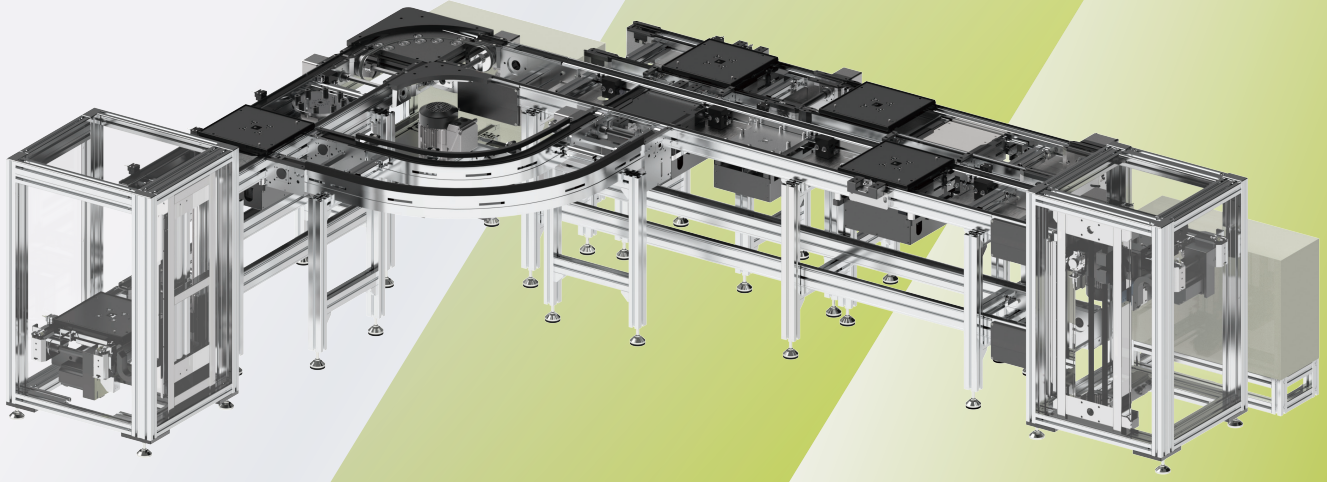
WORKPIECE PALLET CONVEYOR

LOCATE UNIT
LIFT AND TRANSFER UNIT

LIFT AND ROTATE UNIT
CURVE UNIT

LIFTER
TRANSPORTATION CONTOL

Vitrans



Vitrans EnginePro

Conveyor Layout Design Instrument

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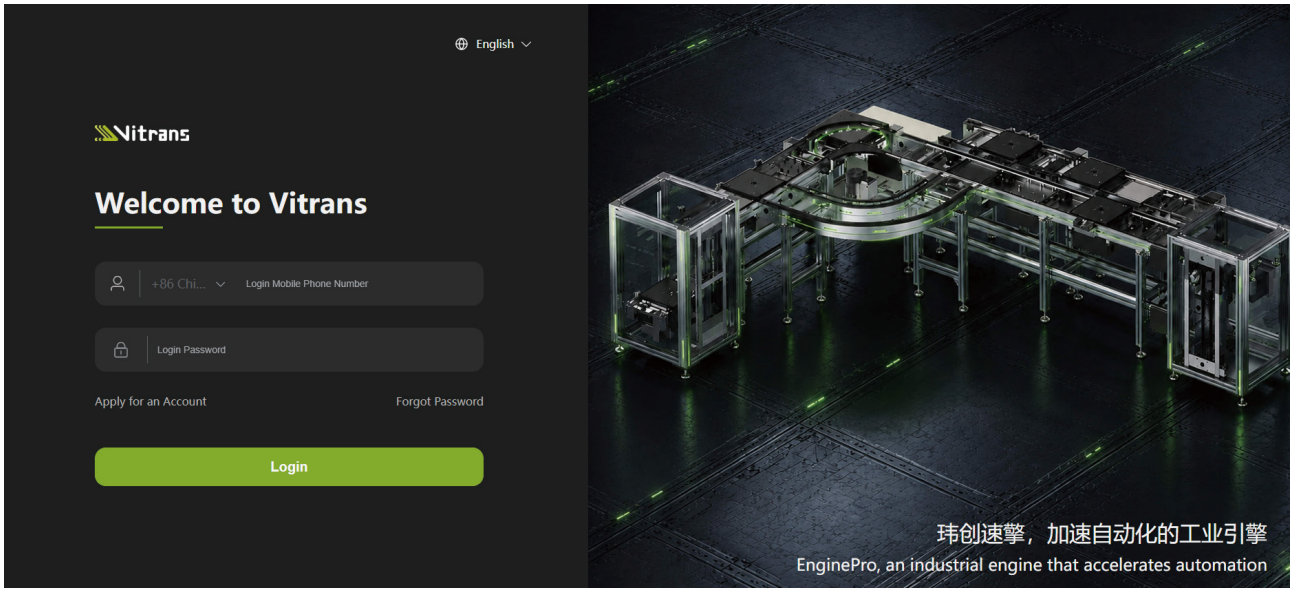
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1.Apply for a new account

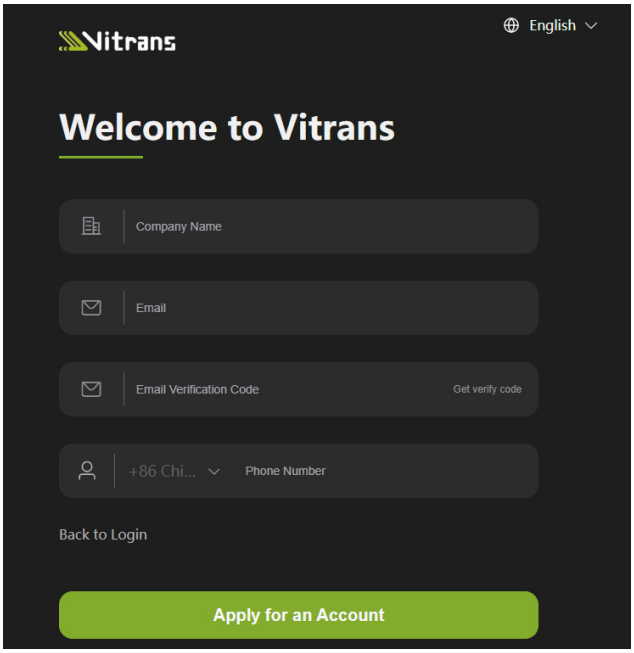
Vitrans EnginePro is an-online design software. You may visit the website (https://vitrans-conveyor.com/vitrans-engine-pro/) to apply for a new account or log in. Vitrans EnginePro is free-to-use software. Our goal is to bring convenience to engineers and help them gain deeper insights into our conveyor systems.



Click “  ” icon to select the system language.

Click “  ” icon to talk to us online if you have any questions.

For new users, please click “**Apply For an Account**” , then enter your information, including company name, email address and mobile phone number. (Please make sure the email address you-entered is correct; otherwise, you will not receive the verification code.)



Click “**Get Verification Code**”, then enter the verification code received in your email.

Click “**Apply for Account**”. Once your application is approved, your account-name and login password will be sent to your email.

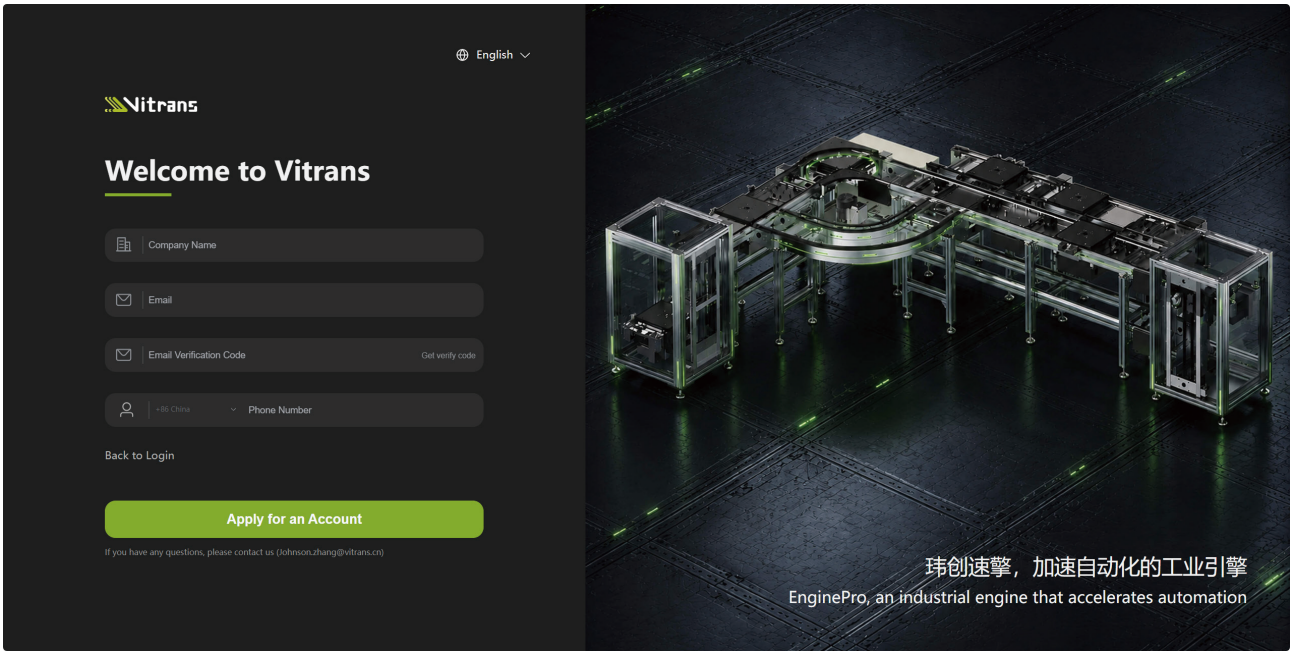
Email Verification Code

Use the verification code below to continue your vitrans account application:

331536

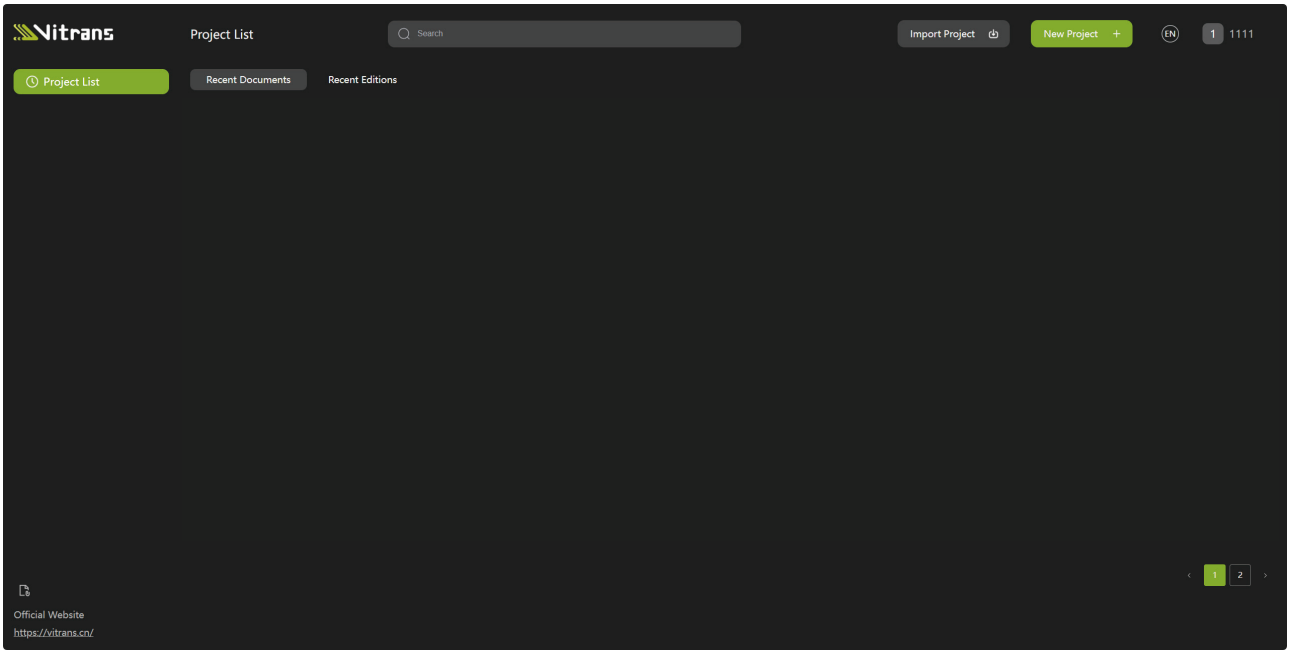
This code expires in 10 minutes. Do not share it with anyone. If you did not request this code, you can safely ignore this emal.

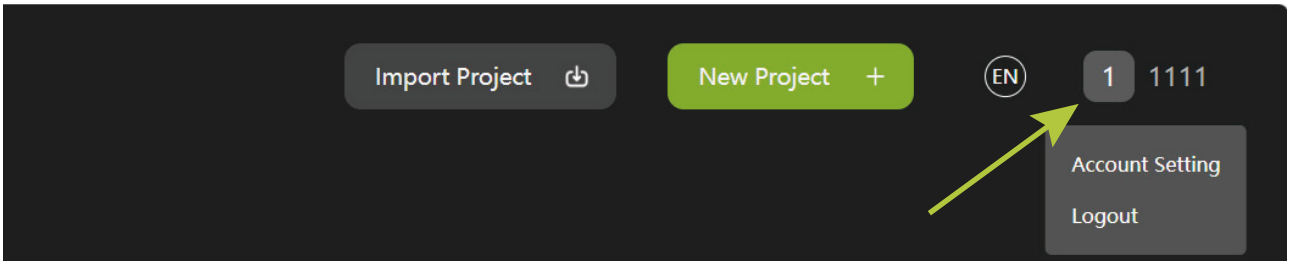
This is an automated message. Please do not reply.

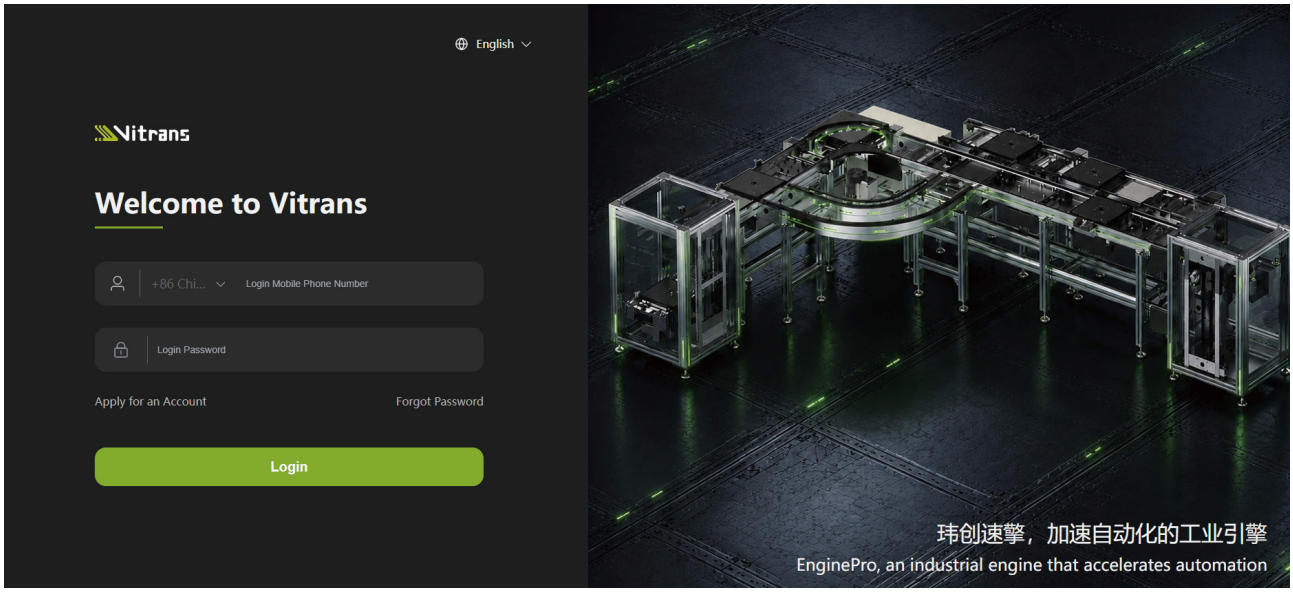


2.Change Password and Log Out

After logging into the home page, click the account icon in the upper-right corner. The options "**Account Settings**" and "**Log Out**" will appear. Click "**Account Settings**" to change your password, or click "**Log Out**" to return to the login page.

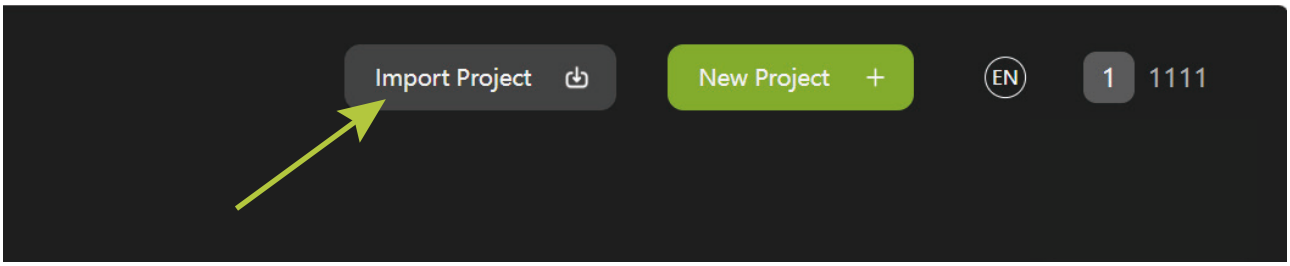






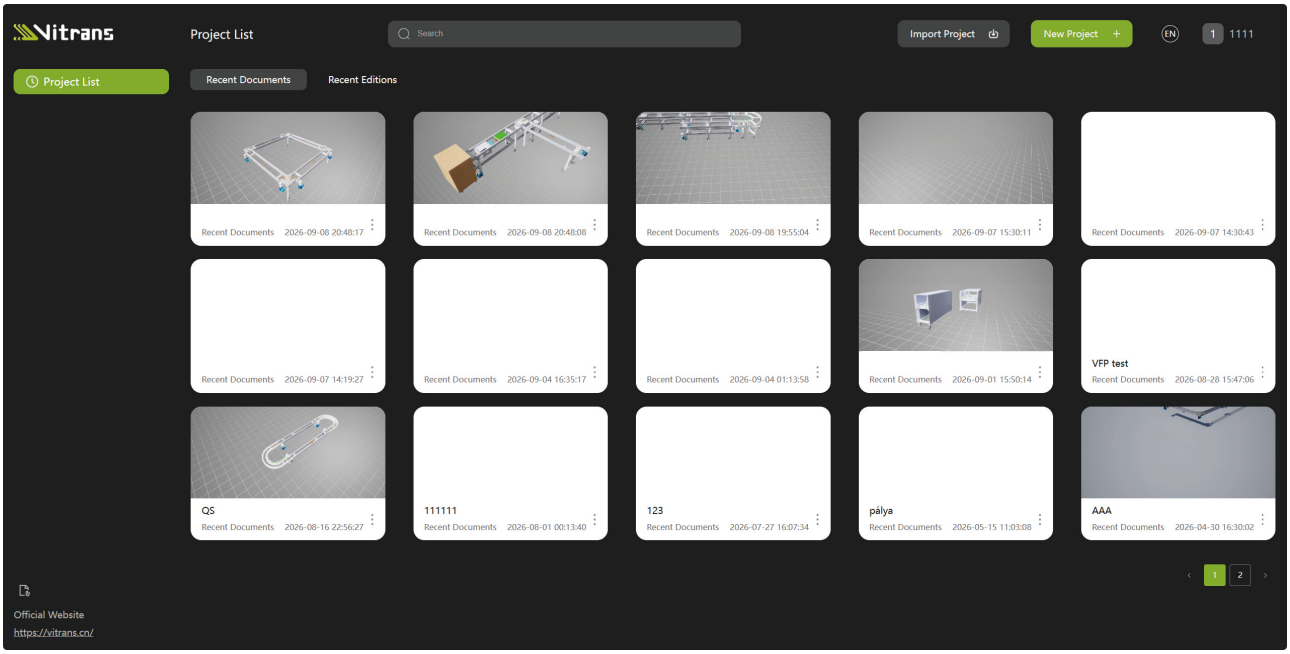
3.Import Project

After logging into the home page, click the "**Import Project**" icon in the upper-right corner. Select the "**JSON**" file you want to import to load your saved layout onto the home page. After successful import, the layout thumbnail will be displayed on the interface.

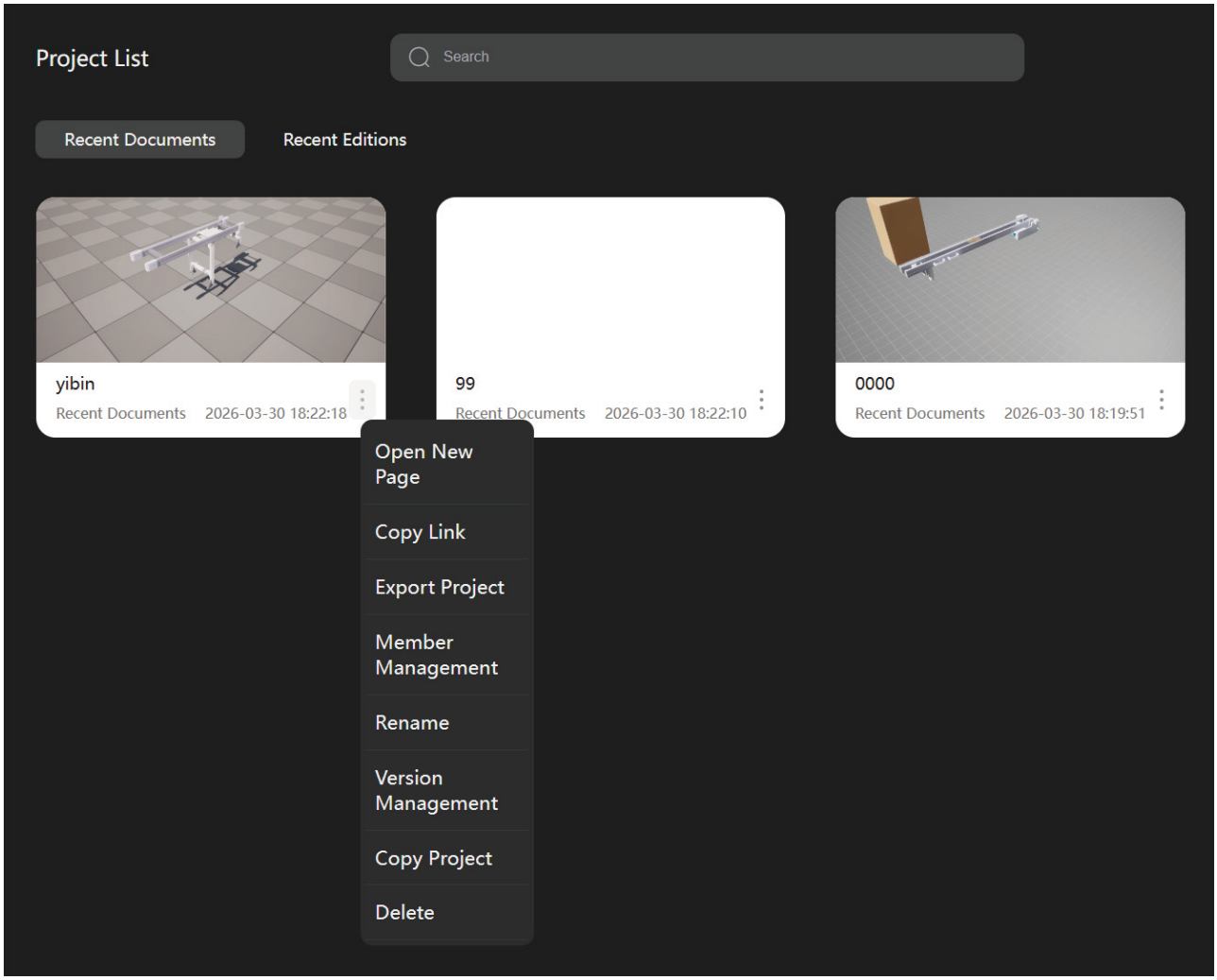


4.User Login and Home Page

Enter your valid account name and password, then click **Log In**. The home-page interface after login is shown below.



The recently-edited layout thumbnails are displayed in the "**Project List**". Click the icon at the bottom-right corner of the layout thumbnail, and the following function options will pop up.



"Open New Page" : Upon clicking, the layout will open in a new tab.

"Copy Link" : Upon clicking, the layout link will be copied, and you can share it with other users.

"Export Project" : You can export the layout as a "JSON" file. "JSON" files are compact and easy to store. You can re-import the "JSON" file in the software to edit it again or share it to other users.

"Member Management" : Configure access permissions for different users on this layout.

"Rename" : Rename the layout.

"Version Management" : dd notes for the layout version, making it easy to track how many times the layout has been modified.

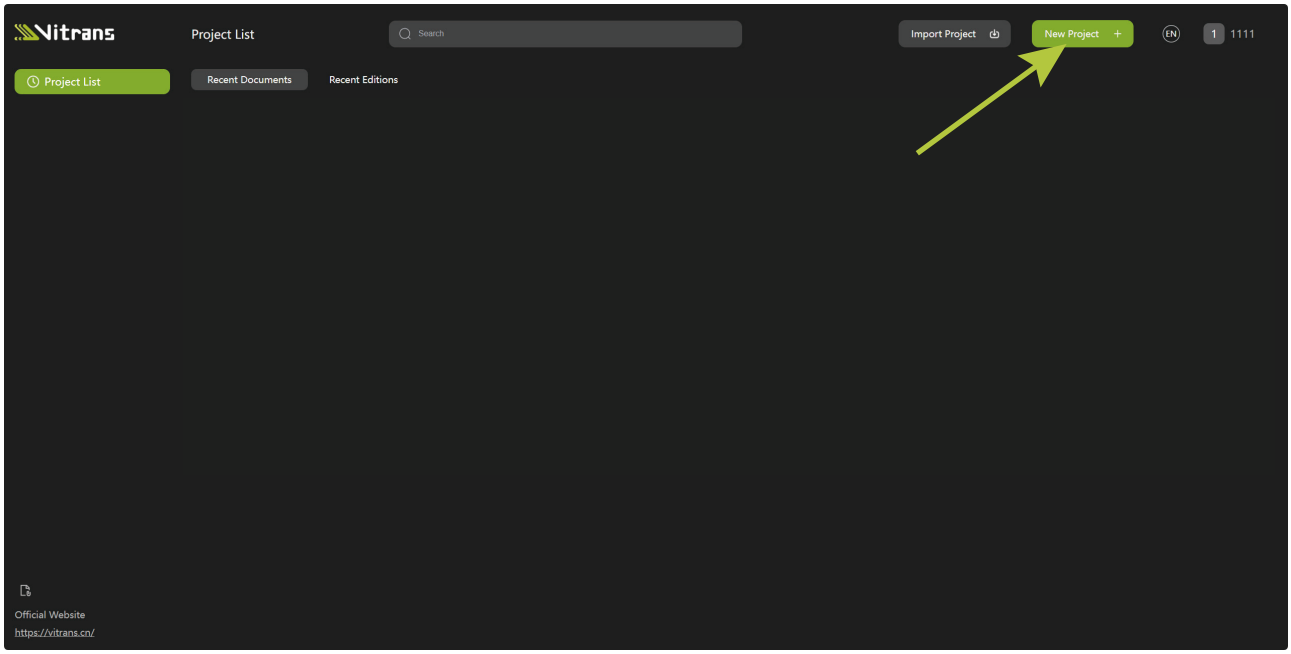
"Copy Project" : Copy and paste the layout onto the home-page interface. After copying, two identical layouts will appear on the home page.

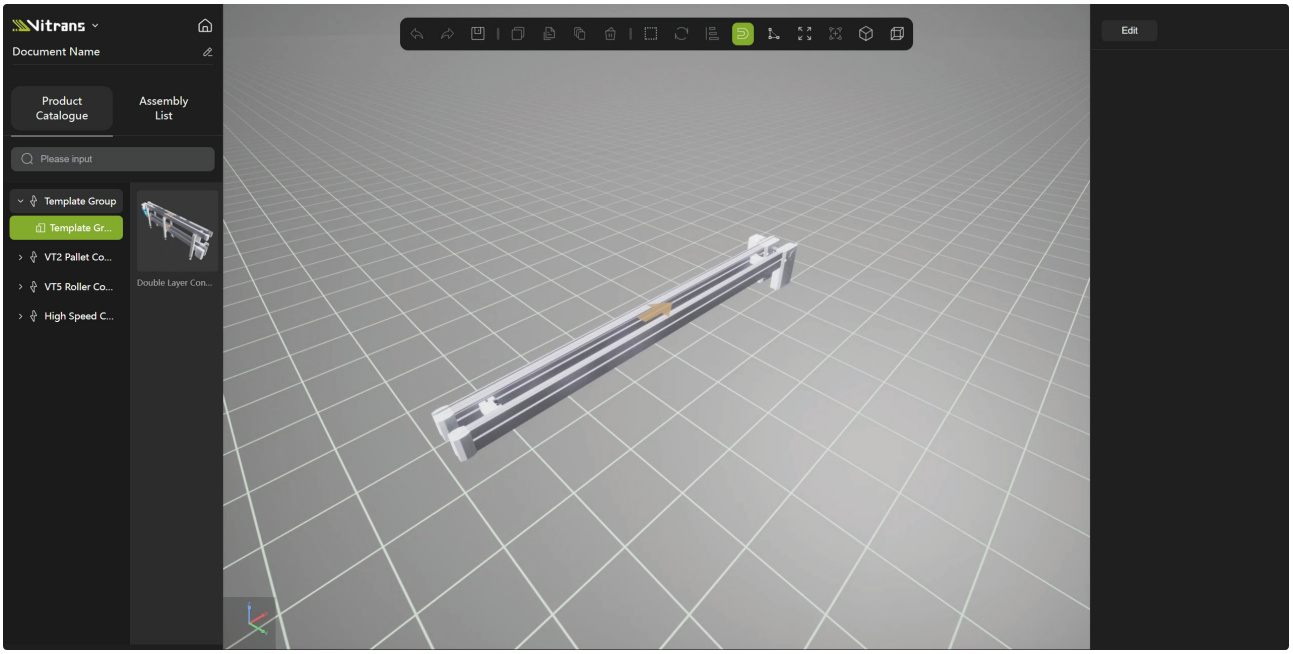
"Delete" : Delete the layout.

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5.Layout Design Interface Introduction

Click the layout thumbnail on the home page that you want to edit, or click the "**New Project+**" button in the upper-right corner to enter the layout design page.





5.1.Function Bar Introduction



: Undo

: Redo

: Save the layout

: Copy the selected object

: Paste the copied object

: Duplicate the selected object into multiple copies

: Delete the selected object

: Box-select multiple objects

: Rotate the selected object. (For precise rotation, select the object and adjust the angle by modifying the coordinate-axis values.)

: Align the selected object with the reference object. First select the object to be moved, click the align button, and then click the fixed reference object.

: Toggle button for assemble function. The button remains lit when the assemble function is enabled. Automatic assembly occurs only when two objects are brought close to each other.

: Measure the distance between two selected points.

: Click to zoom the entire view, overview the whole layout from the current perspective.

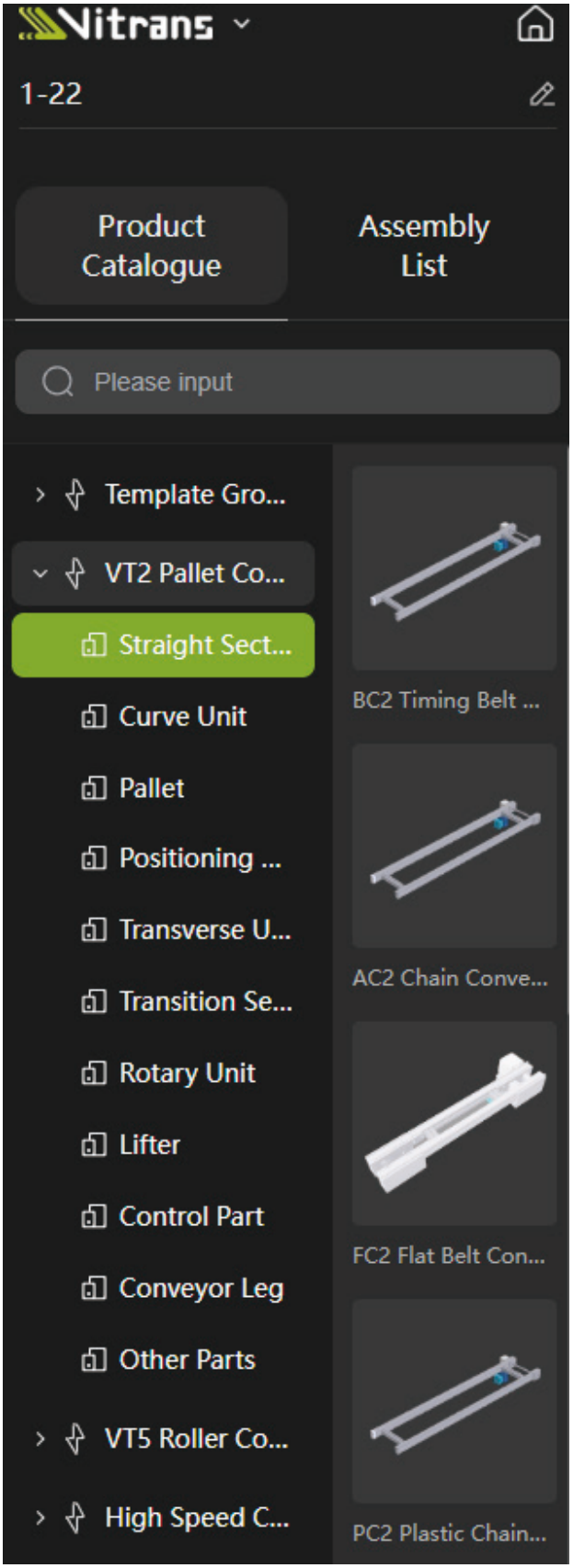
: Click to zoom and show a full view of the selected object from the current perspective.

: Click to switch to the isometric view.

: Select among different views.

Vitrans

5.2.Navigation Bar Introduction



Product Catalogue:

The Product Catalogue contains various modules for setting up conveyor systems. The left side shows product categories, while the right side displays specific module models under each category. To use a module model for layout design, simply drag-and-drop it onto the layout design interface.

Assembly List:

The Assembly List displays all model items in the layout, including assembly and unassembled modules. When an assembly or module is selected in the equipment list, the corresponding model in the layout will be highlighted and set to the selected state.

Click the “  ” button to hide or show assembled groups or components.

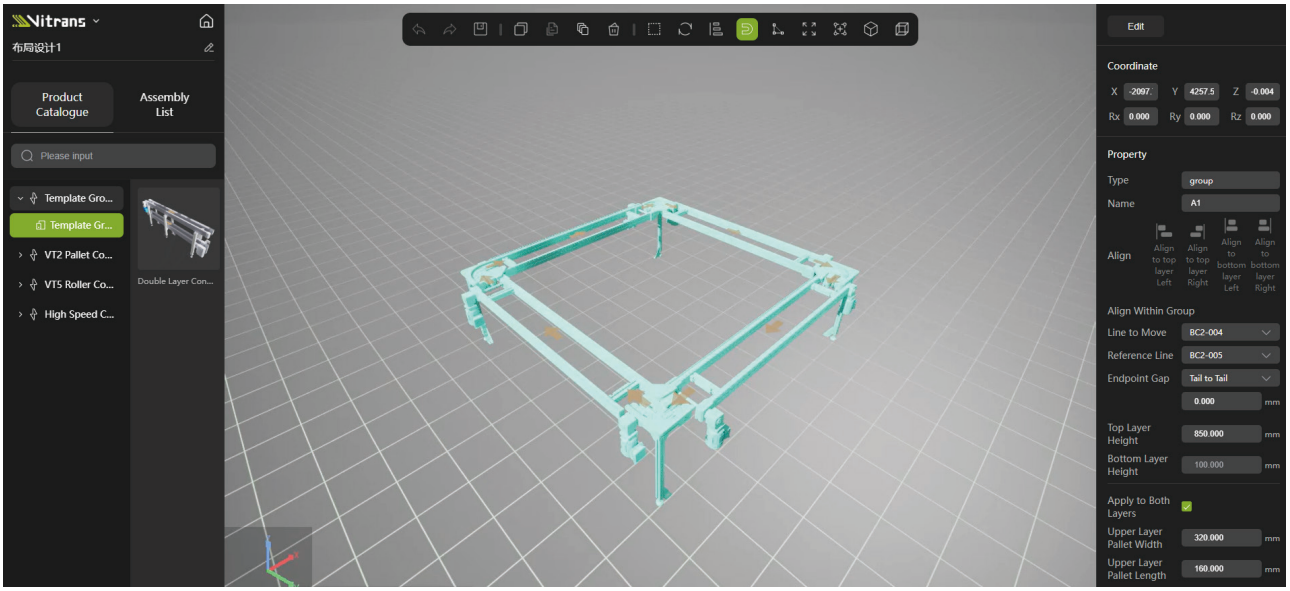
Search Bar:

When in the Product Catalogue interface, enter the desired module name or code in the search bar to quickly locate the corresponding module.

When in the Assembly List interface, enter a desired assembly/module name or code in the search bar to filter and list the details of that assemblies/modules already used in the layout.

5.3.Edit Interface Introduction

5.3.1.Edit Interface of assembly



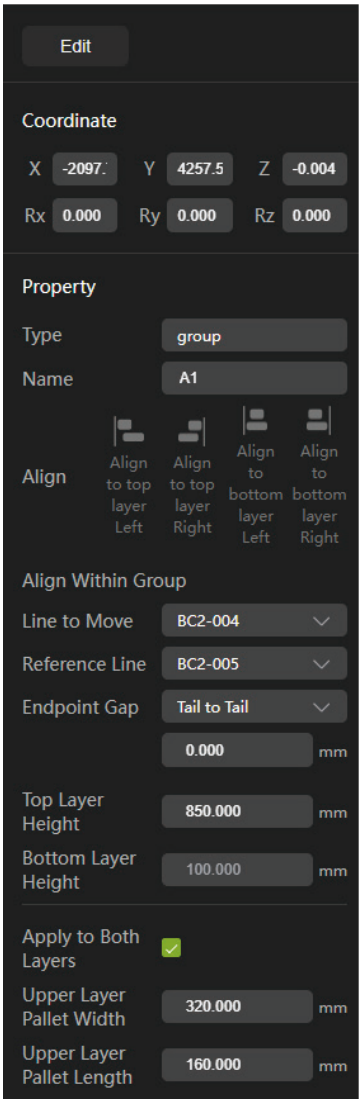
Coordinate:

Can be used to move the assembly in the X, Y, and Z directions, while Rx, Ry, and Rz are used to adjust the angle of the assembly. Accurate adjustment can be made by inputting numerical values.

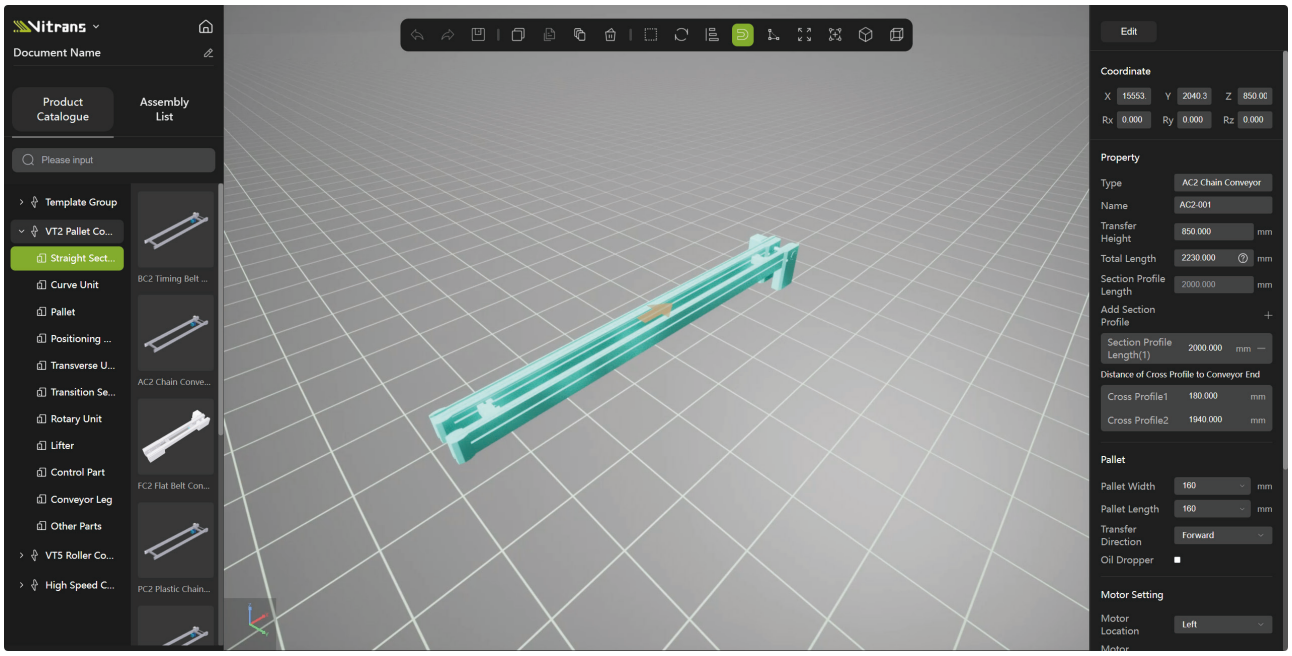
Property:

Can modify the conveying height, matching pallet dimensions and the name of the assembly.

Note: If the conveying system needs to adapt to custom pallet dimensions, do not select preset options during parameter setup. Directly enter the required custom dimensions in the size input field.

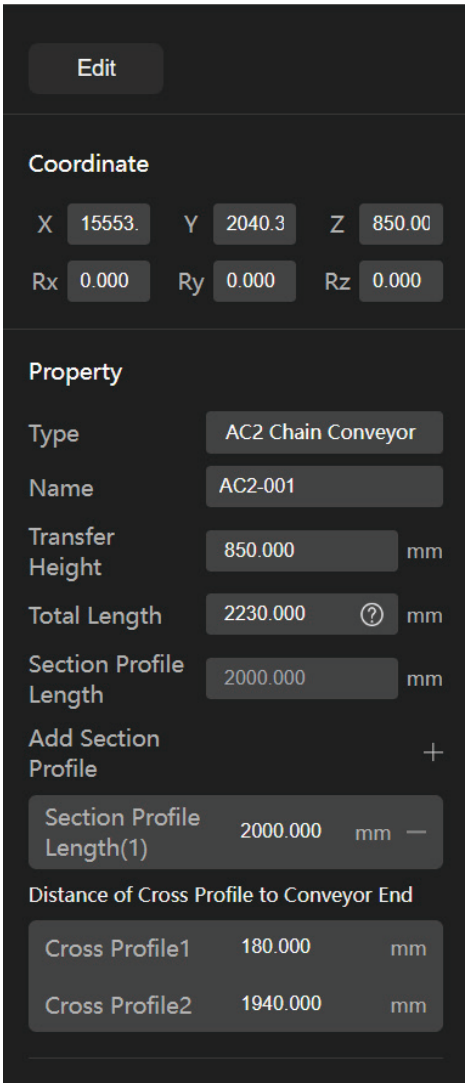


5.3.2.Edit Interface of module(Unassembled)



Coordinate:

Can be used to move the module in the X, Y, and Z directions, while Rx, Ry, and Rz are used to adjust the angle of the module. Accurate adjustment can be made by inputting numerical values.



Property:

The following main properties of the modules can be modified. (Available properties vary for different module types.)

1)Module width and length

2)Conveying height

3)Conveyor section profile length

4)Conveyor cross profile position

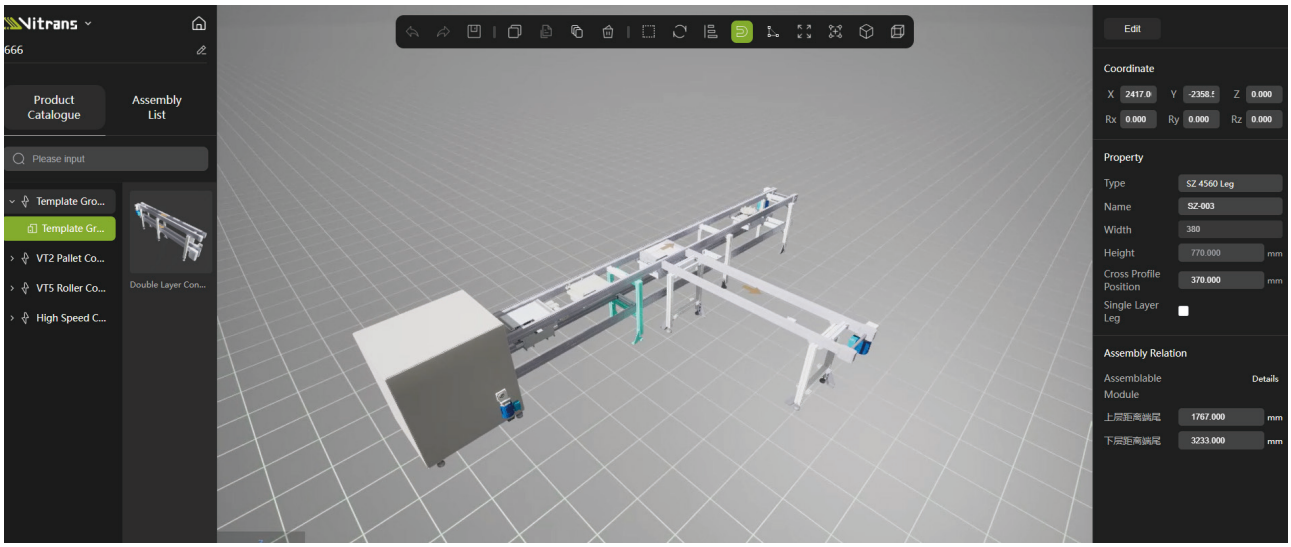
5)Conveying direction and speed

6)Motor location, angle and brand

7)Create leg suppot

Note: If the conveying system needs to adapt to custom pallet dimensions, do not select preset options during parameter setup. Directly enter the required custom dimensions in the size input field.

5.3.3.Edit Interface of module(Assembled)



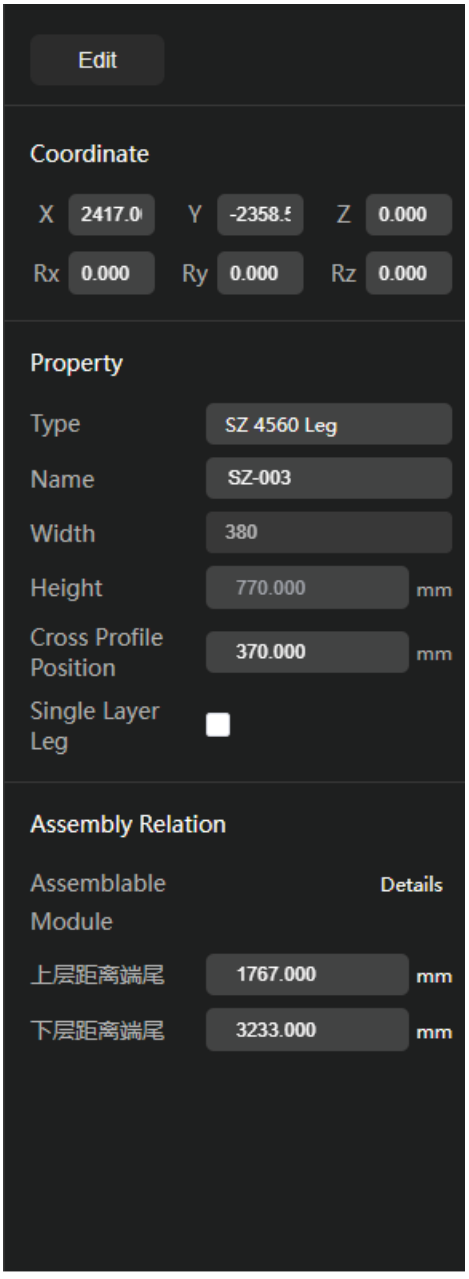
Coordinate:

Can be used to move the module in the X, Y, and Z directions, while Rx, Ry, and Rz are used to adjust the angle of the module. Accurate adjustment can be made by inputting numerical values.

Property:

In addition to modifying the properties associated with individual modules mentioned above, you can also adjust their relative positions in the assembly.

Note: If the conveying system needs to adapt to custom pallet dimensions, do not select preset options during parameter setup. Directly enter the required custom dimensions in the size input field.



6.Common Shortcuts for Layout Design

Select a single module in the assembly:

Hold **Ctrl** → Click the module you want to select

Copy and paste (Assembly or unassembled module) :

Option 1 : Select an assembly or a unassembled module → Hold **Shift** and drag the assembly or unassembled module.

Option 2 : Select an assembly or a unassembled module → **Ctrl+C** → **Ctrl+V**

Copy and paste (Assembled module) :

Option 1 : Hold **Ctrl** → Click the module you want to select → Hold **Ctrl+Shift** → Drag the selected module

Option 2 : Hold **Ctrl** → Click the module you want to select → **Ctrl+C** → **Ctrl+V**

Delete (Assembly or unassembled module) :

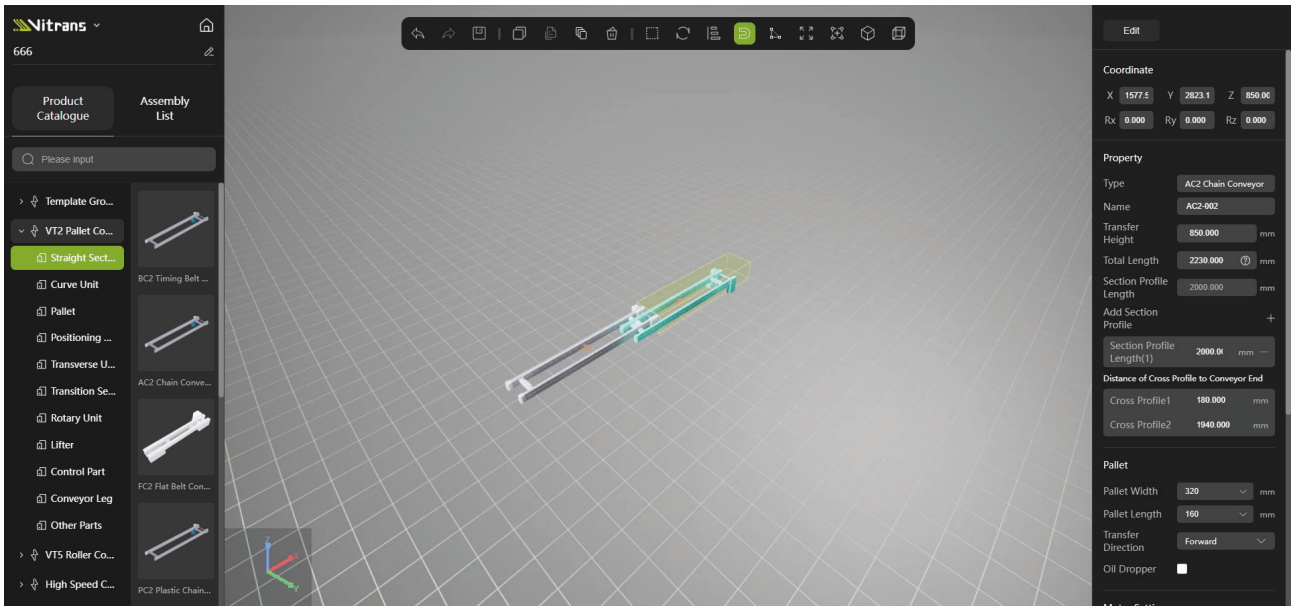
Select an assembly or a unassembled module → **Del**

Delete (Assembled module) :

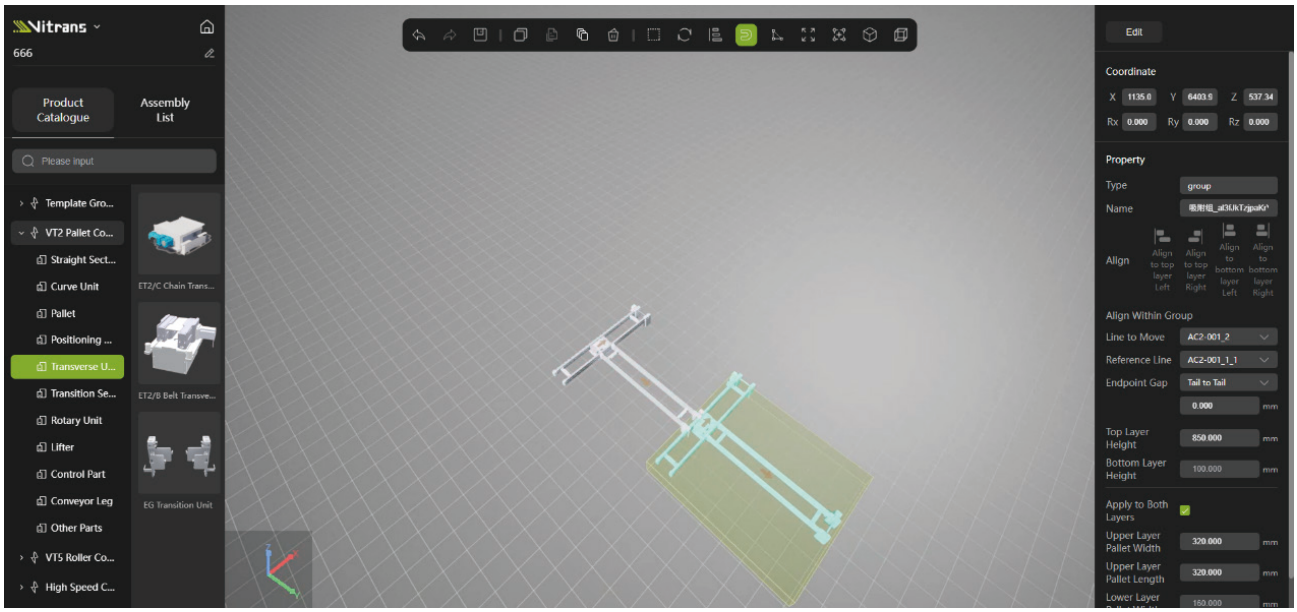
Hold **Ctrl** → Click the module you want to select → **Del**

7.Assemble

1) Drag the module/sub-assembly near another module/sub-assembly. When the yellow highlighted assembling box shows up, release the module/sub-assembly to finish assembling.



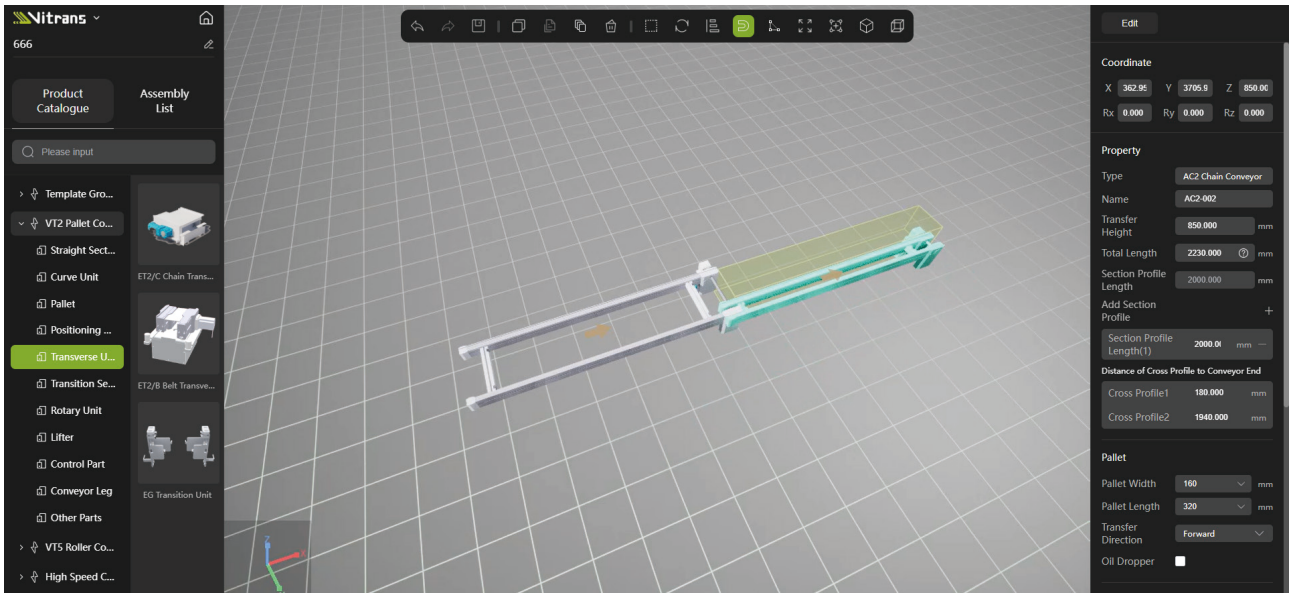
Assemble a module to another module



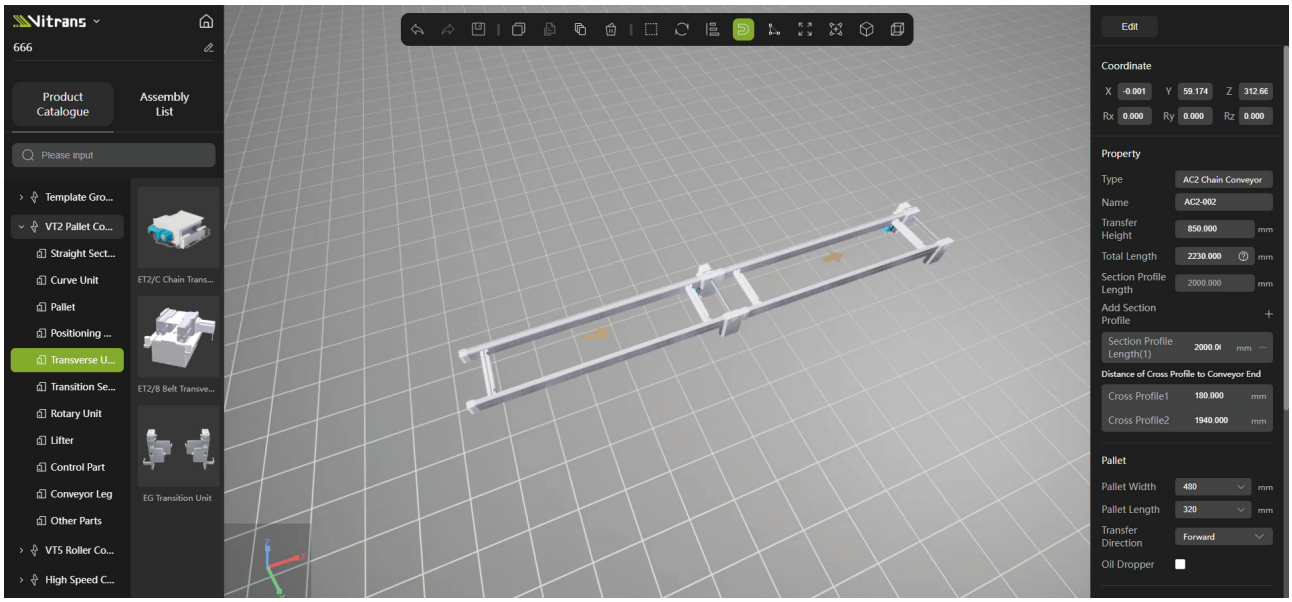
Assemble a sub-assembly to another sub-assembly

2) When you assemble one module to another module, its specifications automatically adapt to the target module.

For instance, if you assemble a 160 mm-wide conveyor to a 480 mm-wide conveyor, the 160 mm conveyor will automatically resize to 480 mm.



Before assembling

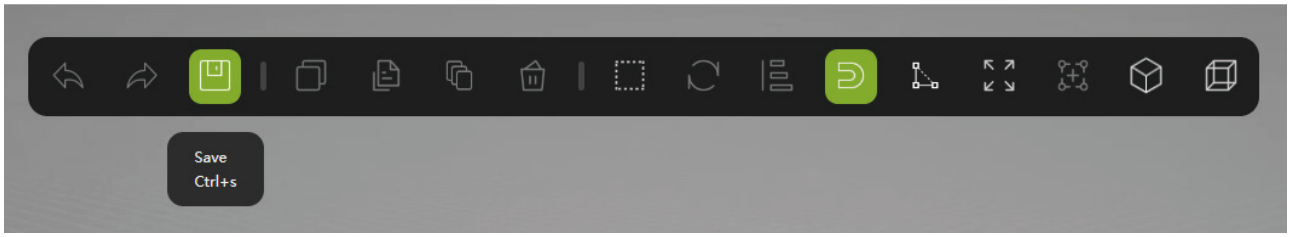


After assembling

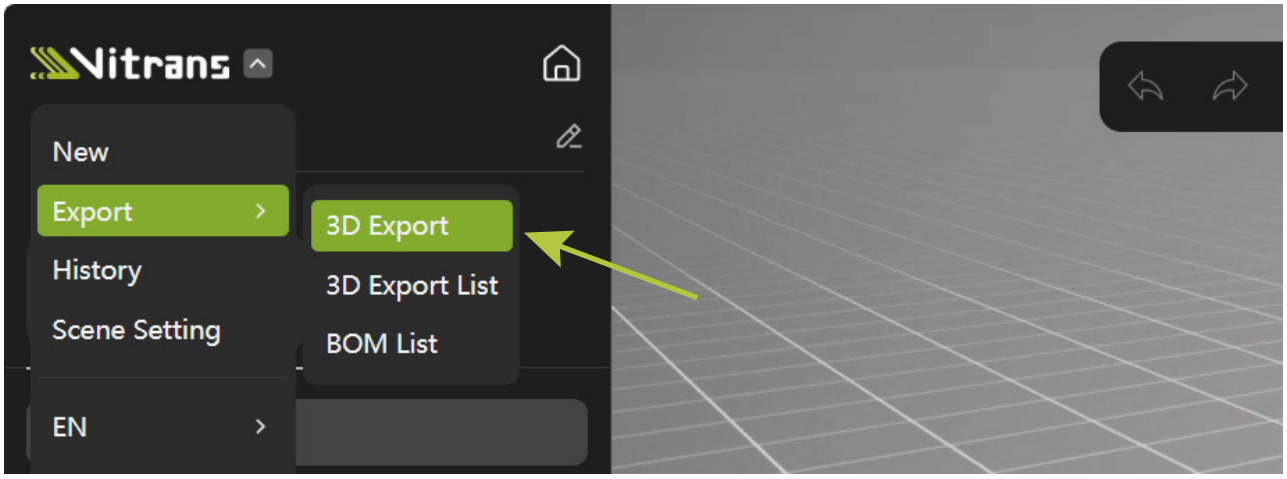
3) To release the assembly relationship, hold Ctrl, select the target module, and drag it out of the assembly.

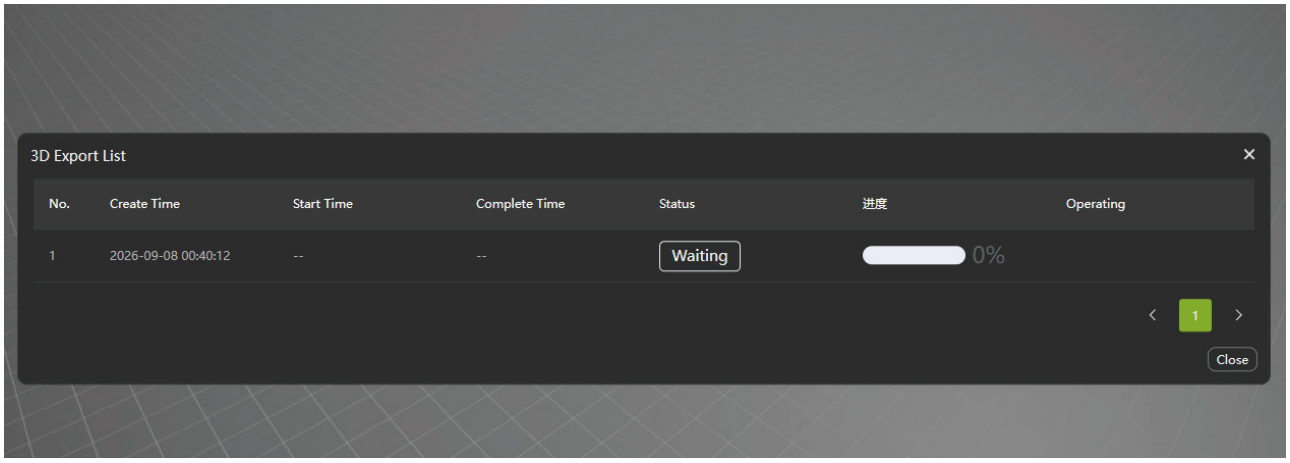
8.Save and export the design

Save the design: Click " " to save after finishing the design. The saved design will appear on the home-page interface, where you can open, view or edit it later.



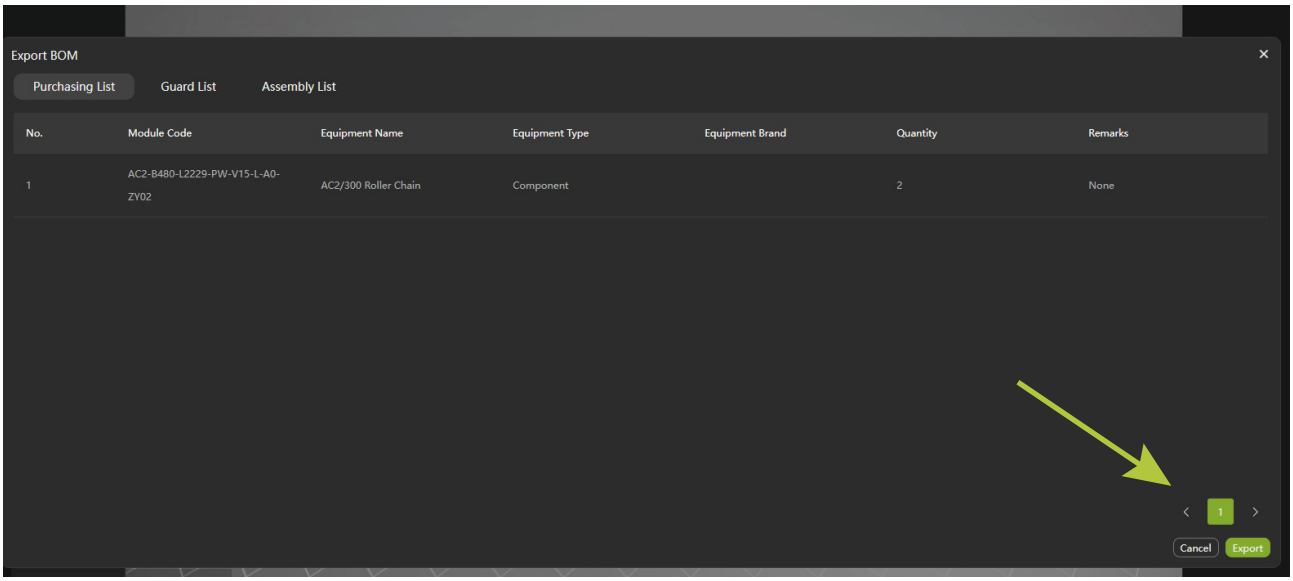
Export STP file: After completing the design, click " " to save your work. Click " " icon at the top-left corner of the design interface, select **Export** → **3D Export**, and the designed layout can be exported as an STP model for viewing in other software.



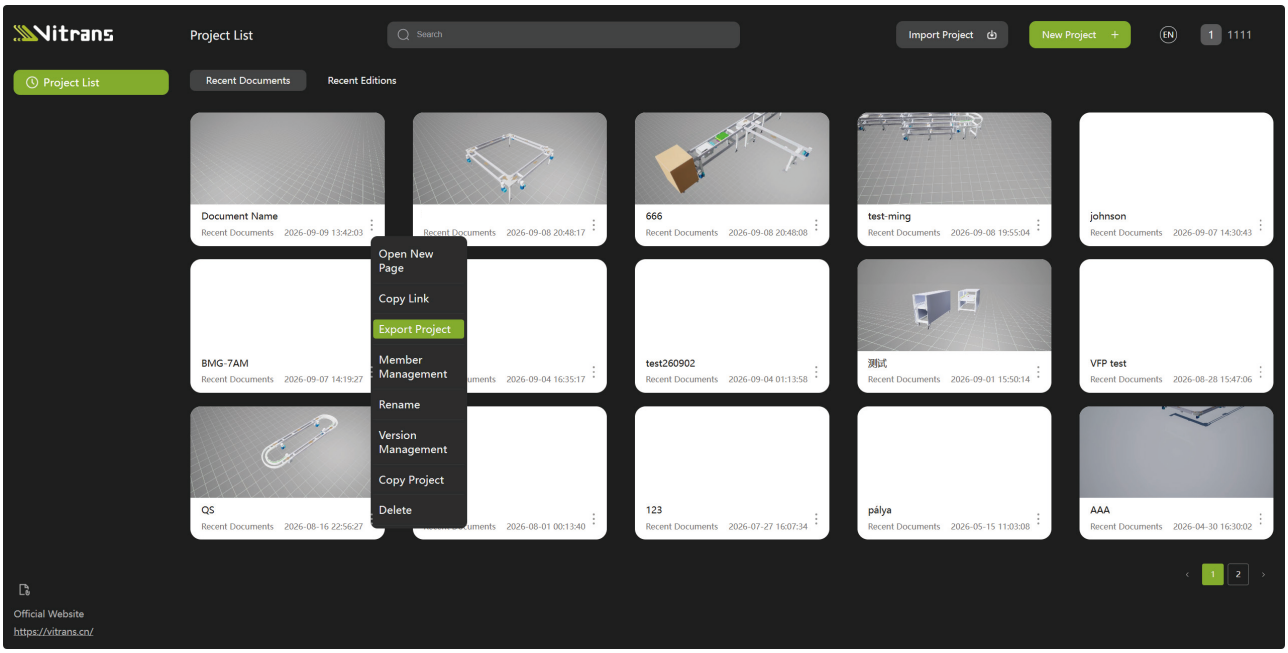


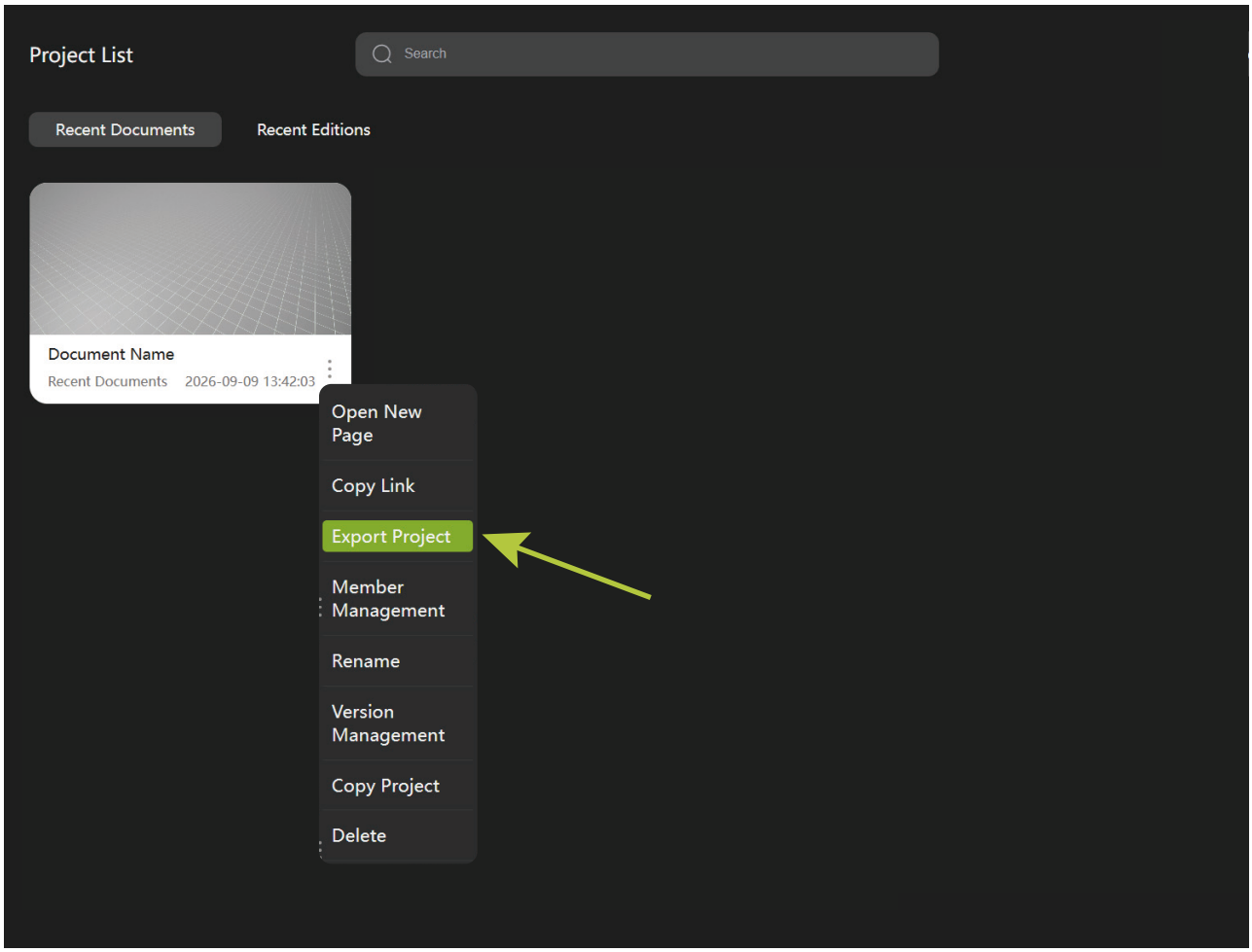
Export BOM List: After completing the design, click“  ”to save your work. Click “  ” icon at the top-left corner of the design interface, select **Export** → **BOM List** → **Export**. This will generate the module list (Excel file) required for the layout, which can be sent to Vitrans for quotation.

Note: When the remark column shows "Some parameters are not selected", please complete the parameter selection for each module first. This prevents unclear model or specification descriptions in the exported list.



Export JSON Layout File: After completing the design, click“  ”to save your work. Return to the home page interface and click “ ” icon at the bottom-right corner of the layout thumbnail to export the JSON file.





9.Notes

1) During layout design, it is recommended to save your work regularly to avoid loss of design results caused by network issues.

2) The system will force log-out if no operation is performed within 30 minutes. Please save your work in time if you need to pause the design.

3) Do not share your account information with others. Otherwise, others logging in to your account may cause unexpected log-out and loss of design data.

4) Should you have any questions during usage, please feel free to contact us: qingsong.xu@vitrans.cn