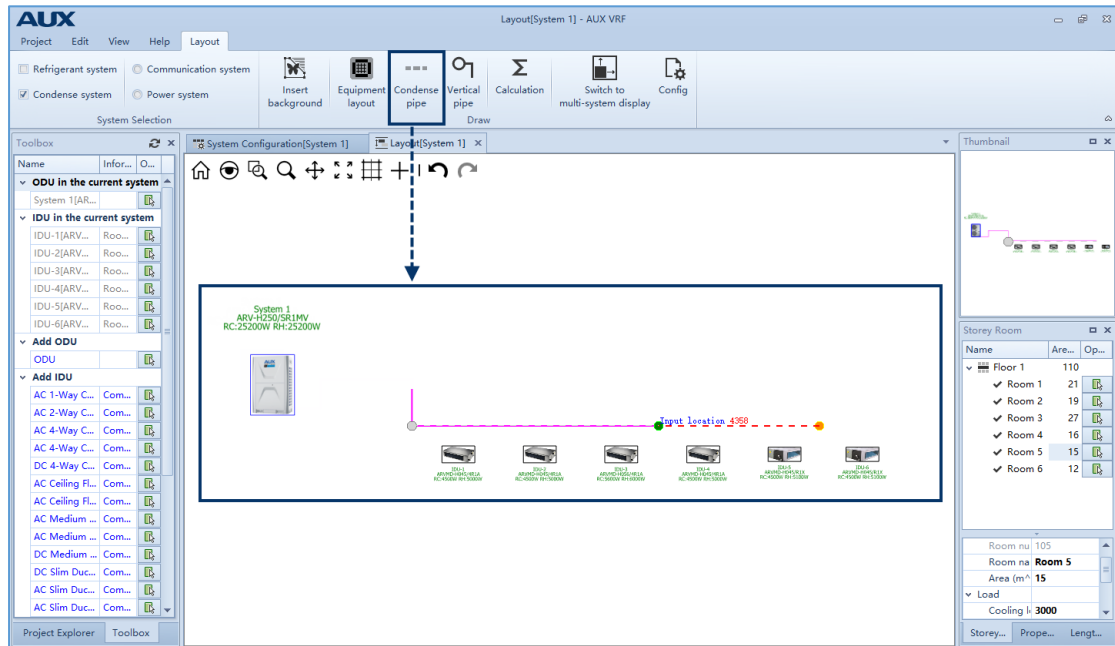


Manual wiring: The software support manually drawing signal wires.



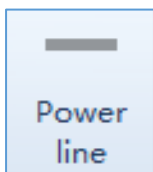


Condense pipe: You can manually draw refrigerant pipe.

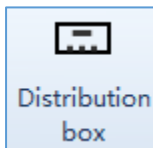


Auto power connection: The software can auto connect power lines.

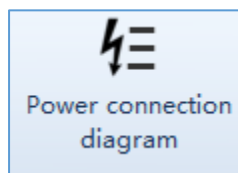
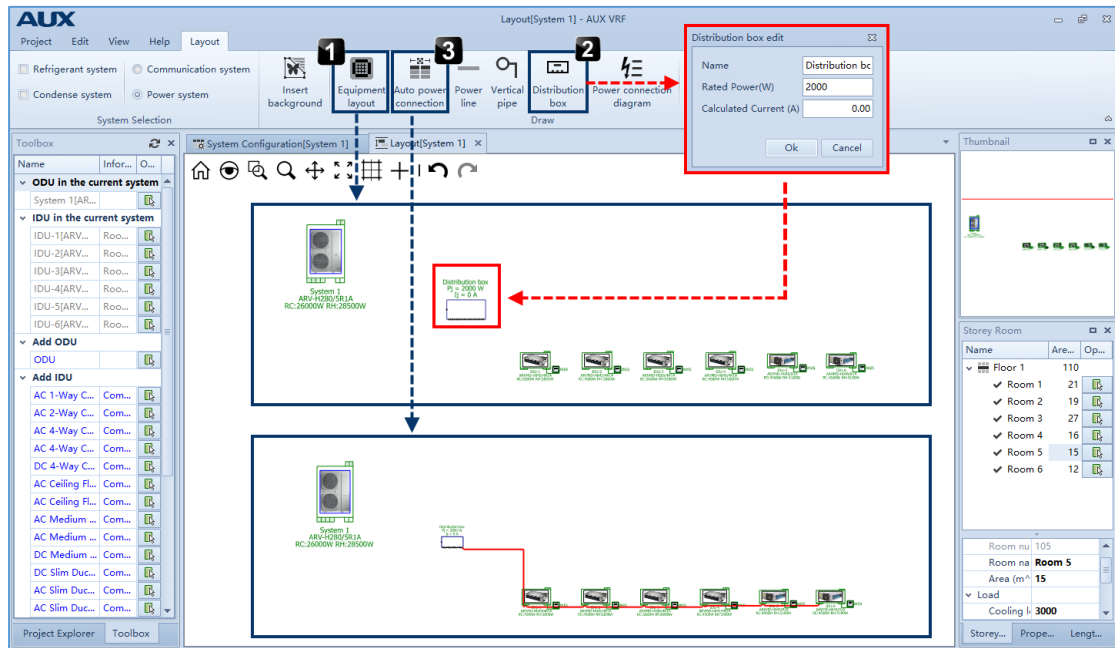
Special notice on manual lay out distribution box.



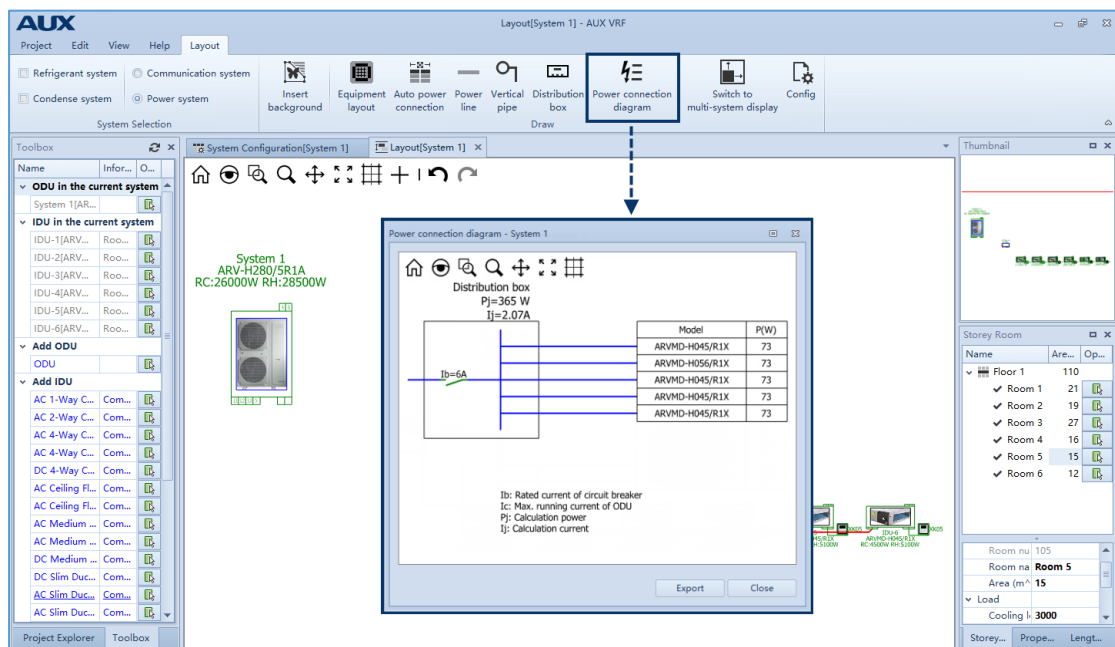
Manual power line connecting: The software supports manually connect power lines.



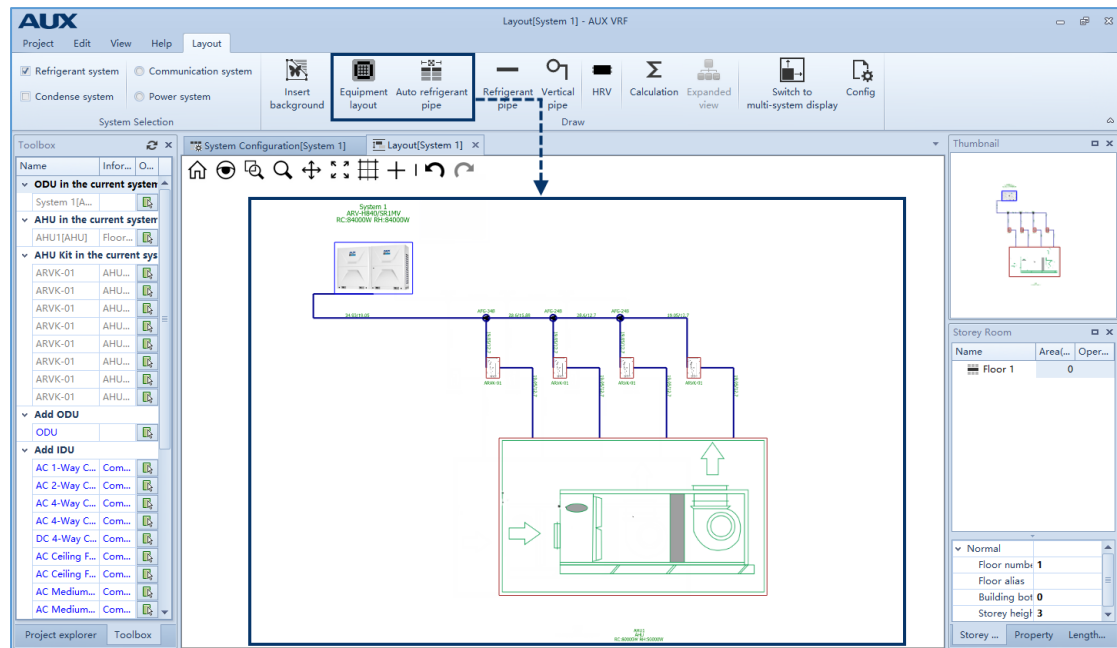
Distribution box layout: The software supports manually laying out distribution box.



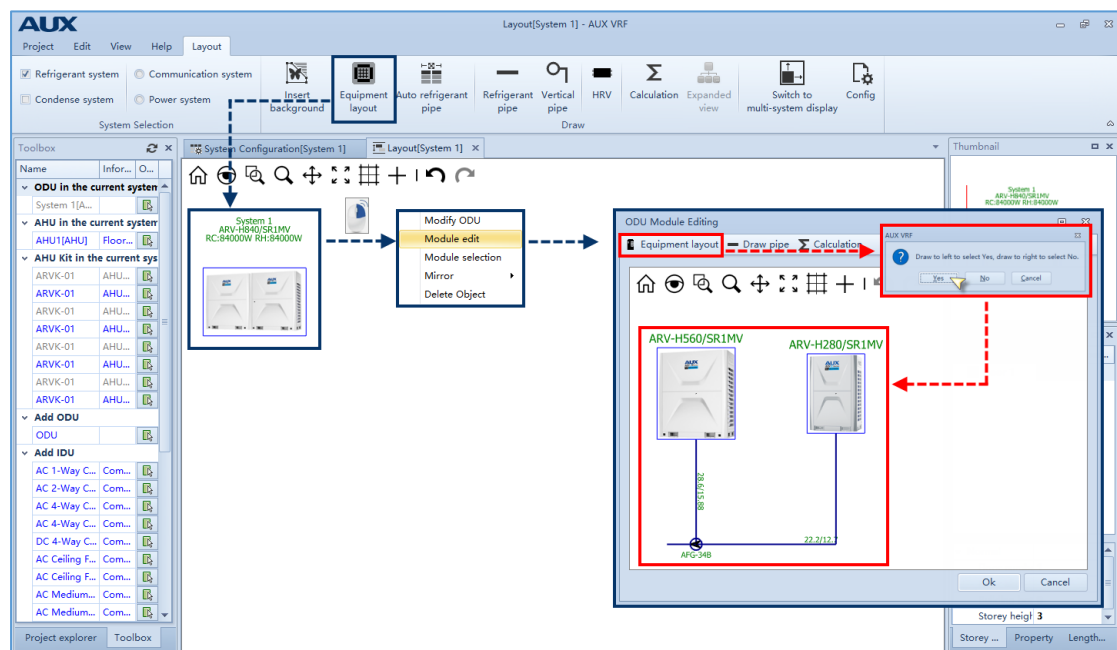
Auto power connection diagram: The software auto generates power connection diagrams.

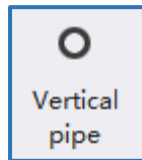


AHU equipments auto layout and piping

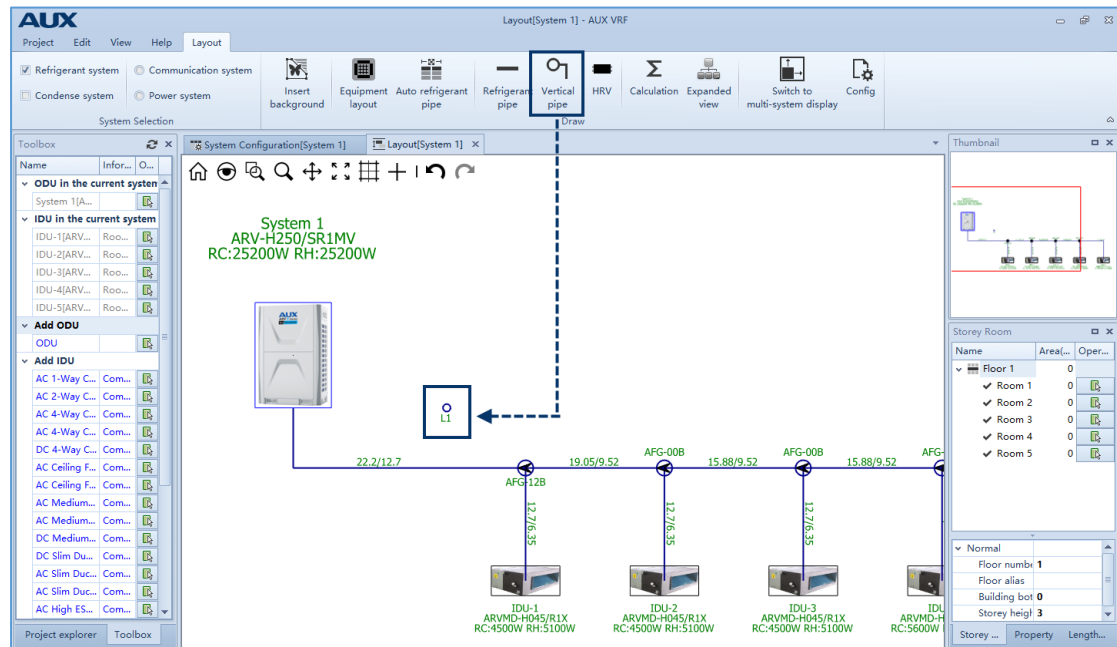


ODU units connecting diagram auto generation

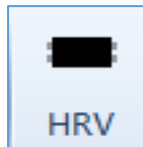
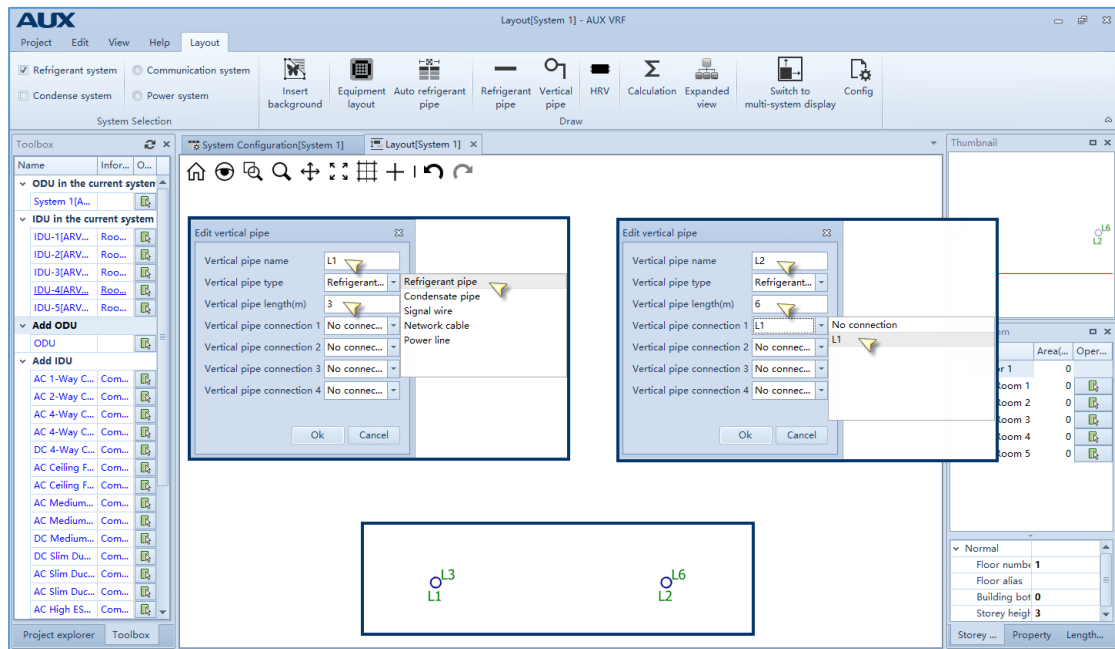




Vertical pipe: You can manually draw refrigerant pipe and set up pipe length and serial number.



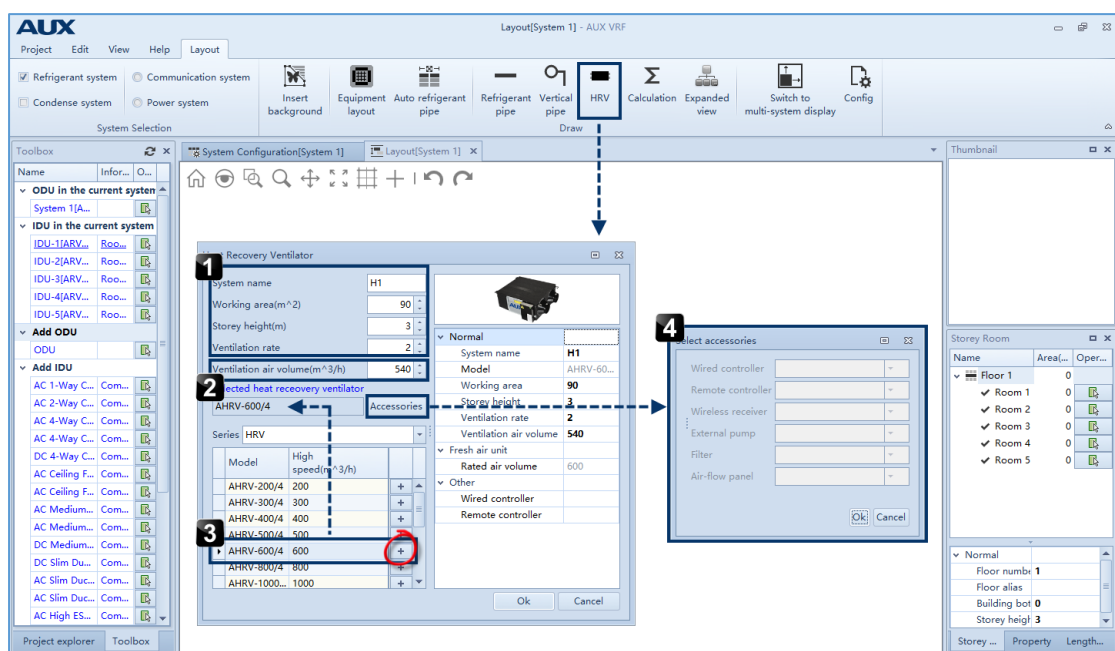
★**TIPS:** When laying out the first vertical pipe, it needs to be named. And the vertical pipes models need to be selected. It also need to manually put in the vertical heights. And the second vertical pipe which connects the first one also requires the same procedures, the name of which is asked to be named as the first one in a sequential order.

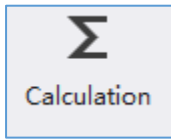


HRV facilities: The software supports manually layout HRV facilities.

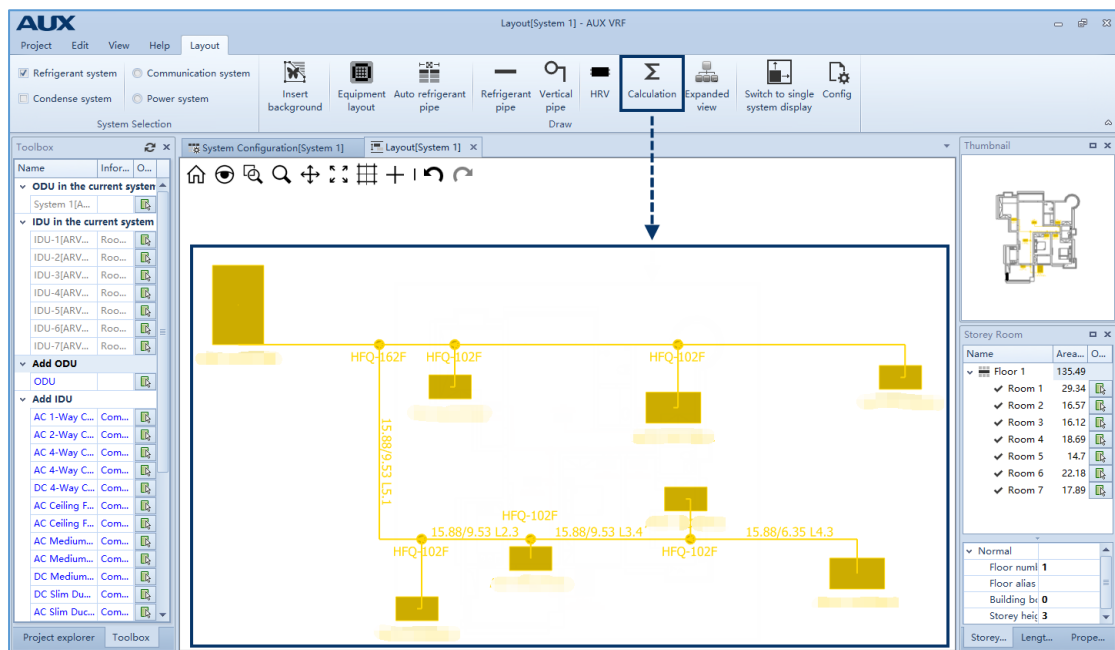
★Tips:

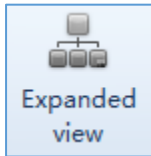
Put in HRV facilities working area, installment height, times of ventilation. It will automatically figure out the volume of ventilation air, which is a reference for HRV and its accessories selection.



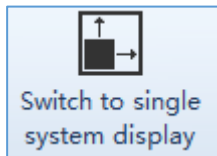
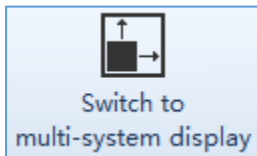
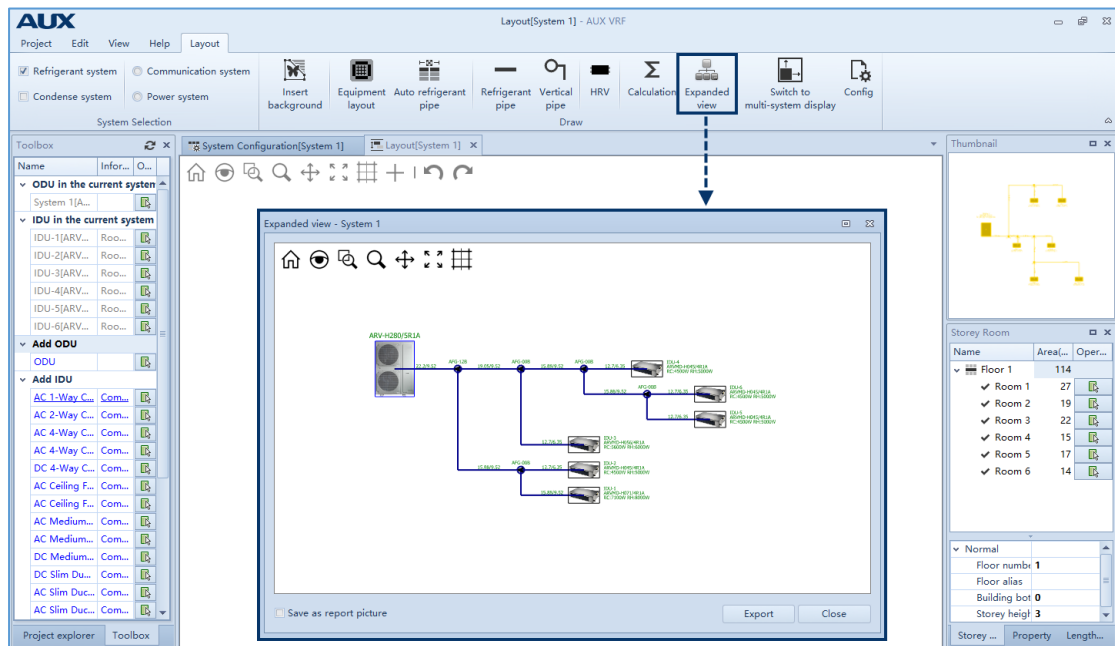


Calculate: It will calculate tautologically referring to the background database and corrected parameters, and get the final computing result of all the pipe diameter, pipe length, branch type of the system. The result of calculation will be highlighted. There will be an error hints if any mistakes happens.





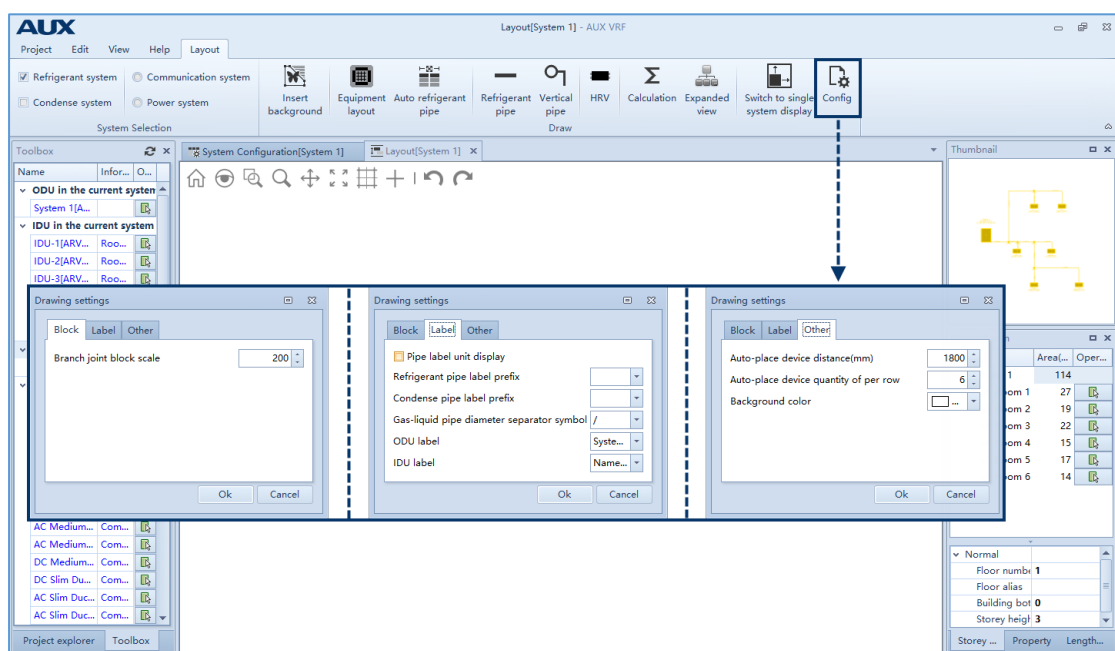
Expanded view: The software can auto generate a expanded view, and can allow input saving.



The software supports single and multi system display switch.



System config: it includes drawing settings and label settings.

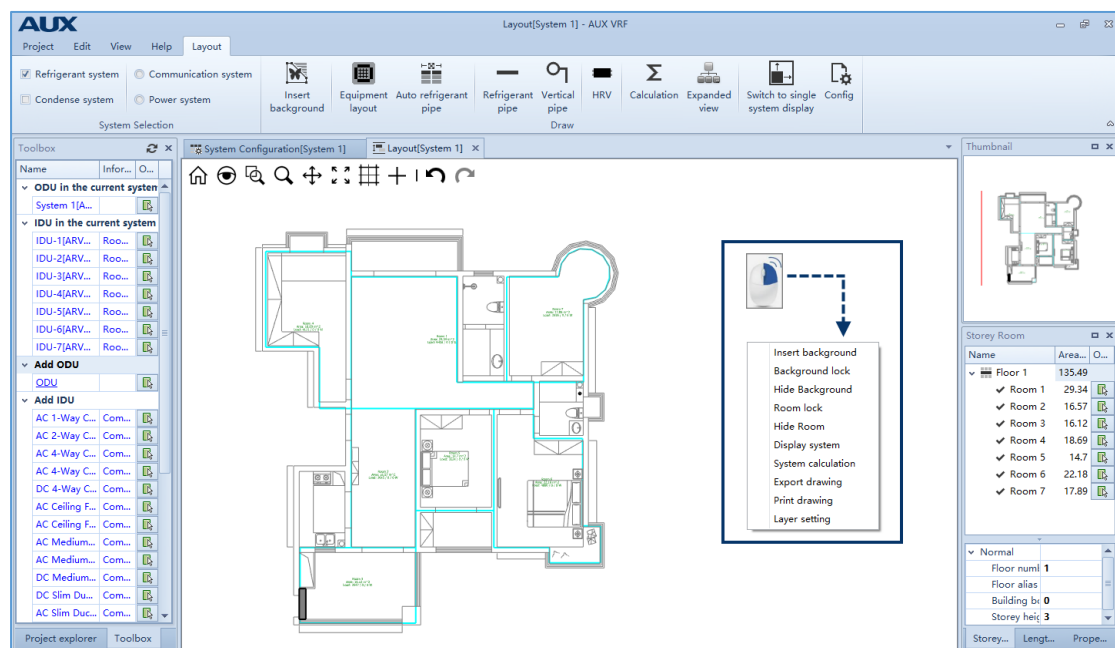


2.6.2. Layout plan drawing example

Inner systems drawing settings and editing.

★Tips:

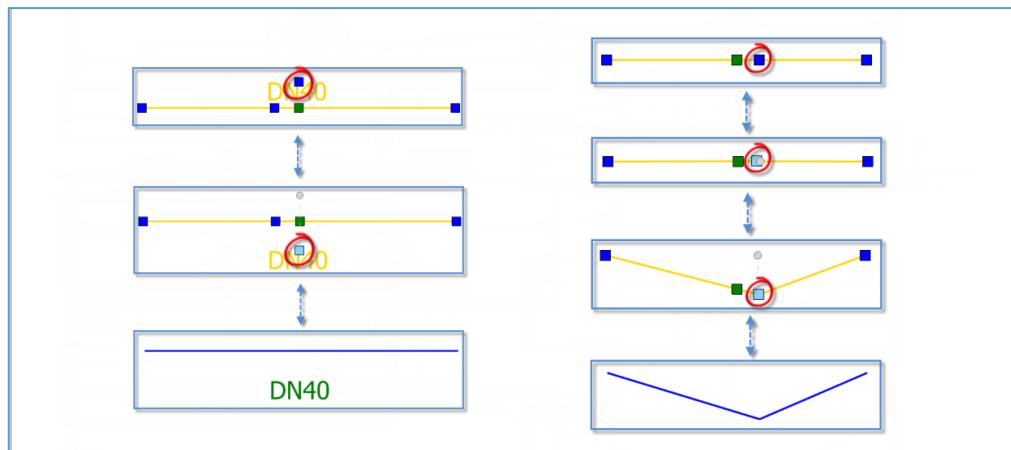
Regular drawing shortcut commands are all showed on the right click menu. The base map and the room can be locked and displayed to put out maps and realize layout settings.



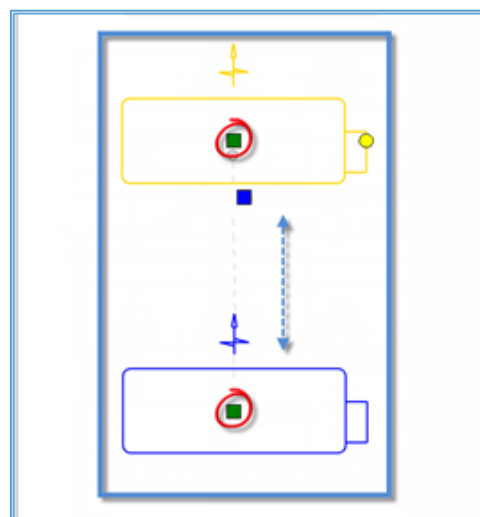
★Tips:

In the system out, all the graphic segments will make 3 pinch points. Blue pinch point labels the positions and pipe line moving directions. Green pinch point controls the whole graphic segments displacement. Yellow pinch point controls the revolving of the whole graphic segments.

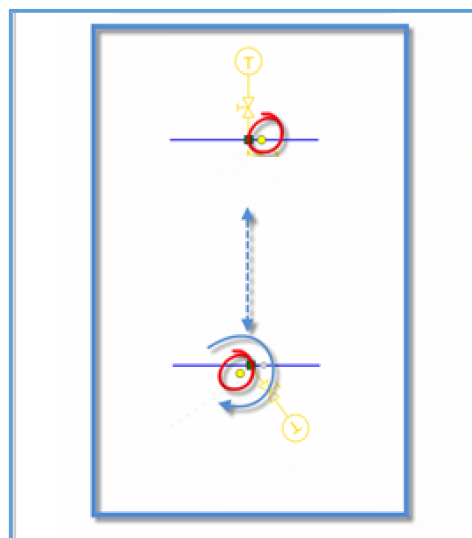
Blue pinch point: It labels the positions and pipe line moving directions.



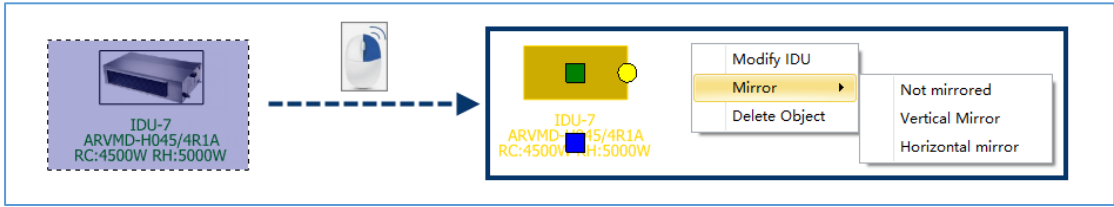
Green pinch point: controls the whole graphic segments displacement.



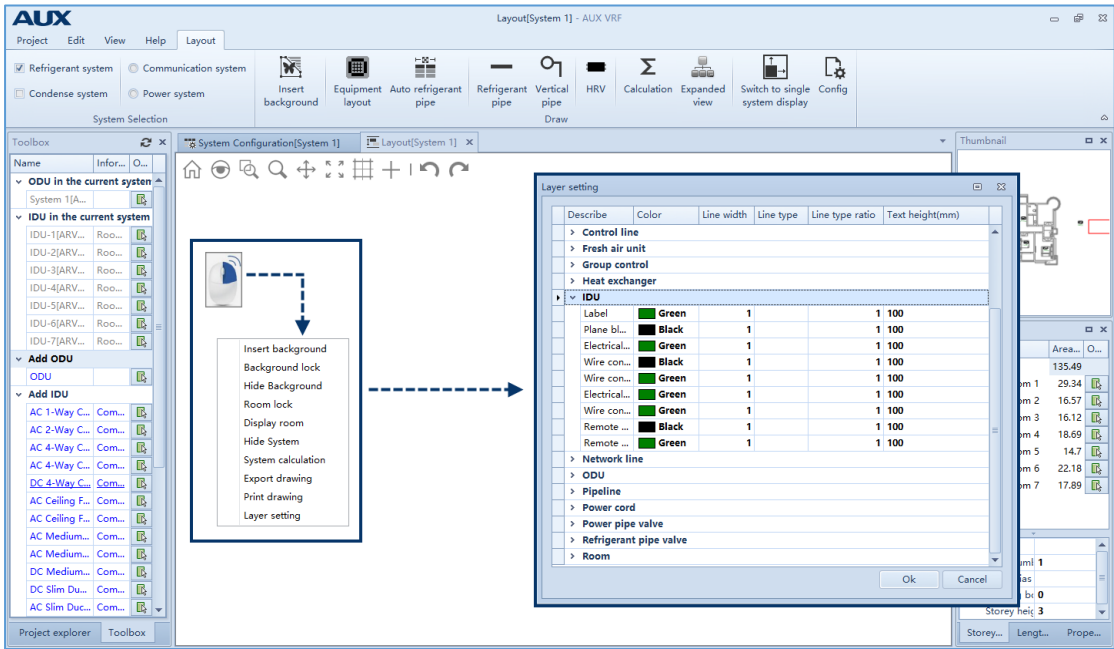
Yellow pinch point: controls the revolving of the whole graphic segments.



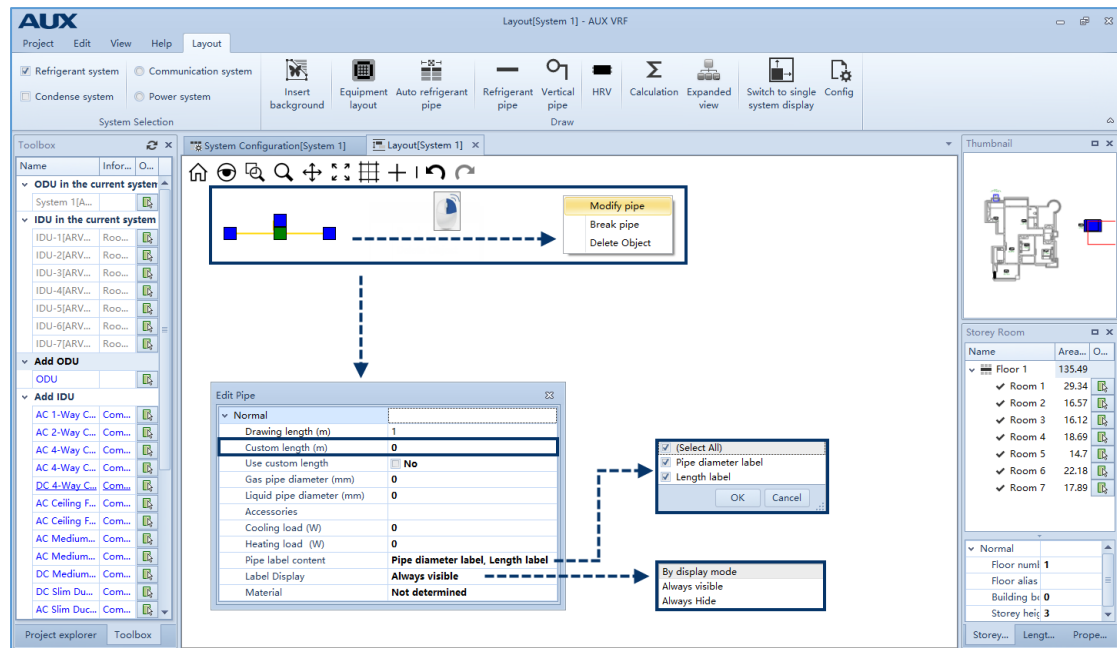
Graphic editing: Once a graphic segment selected, right click menu can realize property editing and mirror function selection.



Layer setting: Layer setting can realize graph display and drawing operations and settings.

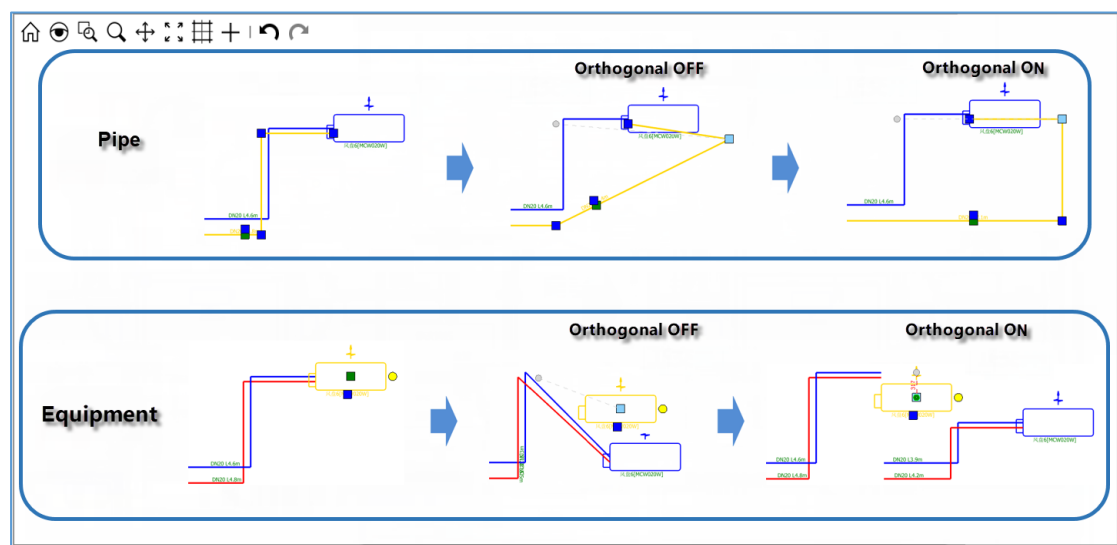


Pipe edit: Pipe edit can customize pipe length and pipe diameters labels.

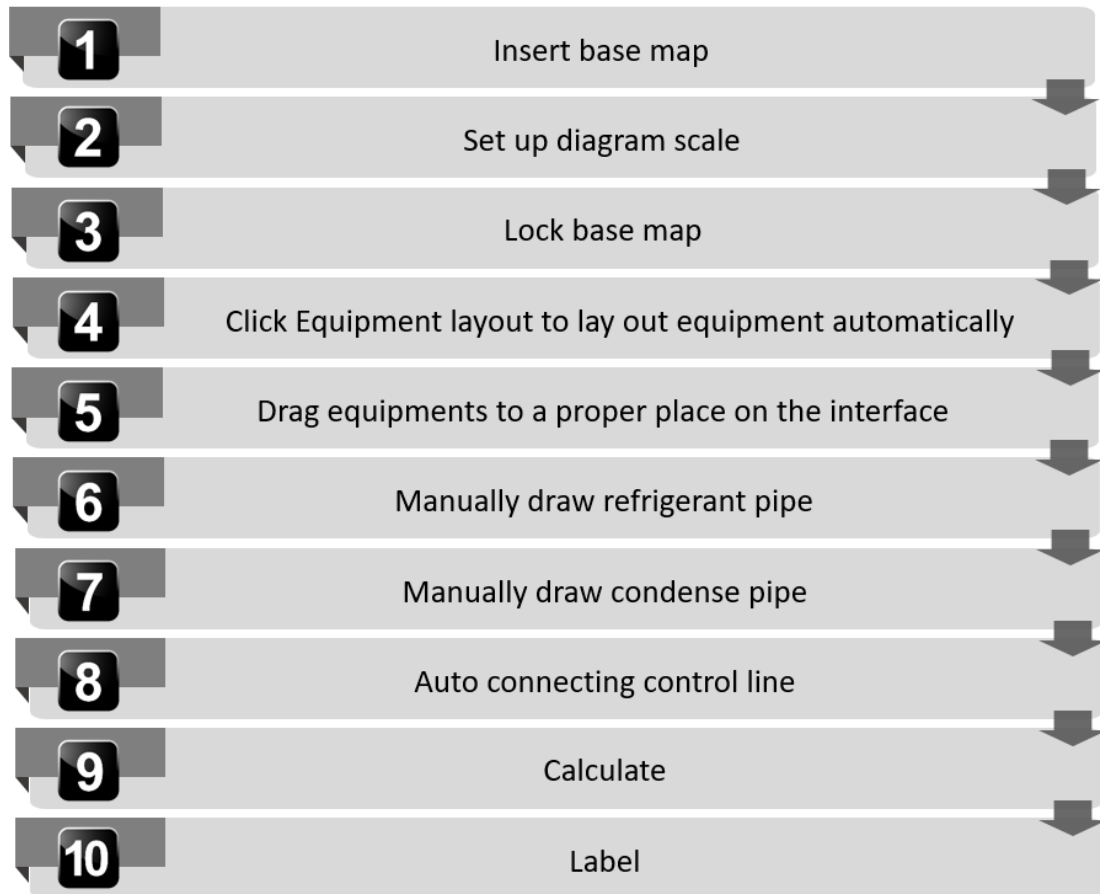


★Tips:

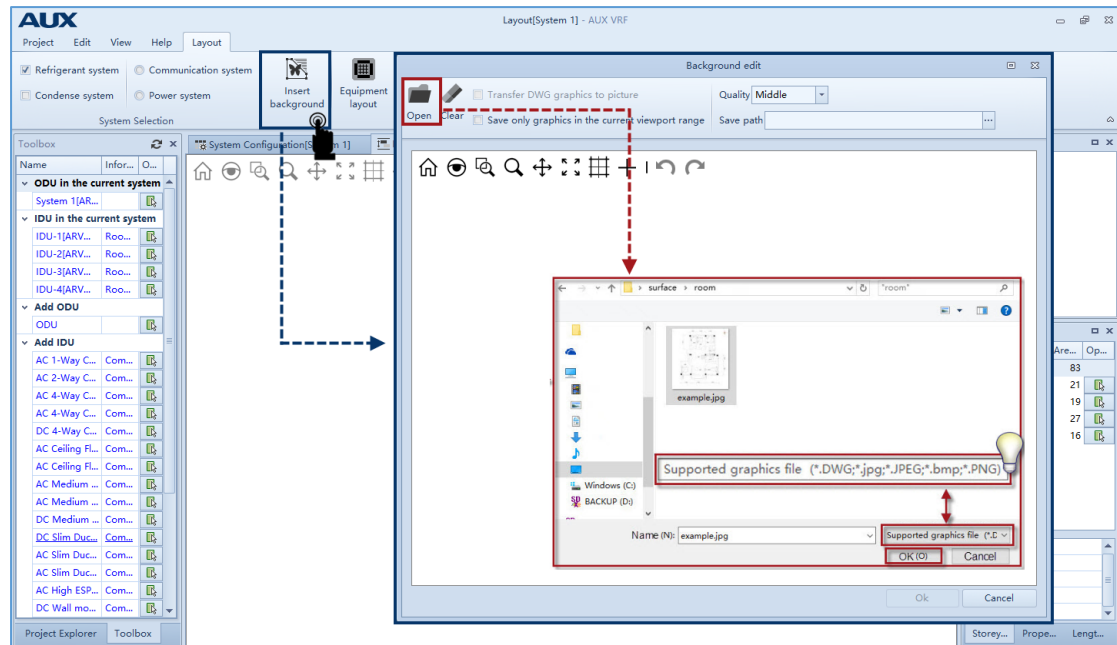
Turn on orthogonal mode, pipe line will be connected accordingly. When moving the pipe lines connected, the orthogonal mode will simultaneously work.



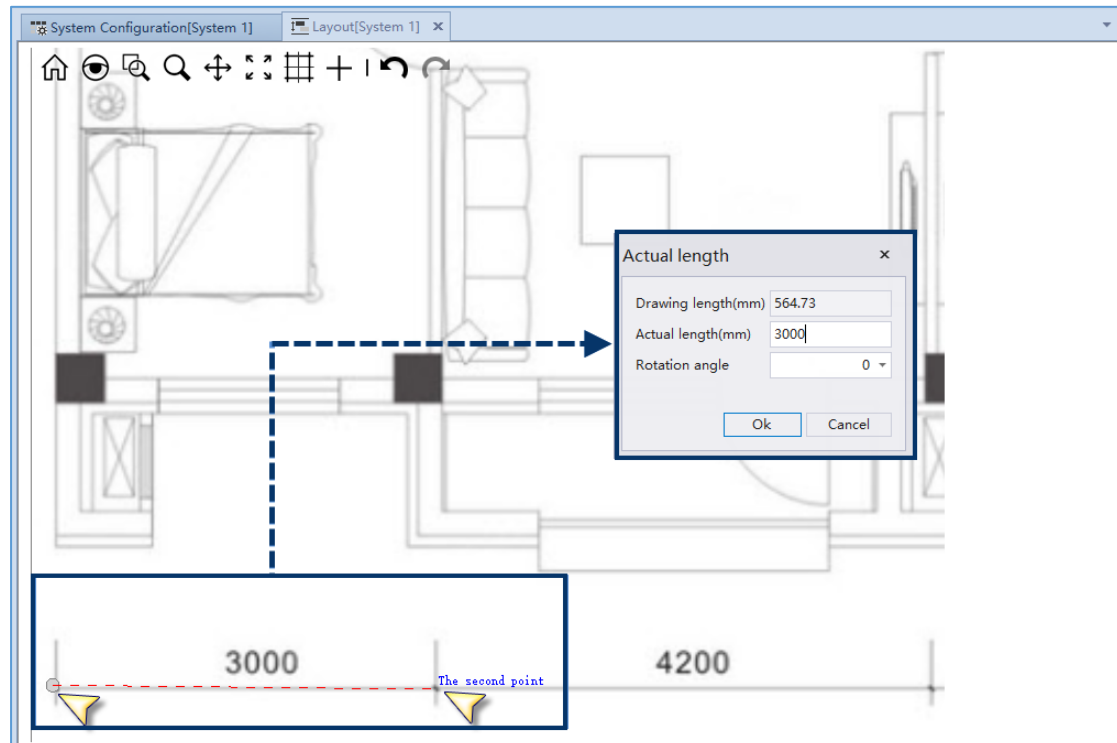
Procedures:



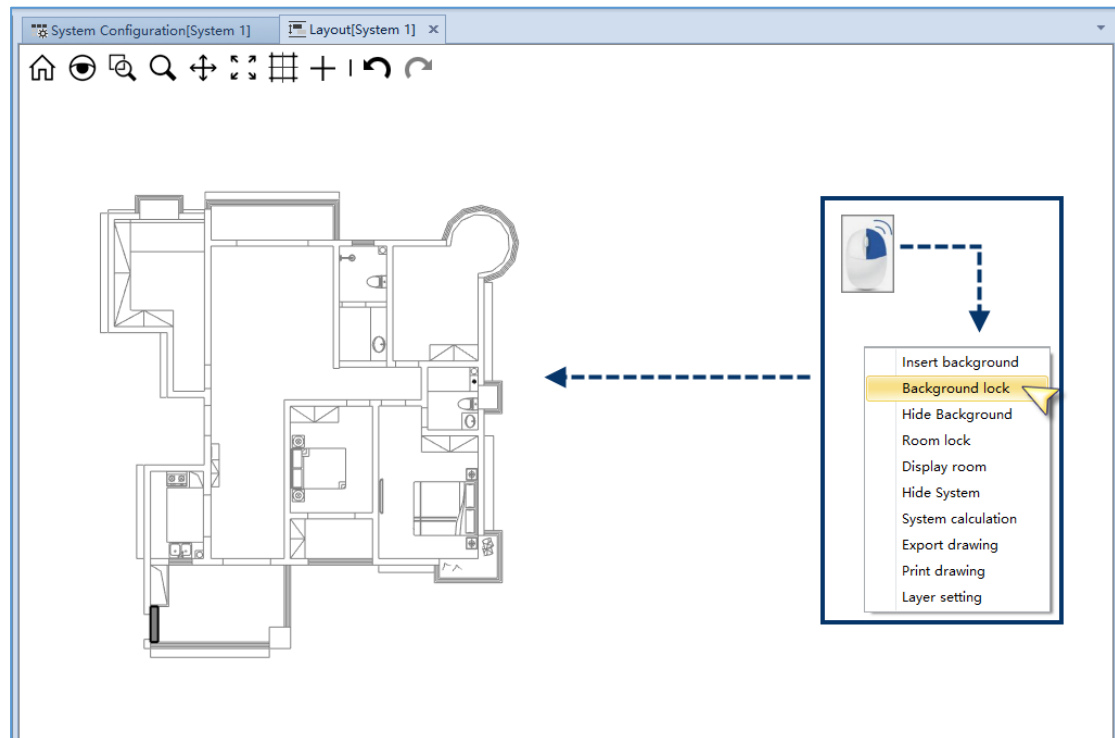
1、 *Insert base map*



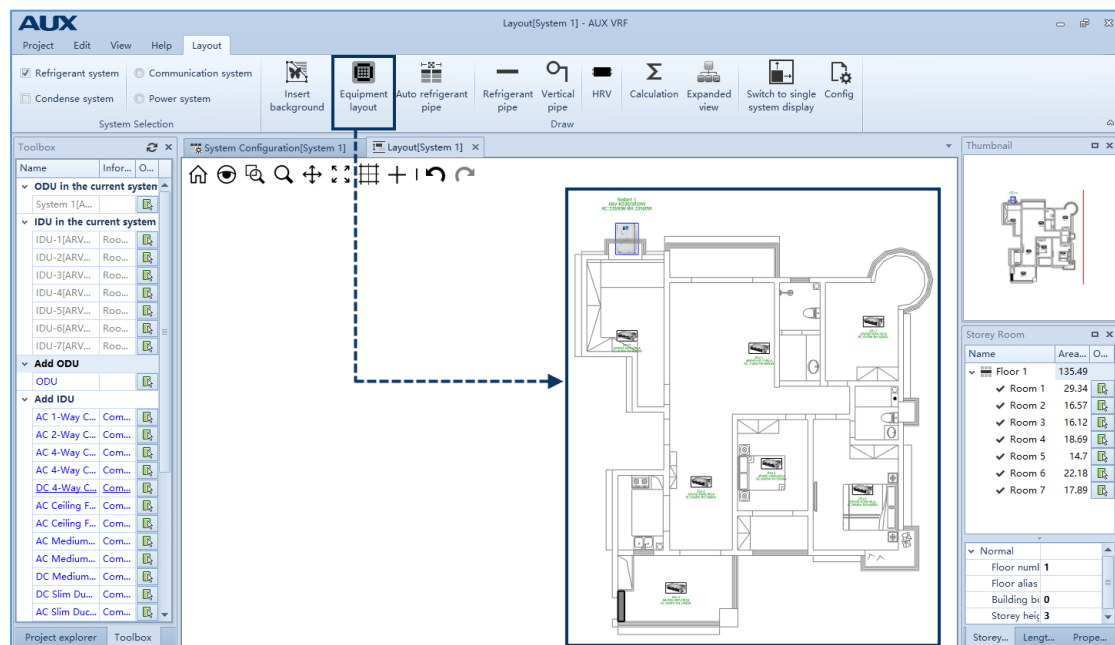
2. *Set up diagram scale*



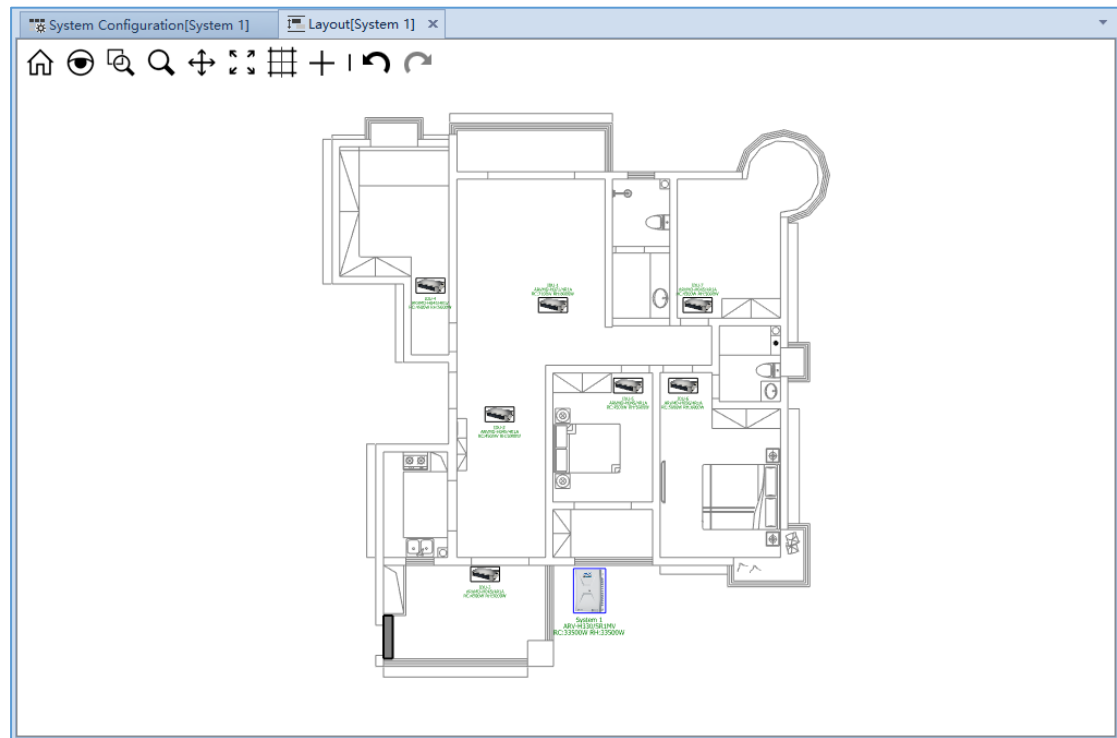
3. Lock base map



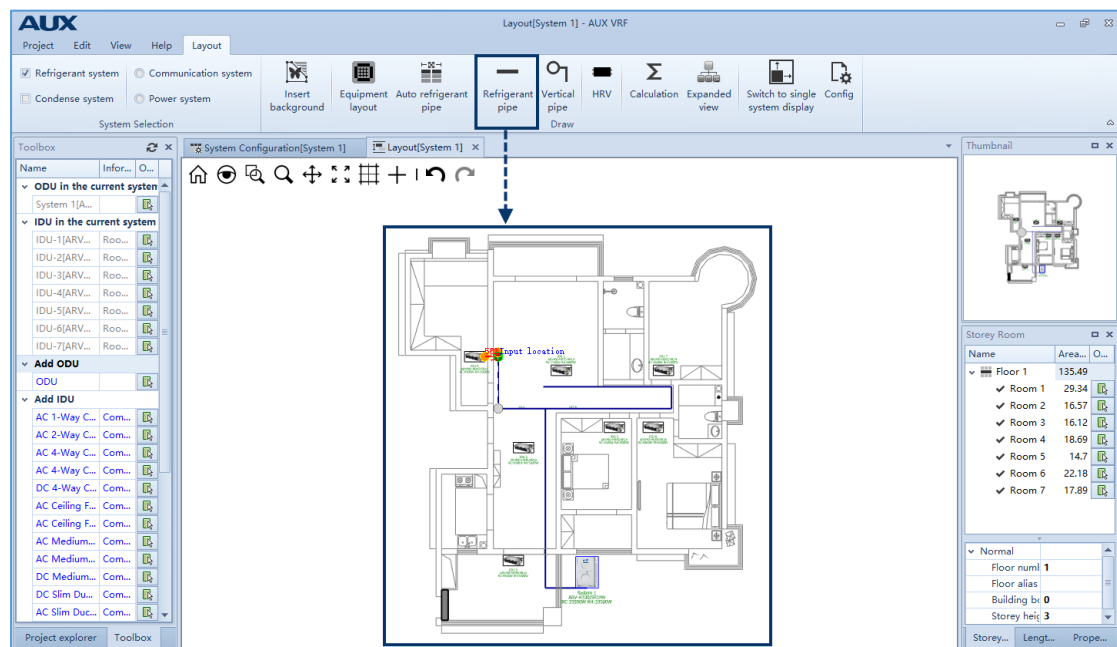
4. Click Equipment layout to lay out equipment automatically



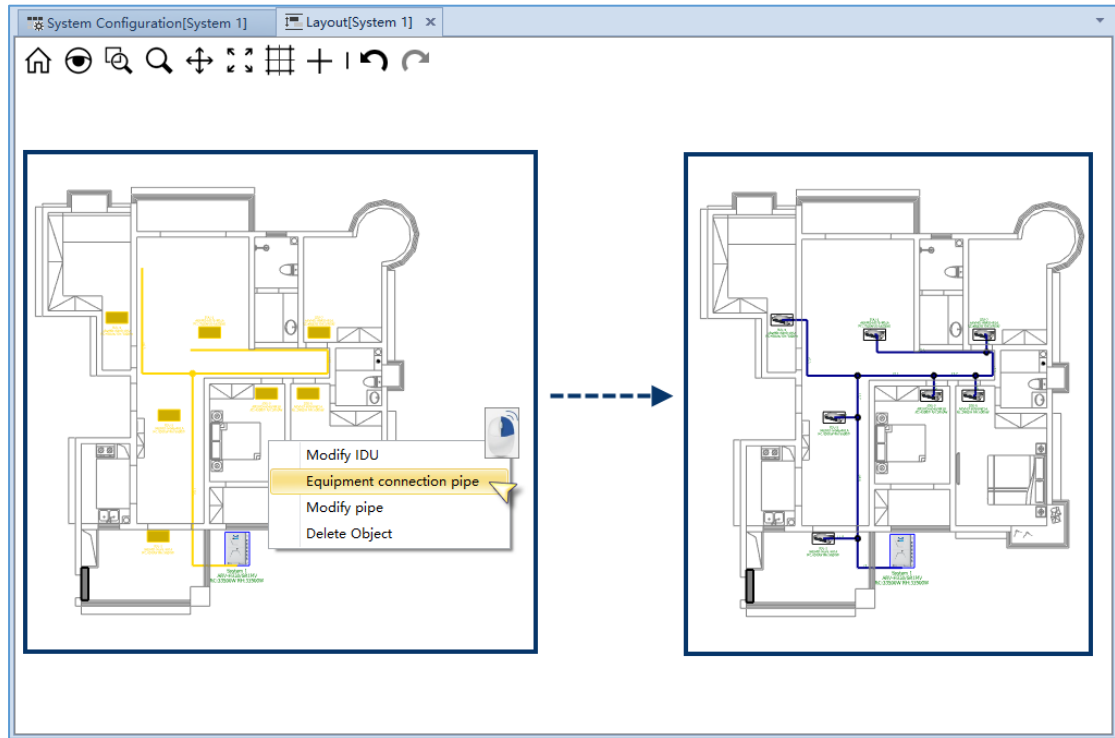
5. Drag equipments to a proper place on the interface



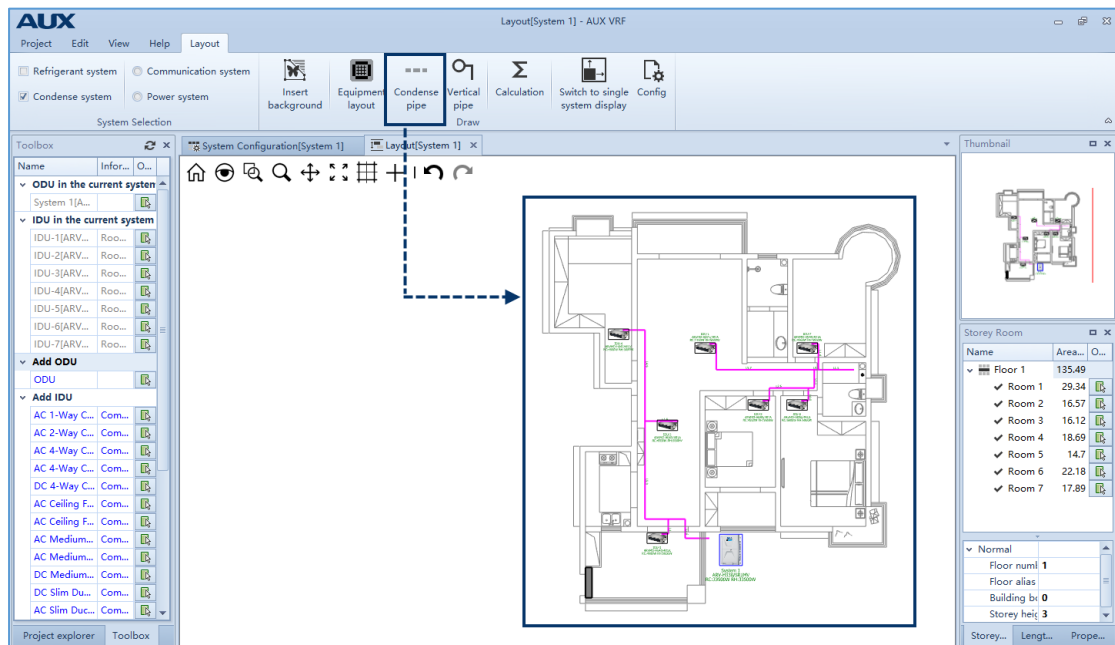
6. Manually draw refrigerant pipe



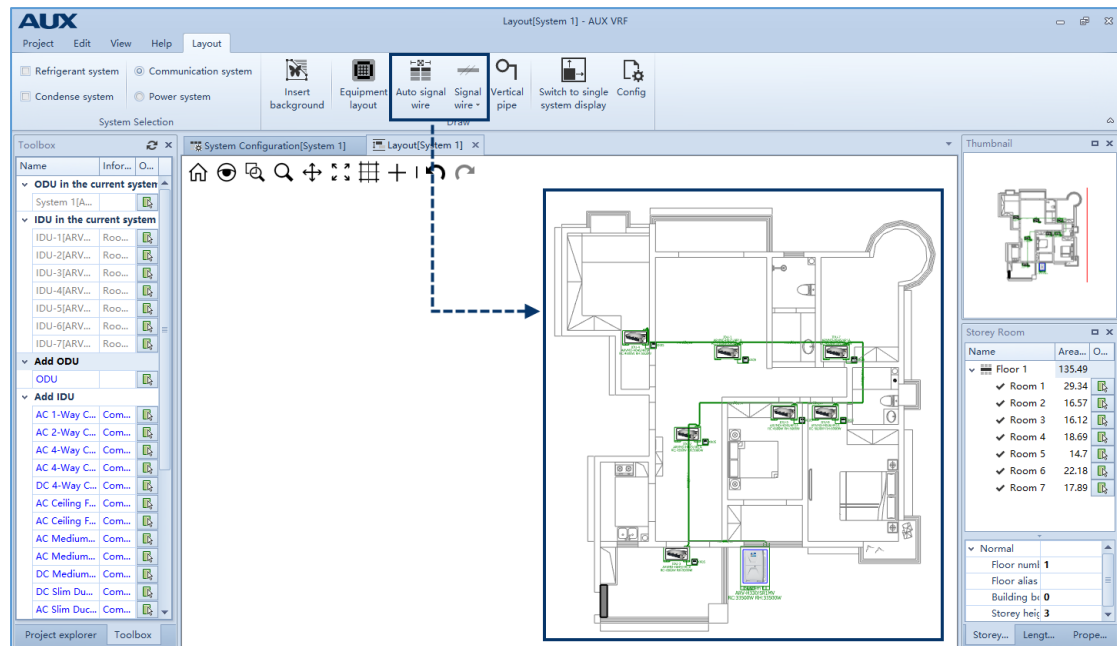
Refrigerant pipe connecting IDU



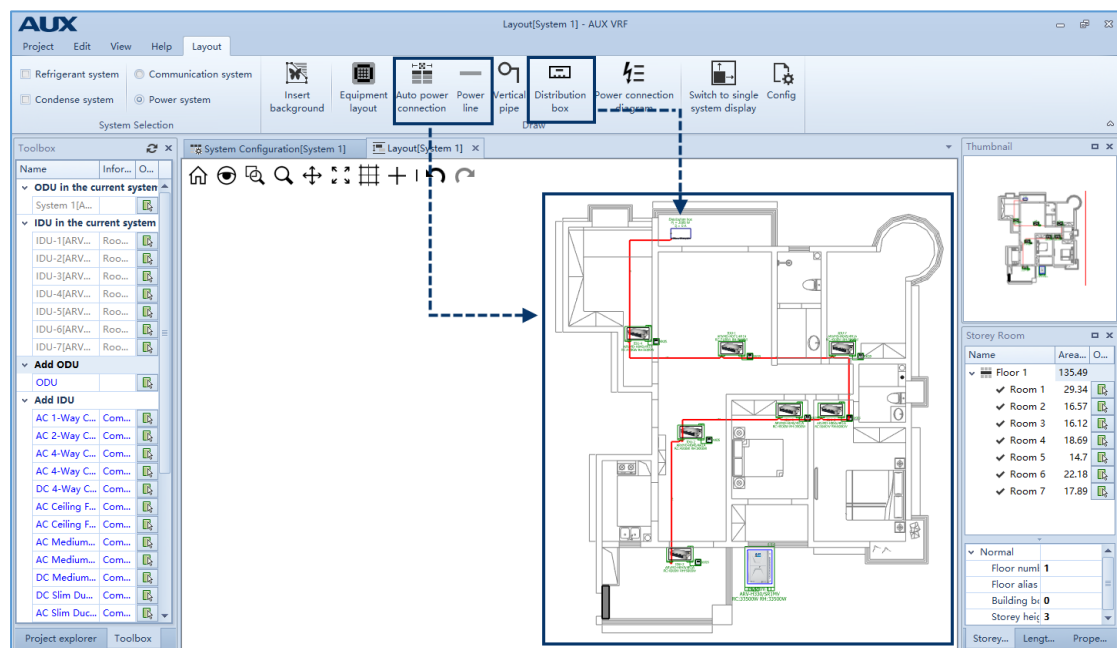
7. Manually draw condense pipe



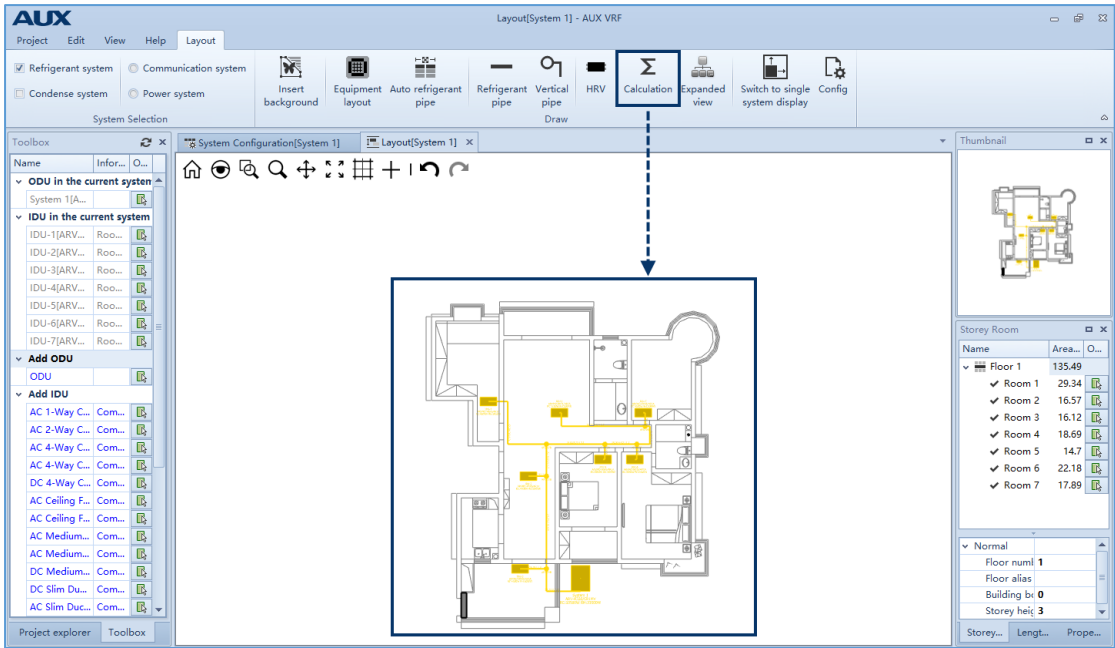
8. Auto connecting control line



Power line connecting

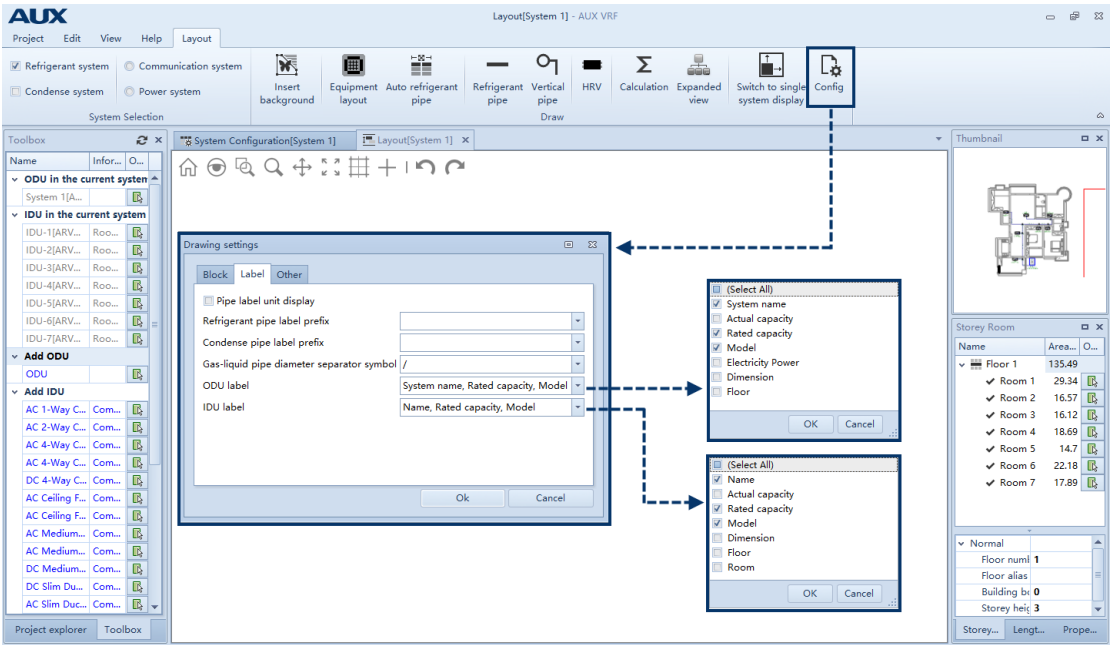


9. Calculate

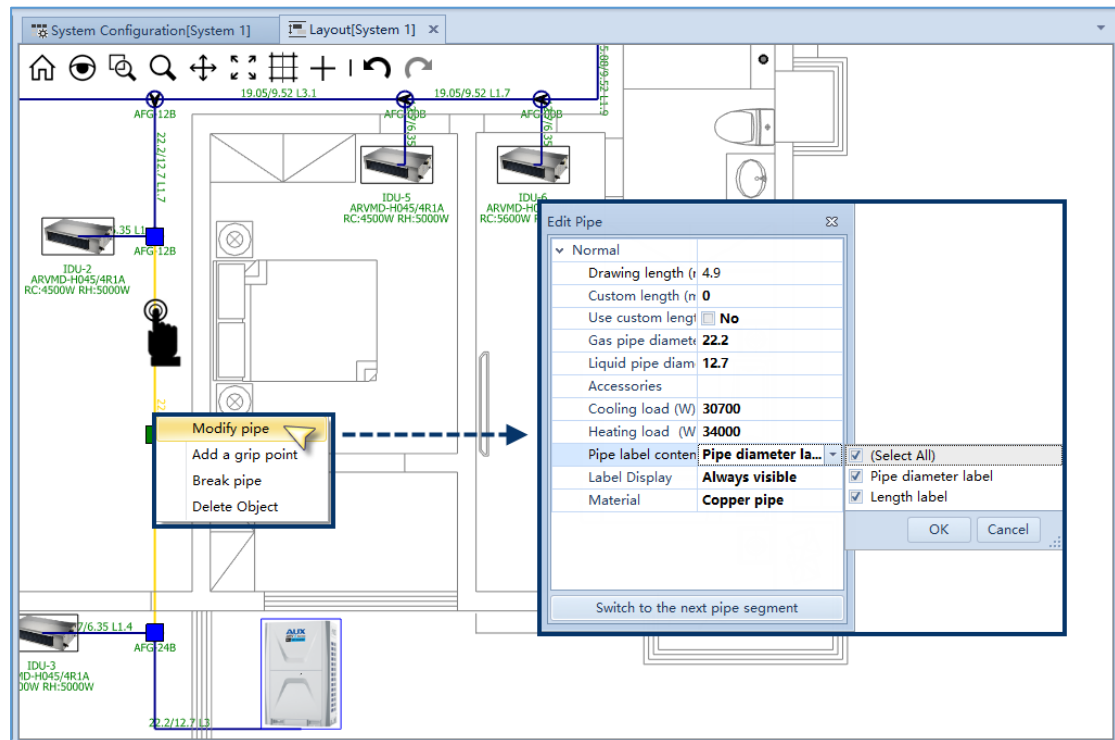


10. Label

Model label

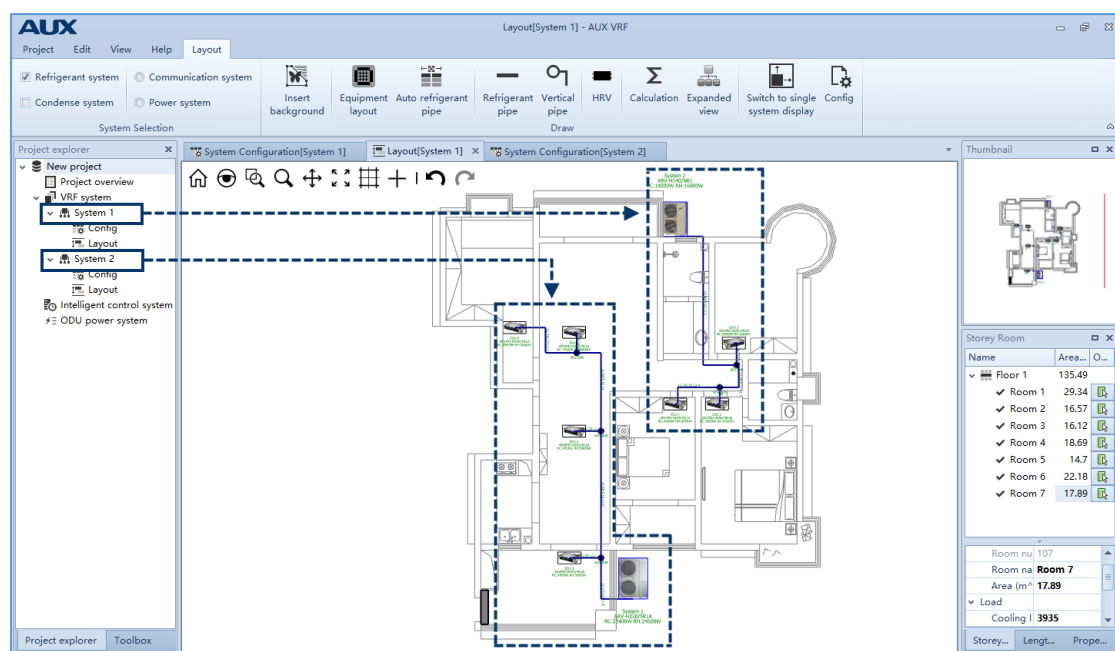


Pipe line label



★Tips:

Several systems can be displayed in one base map. Users can set up these systems and select each device models, and draw plan draft for each system.



System 1

AUX System Configuration[System 1] - AUX VRF

Project Edit View Help

Add floor Add room Add system Add IDU Add fresh air unit Add AHU Add ODU Auto select ODU Choose accessory

Floor Room VRF system

Project explorer

- New project
- Project overview
- VRF system
 - System 1
 - Config
 - Layout
 - System 2
 - Config
 - Layout
 - Intelligent control system
 - #2 ODU power system

System Configuration[System 1] System 1

Room list

Required capacity(W)				Rated capacity(W)				Actual capacity(W)							
Cooling				Heating				Cooling				Heating			
Name	Cooling load	Sensible load	Heating load	Name	Model	Cooling capacity	Sensible capacity	Heating capacity	Cooling capacity	Sensible capacity	Heating capacity				
Room 1	6456	0	0	IDU-1	ARVMD-H071/4R1A	7100	5396	8000	6863	4331	5874				
Room 2	3645	0	0	IDU-2	ARVMD-H045/4R1A	4500	3420	5000	4342	2740	3671				
Room 3	3547	0	0	IDU-3	ARVMD-H045/4R1A	4500	3420	5000	4342	2740	3671				
Room 4	4111	0	0	IDU-4	ARVMD-H045/4R1A	4500	3420	5000	4342	2740	3671				

.....

Rated capacity(W)				Actual capacity(W)							
ODU				IDU				ODU			
Image	Model	Combinat... ratio	Cooling capacity	Heating capacity	Cooling capacity	Heating capacity	Cooling capacity	Heating capacity	Air conditio... area(m...	Placement floor no.	
	ARV-H220/5R1A	92%	22400	24500	20600	23000	21804	16888	80.72		

Storey Room

Name	Area...	O...
Floor 1	135.49	
Room 1	29.34	
Room 2	16.57	
Room 3	16.12	
Room 4	18.69	
Room 5	14.7	
Room 6	22.18	
Room 7	17.89	

Room nu: 107
Room na: Room 7
Area (m²): 17.89
Load
Cooling I: 3935

System 2

AUX System Configuration[System 2] - AUX VRF

Project Edit View Help

Add floor Add room Add system Add IDU Add fresh air unit Add AHU Add ODU Auto select ODU Choose accessory

Floor Room VRF system

Project explorer

- New project
- Project overview
- VRF system
 - System 1
 - Config
 - Layout
 - System 2
 - Config
 - Layout
 - Intelligent control system
 - #2 ODU power system

System Configuration[System 2] System 2

Room list

Required capacity(W)				Rated capacity(W)				Actual capacity(W)							
Cooling				Heating				Cooling				Heating			
Name	Cooling load	Sensible load	Heating load	Name	Model	Cooling capacity	Sensible capacity	Heating capacity	Cooling capacity	Sensible capacity	Heating capacity				
Room 5	3234	0	0	IDU-1	ARVMD-H045/4R1A	4500	3420	5000	4256	2686	3538				
Room 6	4880	0	0	IDU-2	ARVMD-H056/4R1A	5600	4256	6000	5296	3342	4246				
Room 7	3935	0	0	IDU-3	ARVMD-H045/4R1A	4500	3420	5000	4256	2686	3538				

.....

Rated capacity(W)				Actual capacity(W)							
ODU				IDU				ODU			
Image	Model	Combinat... ratio	Cooling capacity	Heating capacity	Cooling capacity	Heating capacity	Cooling capacity	Heating capacity	Air conditio... area(m...	Placement floor no.	
	ARV-H140/NR1	104%	14000	16000	14600	16000	13808	11323	54.77		

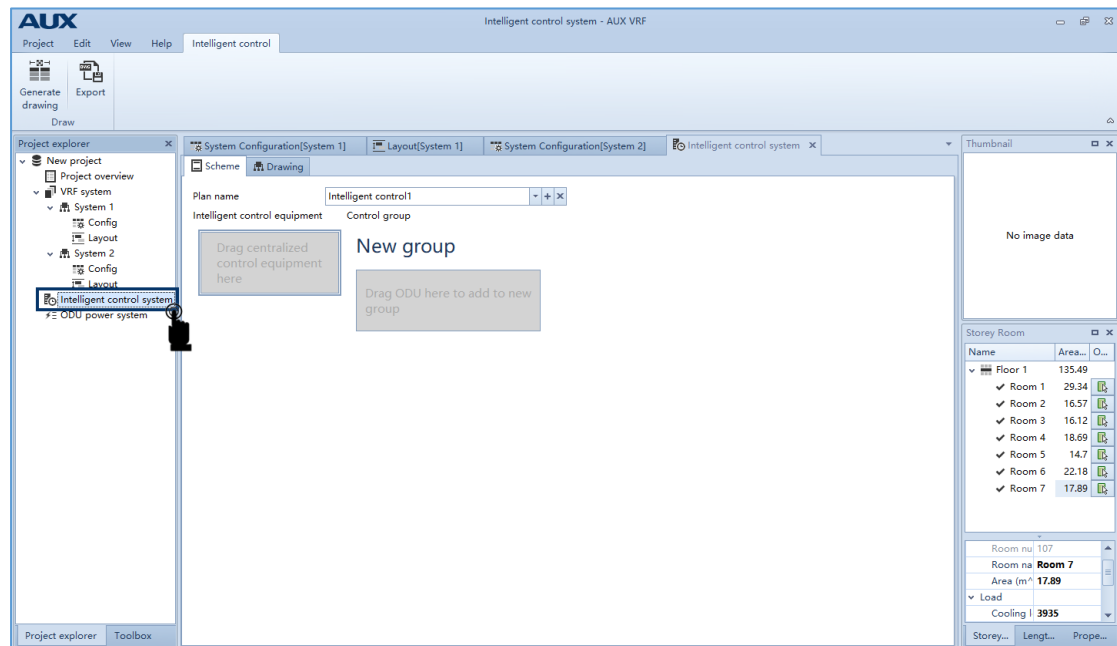
Storey Room

Name	Area...	O...
Floor 1	135.49	
Room 1	29.34	
Room 2	16.57	
Room 3	16.12	
Room 4	18.69	
Room 5	14.7	
Room 6	22.18	
Room 7	17.89	

Room nu: 107
Room na: Room 7
Area (m²): 17.89
Load
Cooling I: 3935

2.7. Centralized control system

It provides you the centralized control system plan, it can automatically generate centralized control system scheme.

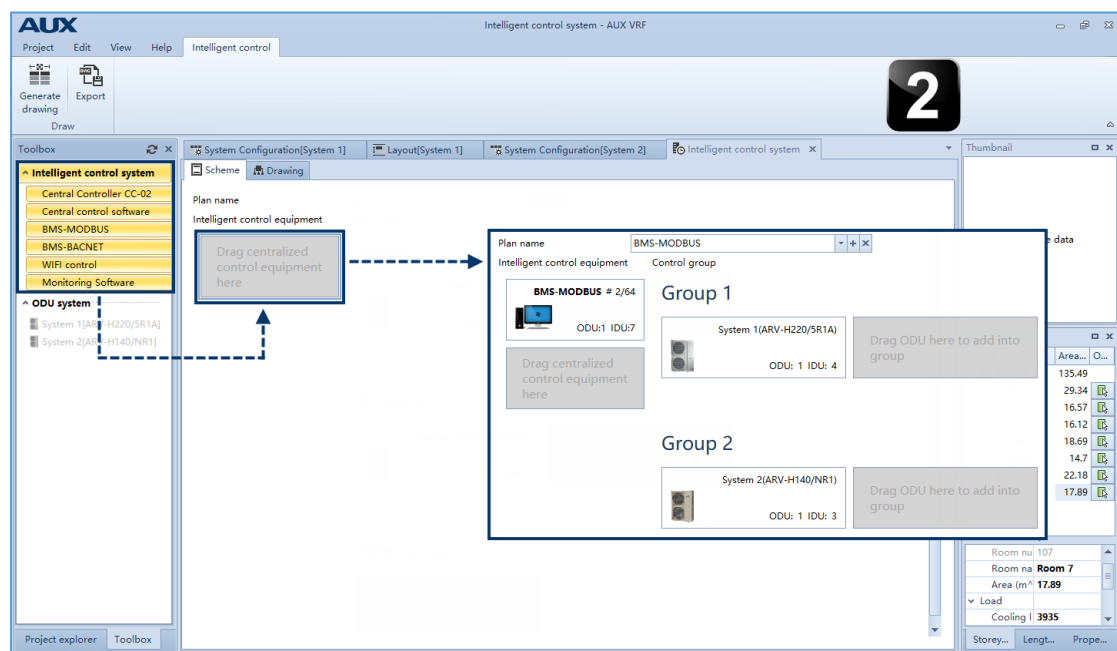
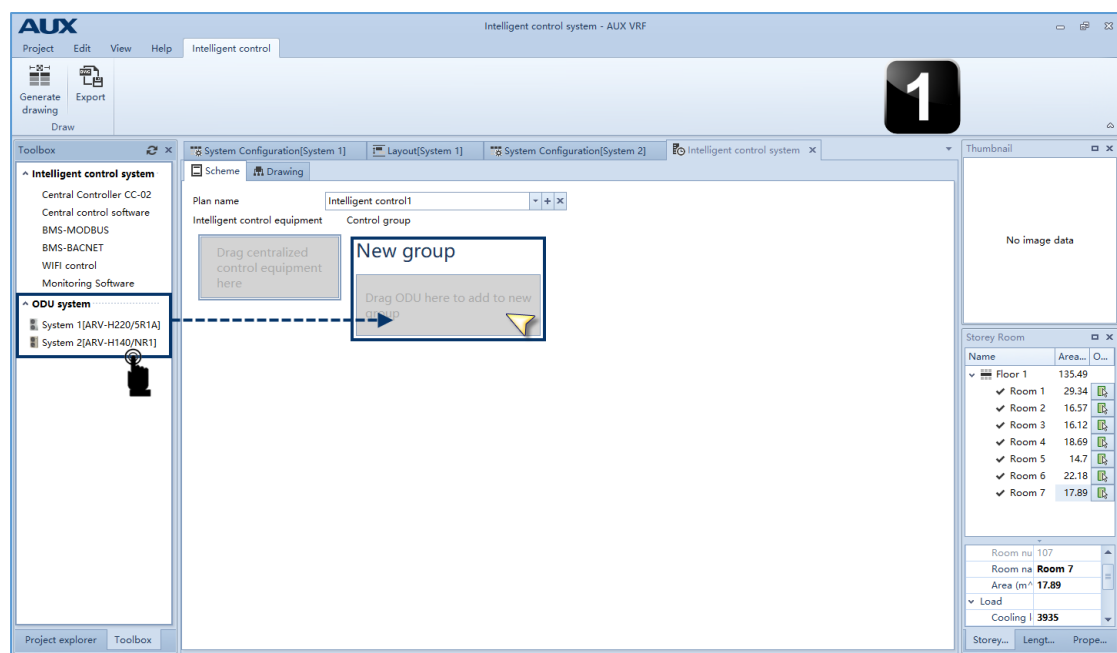


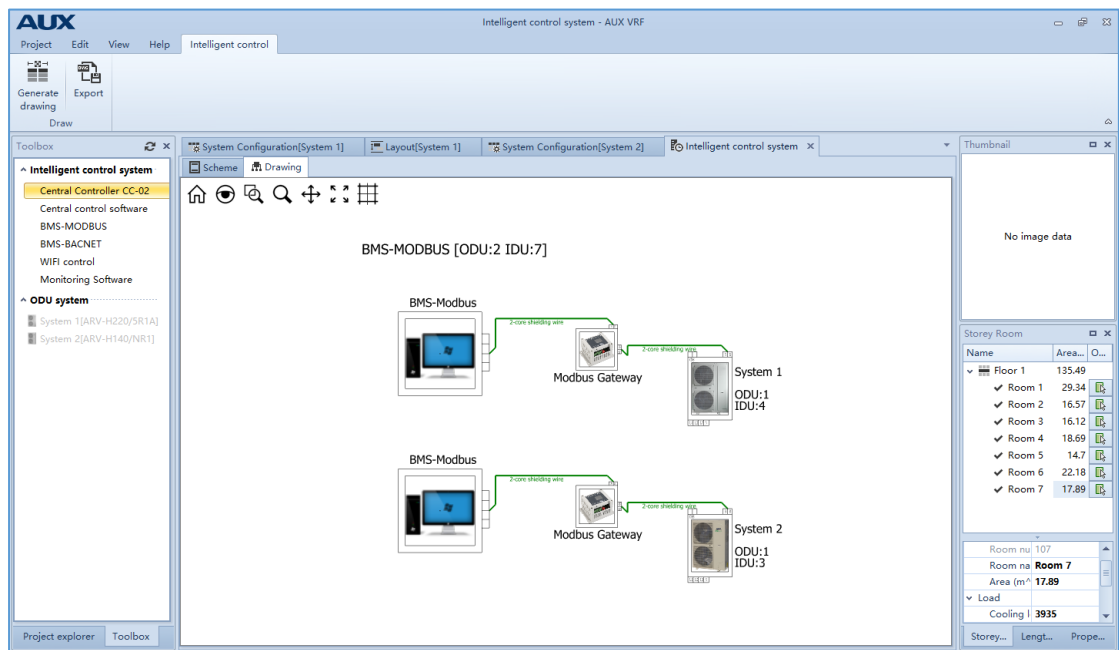
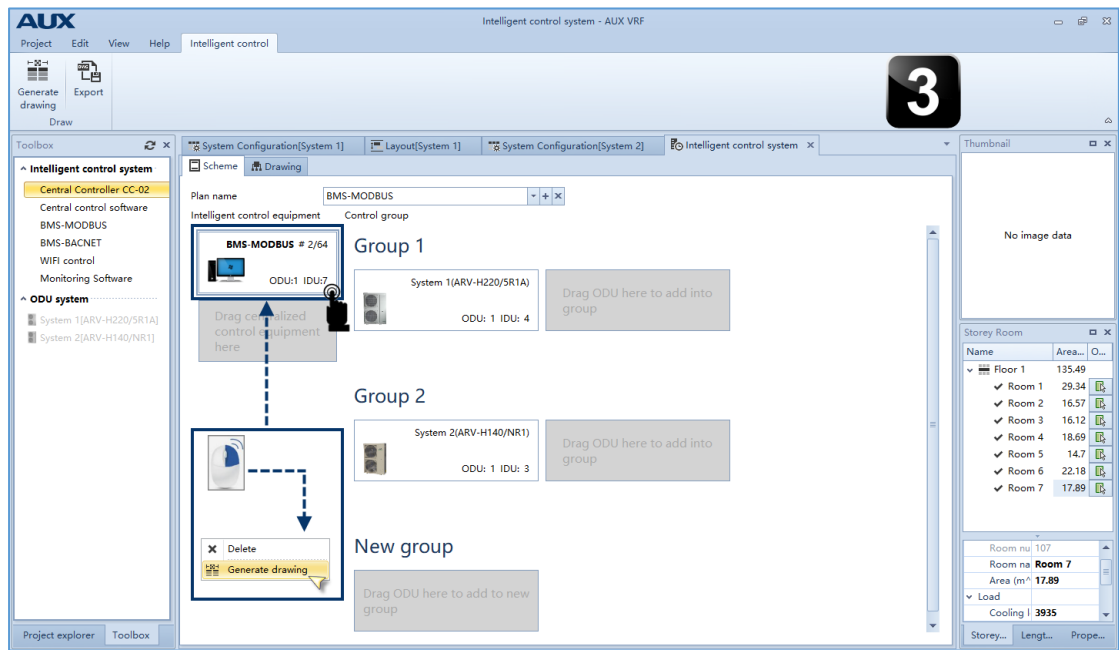
Procedures:

1. Create control group

2. Create central control device

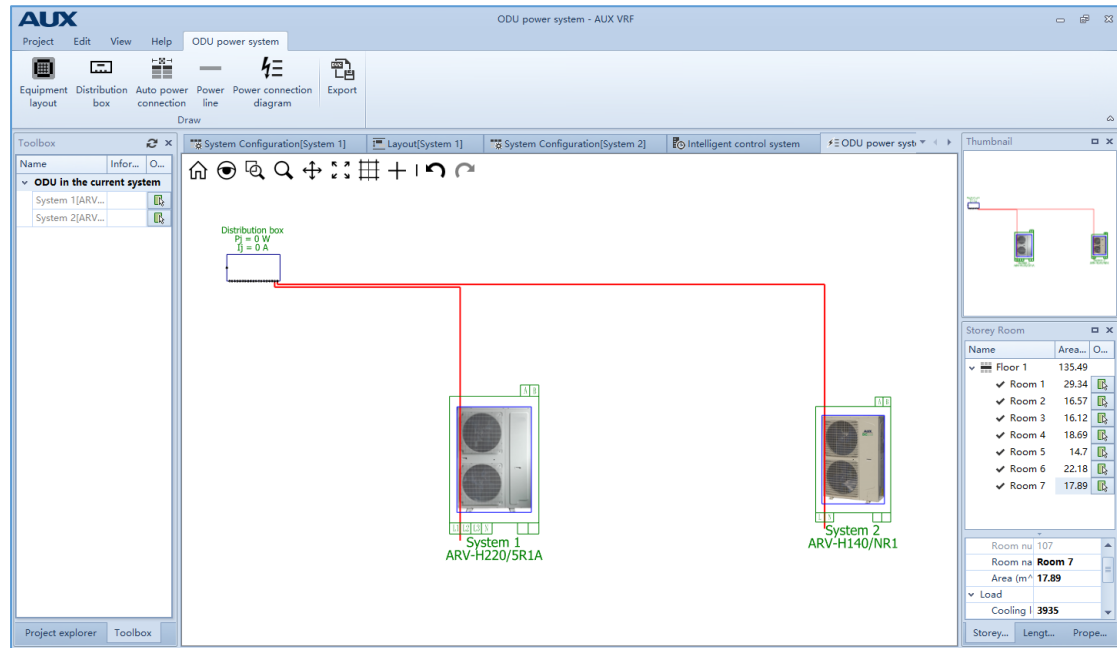
3. Generate scheme



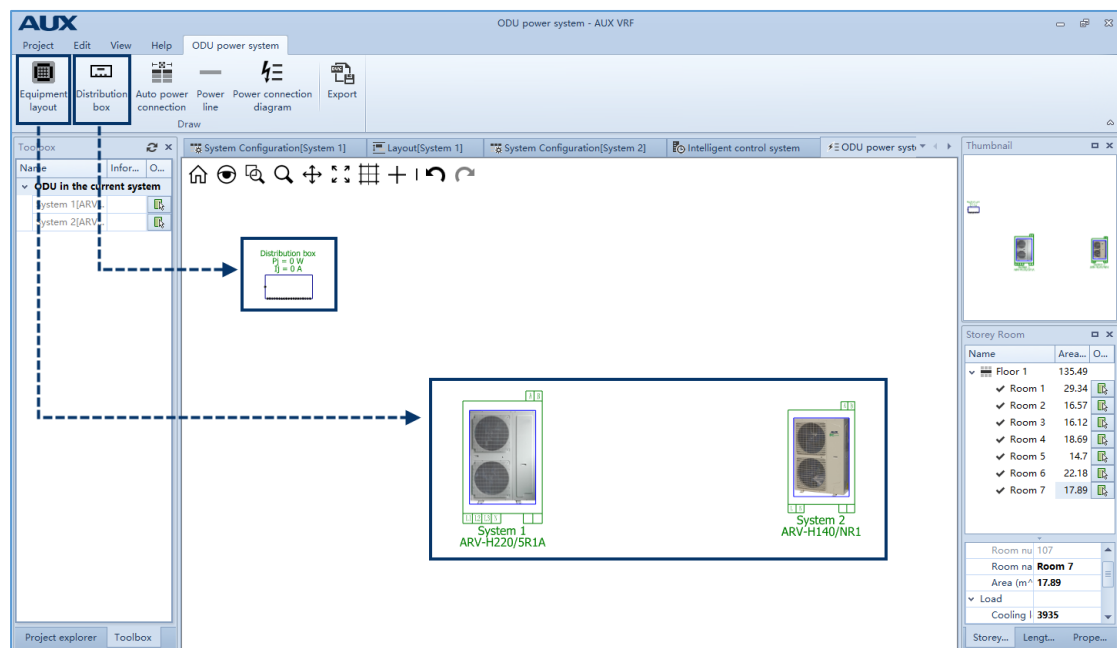


2.8. ODU power system

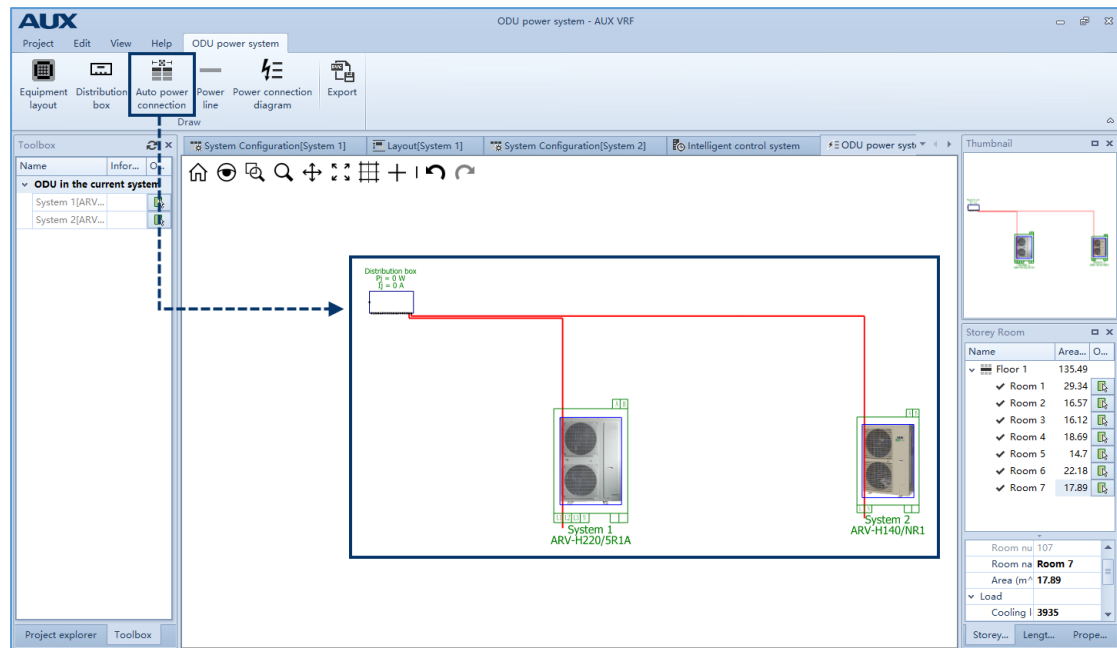
The software generates ODU power system layout. It also supports ODU power line drawing and connecting.



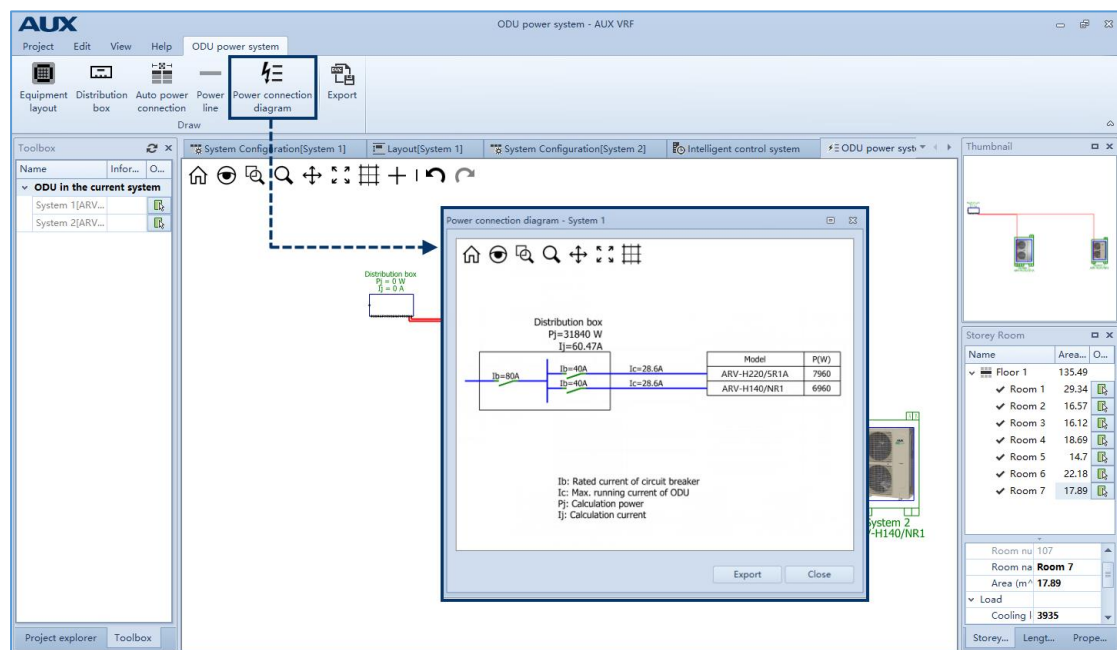
ODU and Distribution box auto layout



Auto power connection

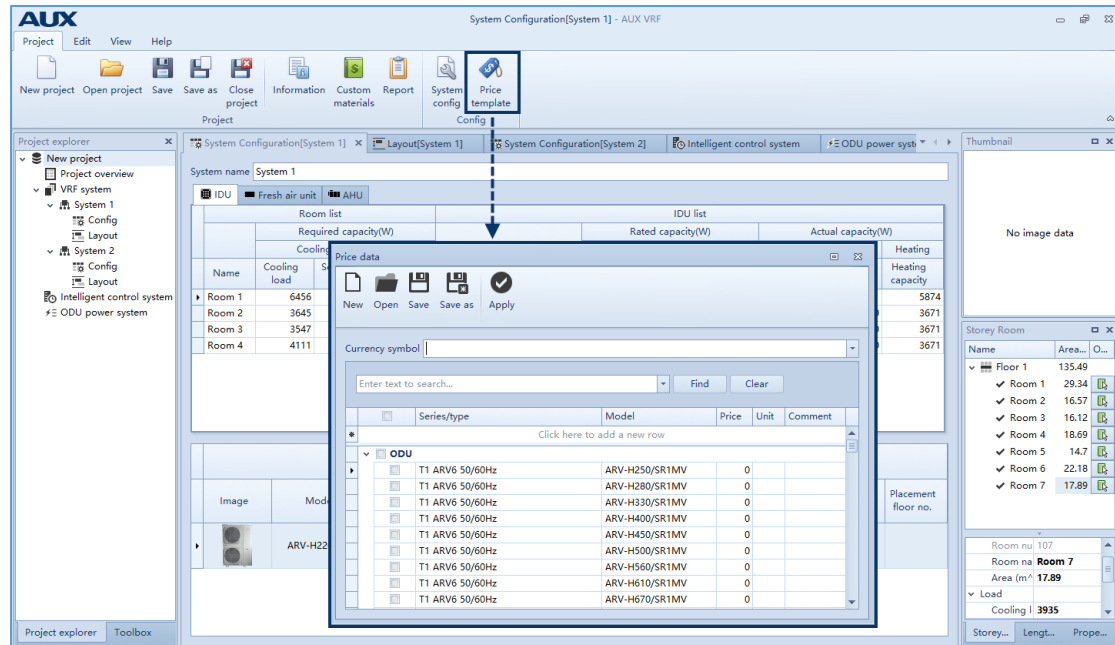


Power connection diagram auto generation



2.9. Project price quote

It will provide a project price quote after using the bidding template.



★Tip:

You need to manually create a bidding template for the first time to give a price quote.

★Tip:

You can pick and open bidding template when there are bidding template saved.

Procedures:

1. Left click New at the Price Template

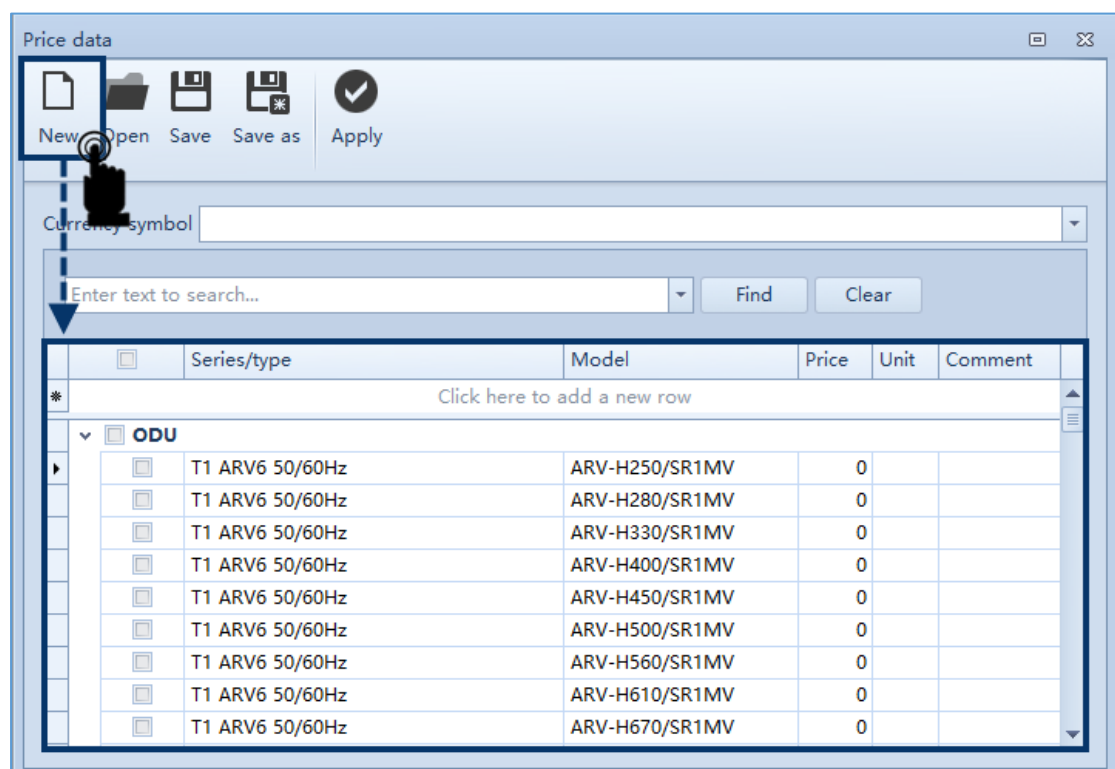
➡ 2. Left click Save to output the new price template and save as an EXCEL file.

➡ 3. Input price information of the facilities at the output EXCEL file , save and update the new EXCEL file

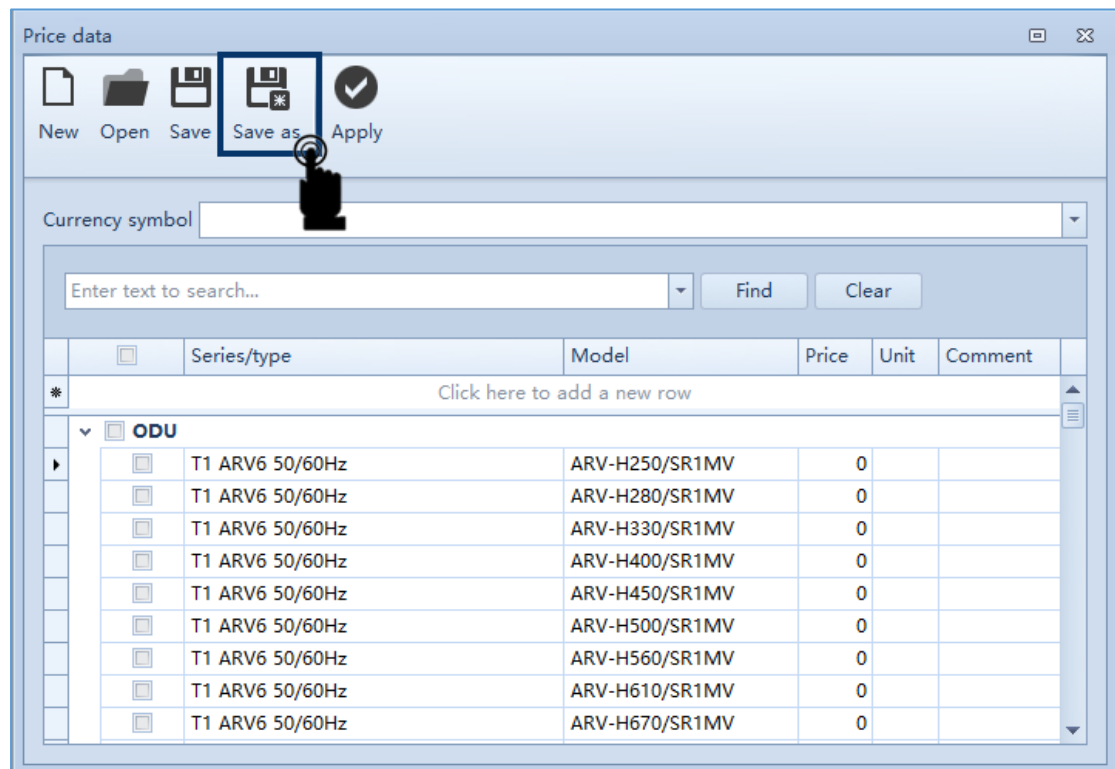
➡ 4. Go back to the software, choose price template to open the EXCEL file.

➡ 5. Left click Apply to load in the updated EXCEL file.

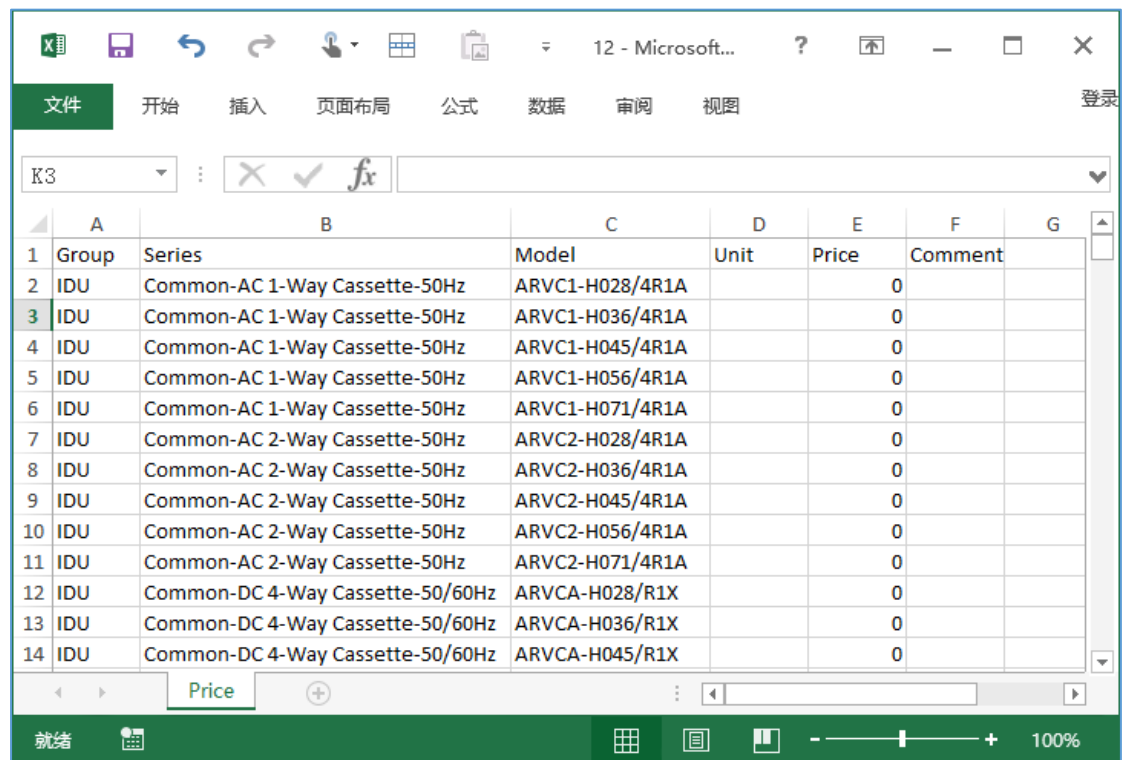
1、 Left click New to start a new template



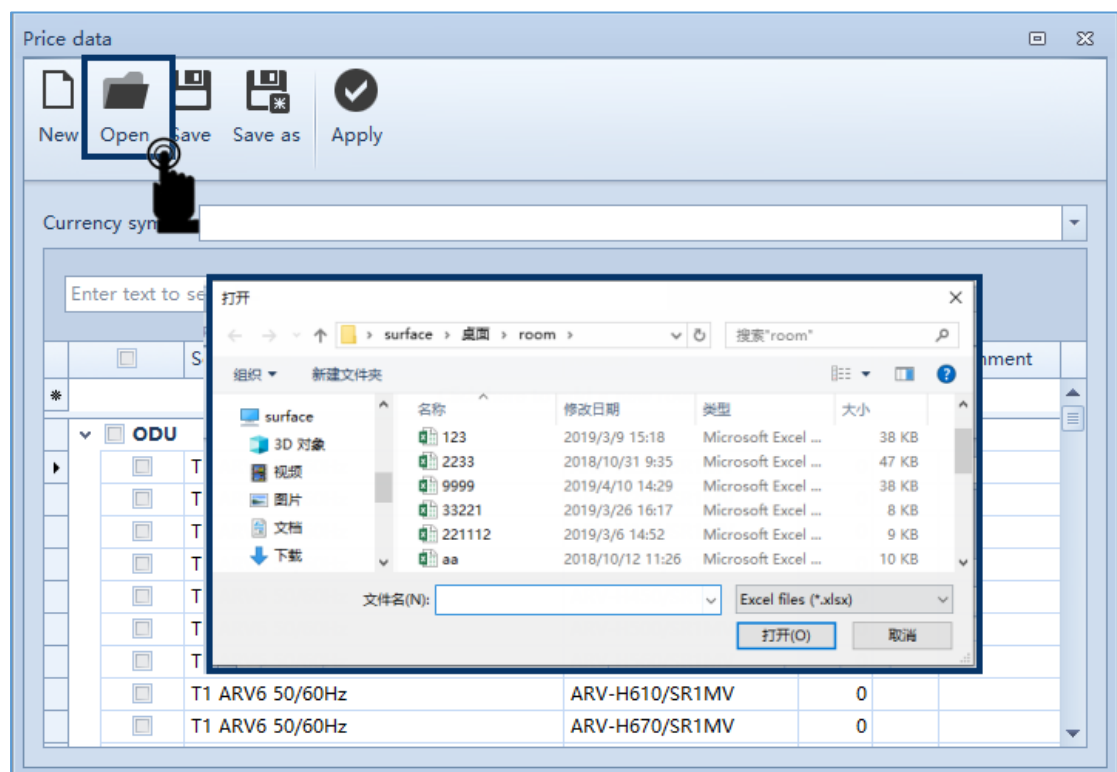
2、 Save the EXCEL file.



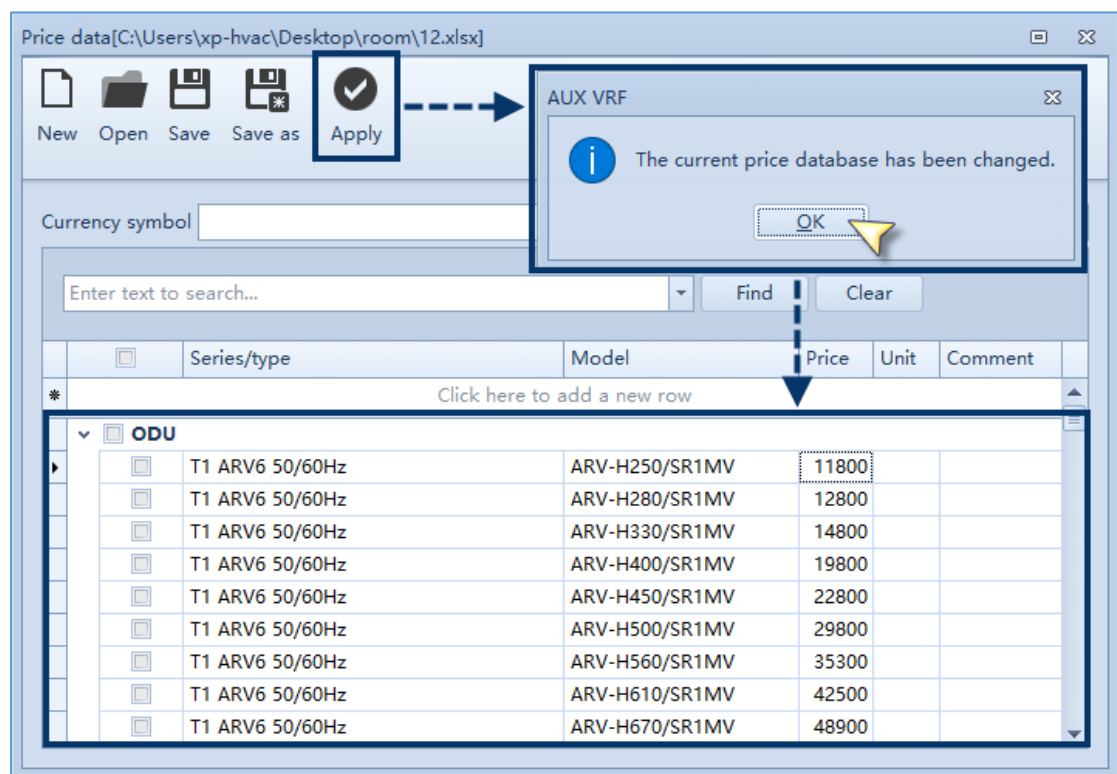
3、 Update the price of the facilities in the file.



4、Input the up dated EXCEL file

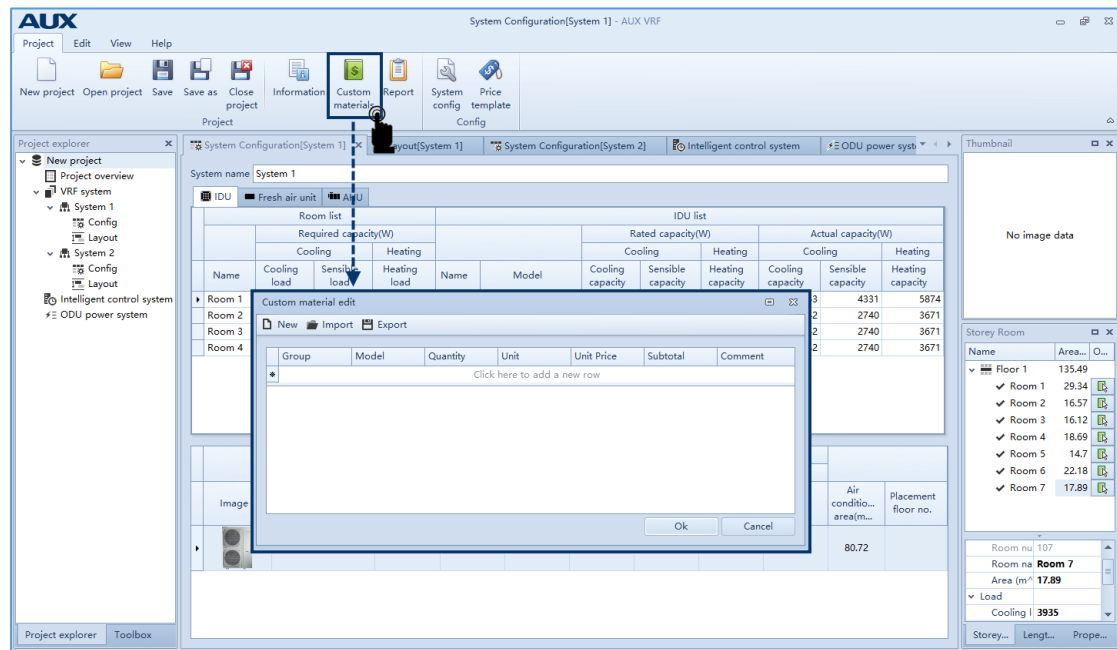


5、Apply the new price information



2.10. Custom materials

Custom materials can help to add new material information, which will be showed in the project report.



2.11. Project report

Left click Project report, it will auto generate the project report. The clients can set up the format of the report to decide if the price is visible or not, the text style of the report, the content of the report, and the water mark settings.

