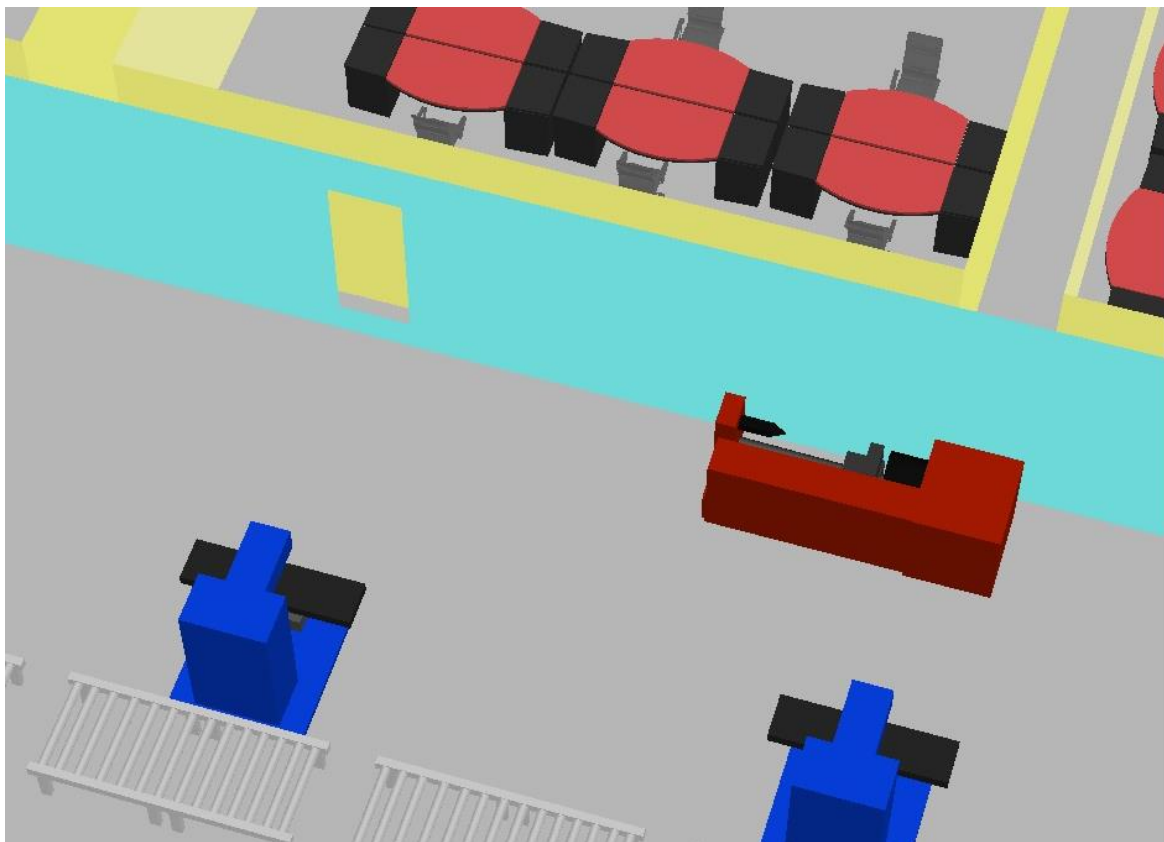


Device Layouter for Windows

User's Guide



Realinite Co., Ltd

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Chapter 1 - Introduction

1 Introduction

1.1 Main Features

- Possible to Install Your Own 3D Data

You can install your own 3D data into this system, and place them on a floor. Your data would be from a 3D CAD system or a free data from a 3D data sharing service.

You can expect wide variety of usage scenarios, as those geometries would be furniture in a house or an office, or machines in a factory.

- Specific Application to Install Your 3D Data Is Available

You have a specific application which allows you to install your own data easily.

You can create your own user interface by modifying the tabs and the sequence of devices on each tab. It would be better to place frequently-used device at the top of a tab. And also, any image which shows your 3D geometry can be added.

- Possible to integrate with Virtual Reality Viewer

You can start Virtual Reality Viewer by selecting a menu in this software, after you create your own 3D data. It is to evaluate your data with 3D stereoscopic rendering result.

1.2 How to Use This Manual

Refer to chapter 4 first, so that you can understand a simple scenario to use this system. And then, refer to the other chapters you are interested in.

Chapter 2 - Installation

2 Installation

2.1 Prerequisite

The prerequisite of this system is as follows.

Item	Description
OS	Microsoft Windows 10 Microsoft Windows 8.1(64bit / 32bit)
CPU	Enough to use your OS. Intel Core i3 or later recommended.
Memory	1GB or greater. The greater your data is, the larger the size is.
Graphic	Graphic boards which supports OpenGL mandatory. An on-board board should be enough for small data. If you use a huge data, a high-performance board, for example from NVIDIA, is recommended.
Display	Enough to use your OS. Resolution : 1024 x 1068 or greater.
Hard Disk	Minimum Free Area Size : 100MB More free area is required to save your data created by this software.
Mouse	3 buttons mouse for easy navigation Middle button scroll for easy zooming operation
Internet Connection	Mandatory for license detection

Some features can be used without any license. We recommend you to try this software before your purchase.

2.2 Installation Procedure

Follow the steps below to install this software.

Notice :

Administrator authority is required to install this software. Log in as a user with administration authority.

This is to prepare the software.

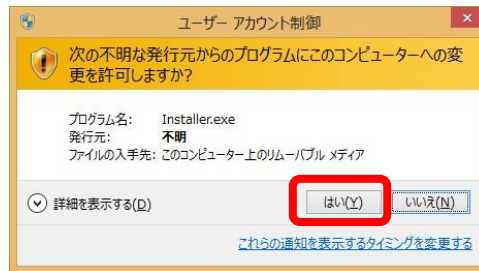
(1) Unzip the zip file.

(2) Open Explorer, and confirm the contents in the unzipped folder.

名前	更新日時	種類	サイズ
BasicSettings	2017/12/14 10:42	ファイル フォルダー	
Programs	2017/12/14 13:11	ファイル フォルダー	
Installer.exe	2017/12/14 14:20	アプリケーション	1,879 KB
Interop.IWshRuntimeLibrary.dll	2017/12/12 15:46	アプリケーション拡張	48 KB

(3) Double click on Installer.exe in Explorer. The installation program starts.

(4) When you see User Account Control dialog box, say <Yes>.



(5) Setup page opens. Press <Install> button.



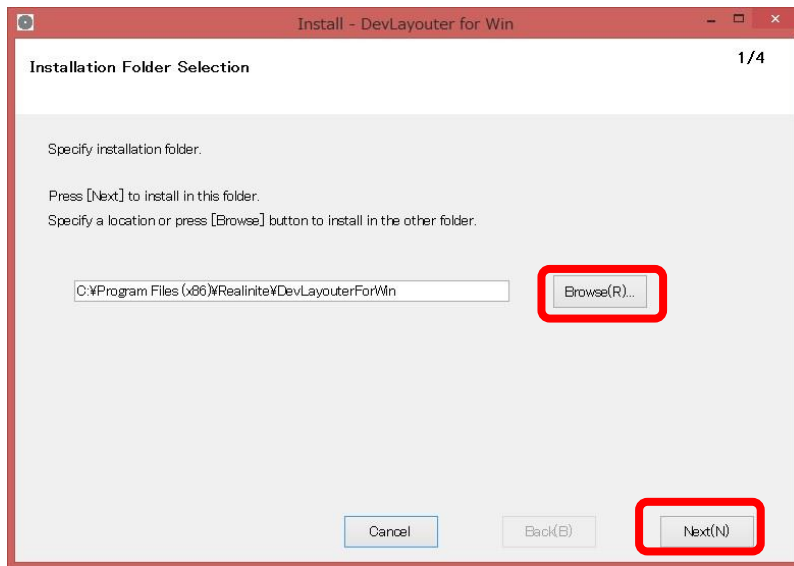
(6) Installation Folder Selection page opens.

Specify a location where you install the program.

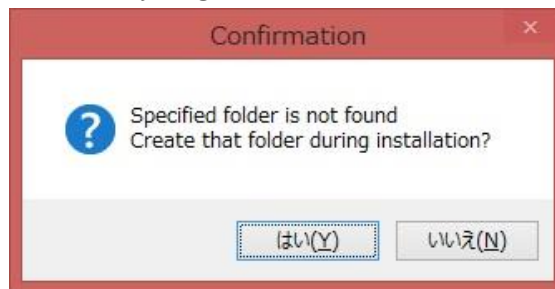
When you change the location, press <Browse> button, and select a folder.

You can also specify the location, by filling the text box.

Once you finalized your setting, press <Next> button.

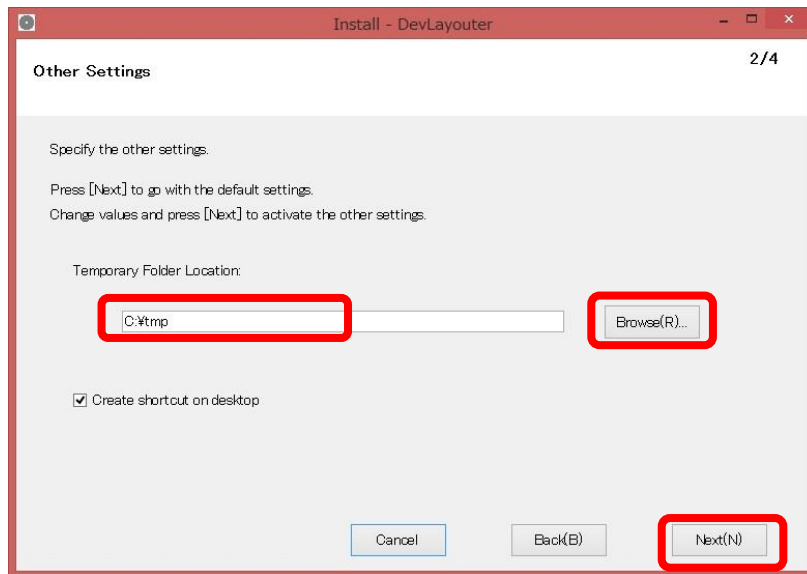


- (7) If you specify a not-existing folder, Confirmation dialog box opens.
By pressing <Yes> button, you activate the current setting.
By pressing <No> button, you go back to the folder selection.



- (8) Other Settings Page opens.
The following settings can be specified.
- Temporary Folder Location
Specify the location for a setting file or others.
 - Create shortcut on desktop
Specify whether you create a shortcut on desktop or not, during installation.

Once you finalize your setting, press <Next> button.

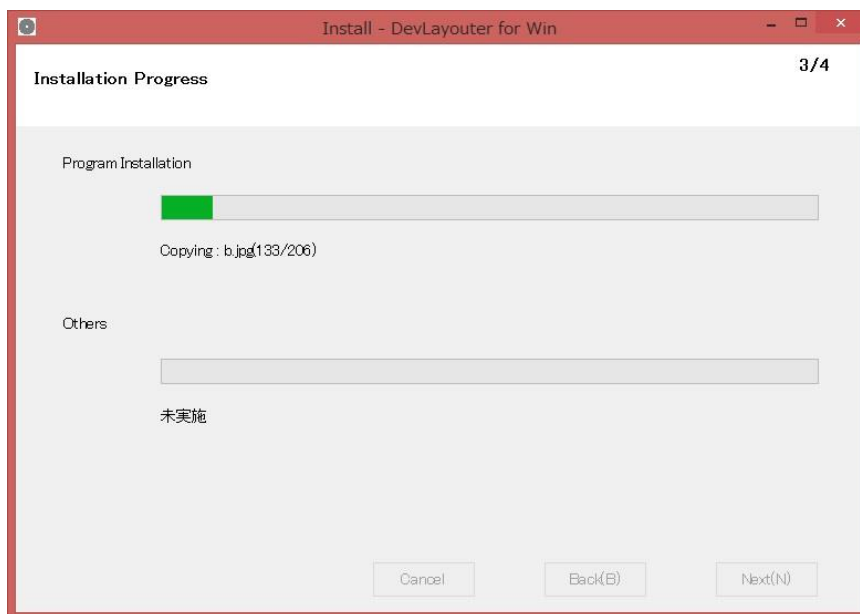


(9) Confirmation dialog box opens.

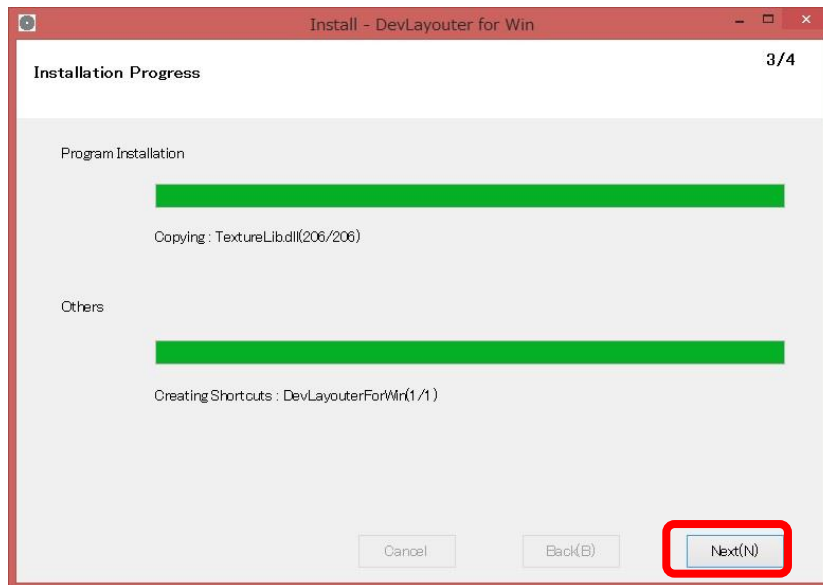
Press <Yes> button.



(10) The installation starts.

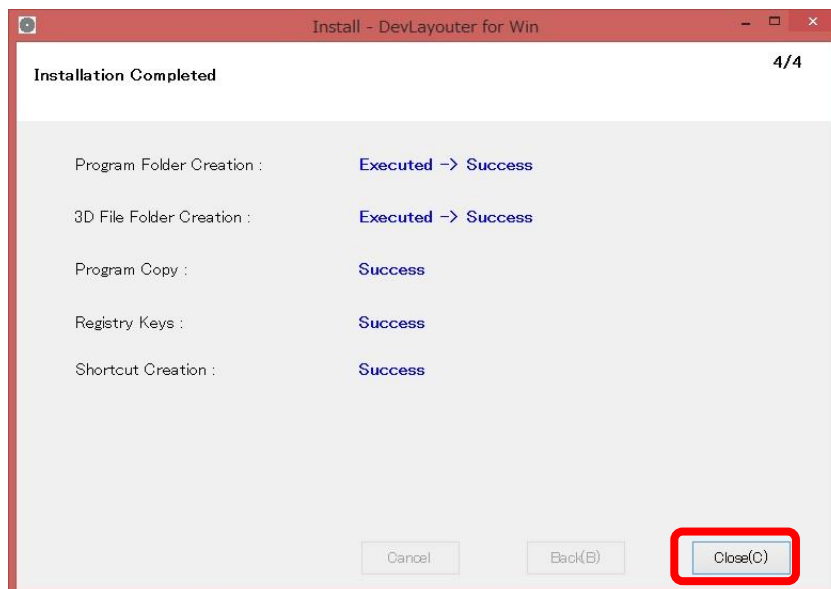


(11) Once the installation ends, <Next> button changes to be active. Press this button.



(12) Installation Completed page opens.

The installation result is shown. Confirm no error occurs, and press <Close> button.



2.3 Uninstallation

The following steps are to delete this software.

- (1) Double click on Installer.exe in Explorer. The installation program starts.
- (2) When you see User Account Control dialog box, say <Yes>.



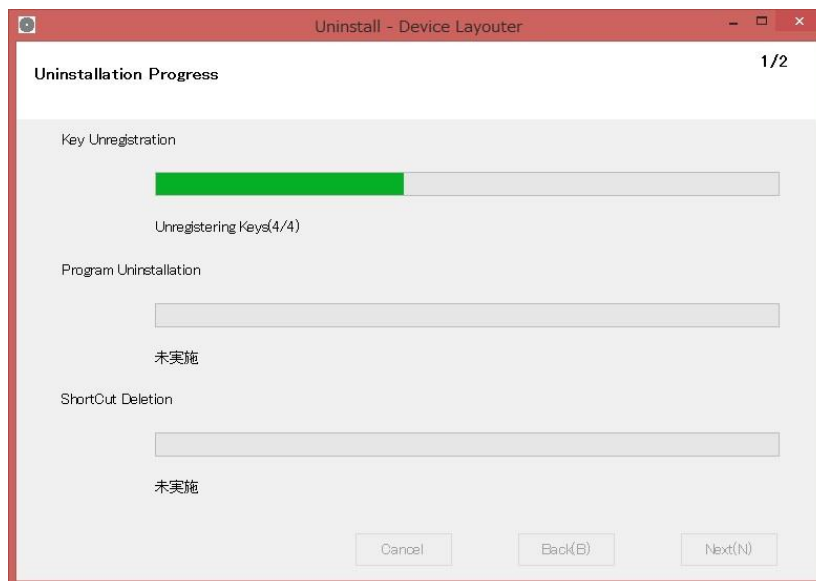
(3) Setup page opens. Press <Uninstall> button.



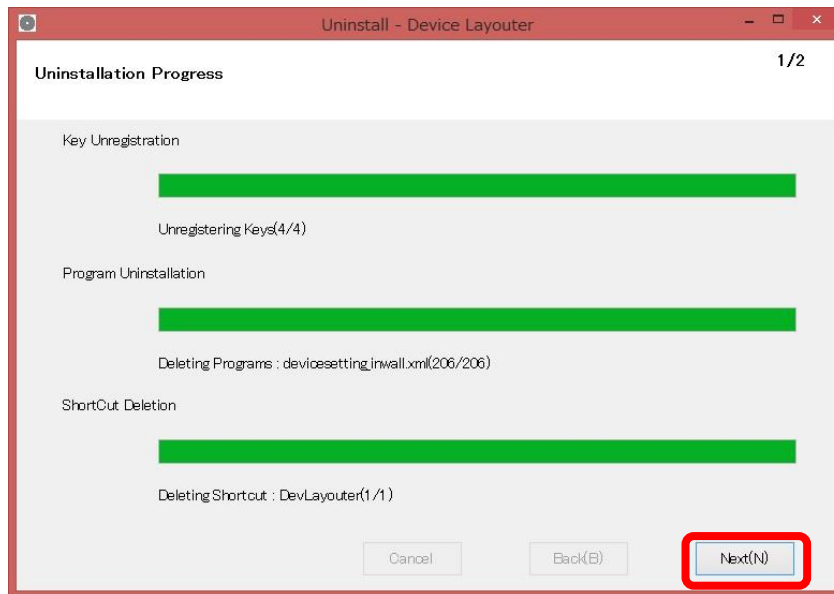
(4) Uninstallation dialog box opens.
Press <Yes> button.



(5) Uninstallation starts.

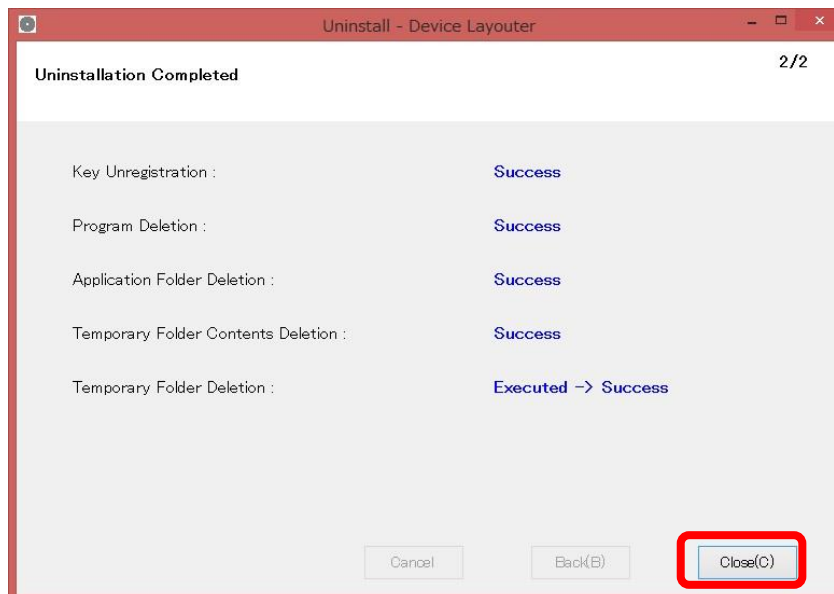


(6) Once uninstallation ends, <Next> button changes to be active. Press this button.



(7) Uninstallation Completed page opens.

Uninstallation result is shown. Confirm no error occurs, and press <Close> button.



Chapter 3 – Start / Terminate System

3 Start / Terminate System

3.1 Start from Start Page

First, let's see how to start it in Windows 8.1.

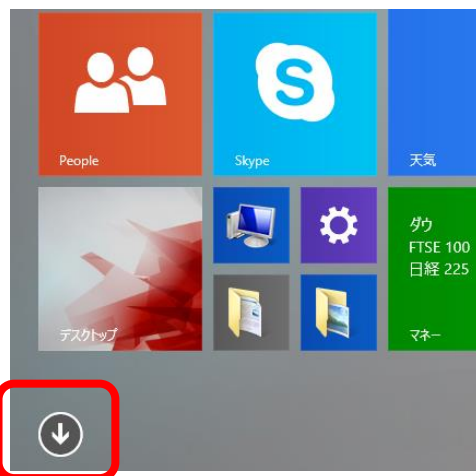
(1) Select tile on Start Page.

It's at the bottom left of the desktop.



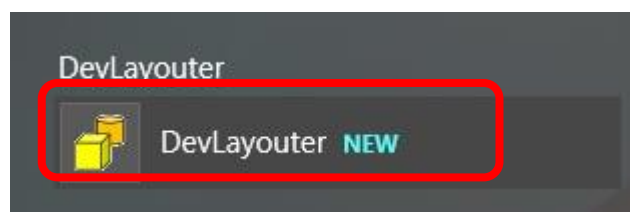
(2) Select arrow at bottom-left

It must be at the bottom left of the desktop.



(3) Look for [Device Layouter] in the application list.

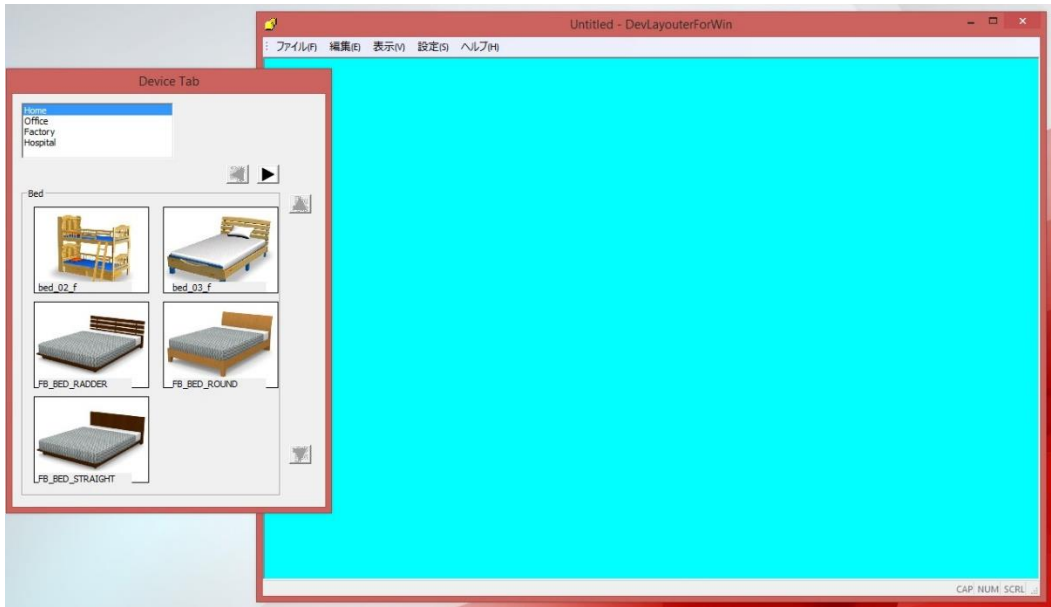
Select <DevLayouter>.



(4) If no valid license is found, the system notifies that it starts as a free user.



(5) The system starts after you press <OK> button.



In Windows 10, the steps will be as follows.

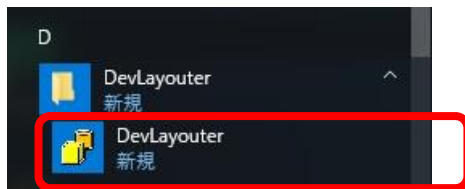
(1) Select tile on Start page.

It's at the bottom left of the desktop.



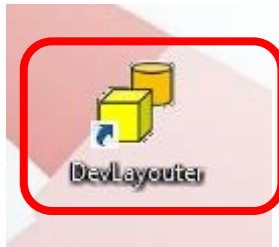
(2) Look for [DevLayouter] in the application list.

Select <DevLayouter>.



3.2 Start from Desktop

If you add shortcut during installation, you can start the system from the desktop. Double click on the shortcut [DevLayouter] to start the system.

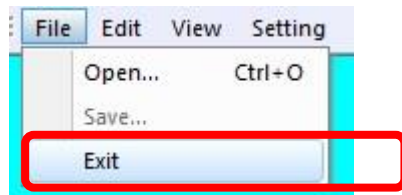


3.3 Terminate System

The procedure is as follows.

(1) Select [File]-[Exit] from the main menu.

Device Layouter for Windows is terminated.



Chapter 4 – Try First

4 Try First

4.1 Opening Sample Data

This chapter explains how you create a simple data in Device Layouter. You will learn basic features here.

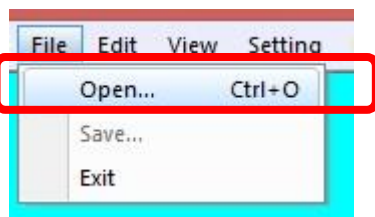
You have a folder called SampleData under your installation folder. The following data should be available there.

Images	2017/12/14 16:01	ファイル フォルダー	
10F-B2F.rmw	2017/02/22 7:55	RMW ファイル	48 KB
factory.rmw	2017/02/22 7:55	RMW ファイル	28 KB
Home.rmw	2017/07/28 10:40	RMW ファイル	24 KB
hospital.rmw	2017/04/12 12:43	RMW ファイル	25 KB

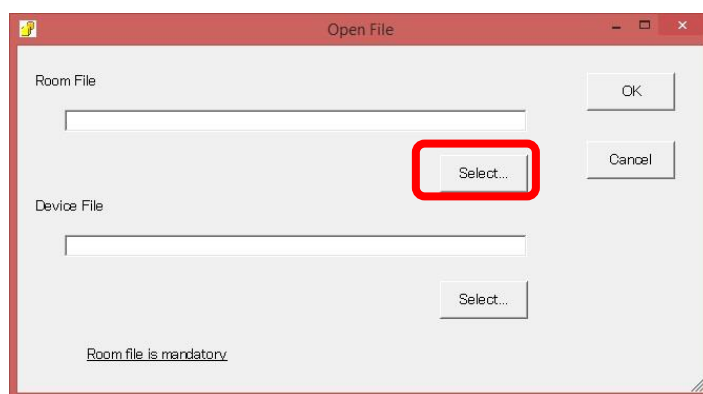
Files with .rmw as extensions are room layout files. You are supposed to create such file in Device Layouter for Web, and import it in this system.

This is how to open a sample data.

(1) Select [File]-[Open] from the main menu.

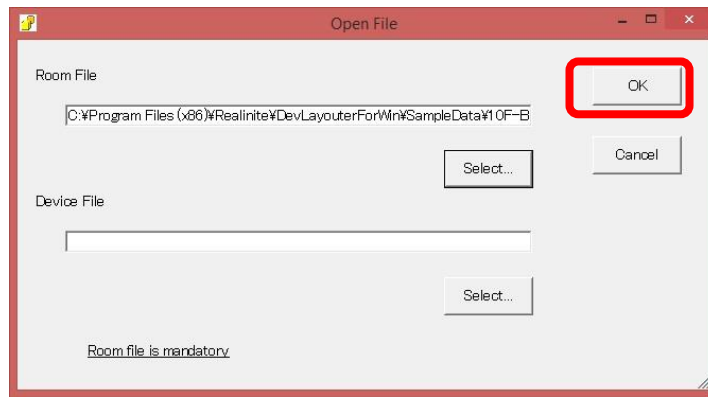


[Open File] dialog box opens.



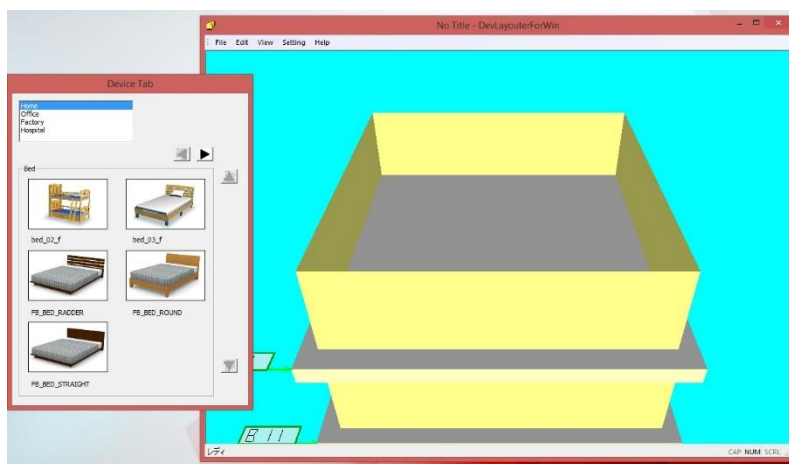
(2) Press <Select> button, and open a sample data from file dialog box.

The description of the selected file is added to room file text box.



(3) Press <OK> button.

The selected file opens.



4.2 View Change

Zoom is possible by mouse middle button scroll.

Upper / Lower / Left / Right viewpoint movement is possible by mouse middle button drag.

Line of sight direction can be modified by pressing 8 / 4 / 6 / 2 numeric key on your keyboard.

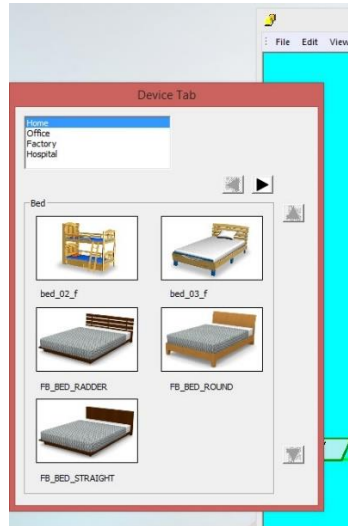
Pressing 8 initiates upper movement. 2 for lower, 4 for left, and 6 for right respectively.

4.3 Placing Device

When the viewpoint is suitable for device placement, look at Device Tab on the left.

Available devices are shown on the tab. The first hierarchy is list box, and the second one is tab. You can manage a lot of devices by these controls.

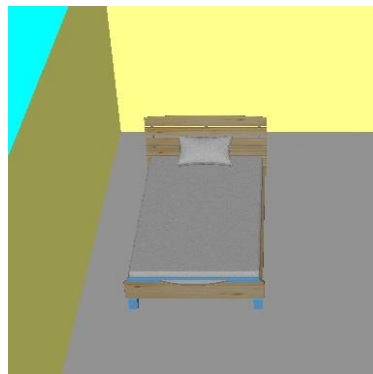
The first page has some kinds of beds. Please select any device by clicking on an image.



Device Load Confirmation dialog box opens. Press <Yes> button.

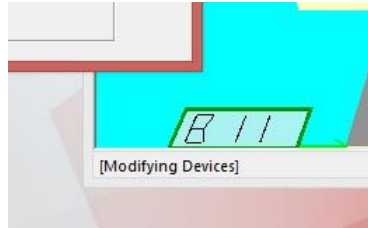


Move your mouse pointer on the floor. The selected device is shown at the mouse pointer location.

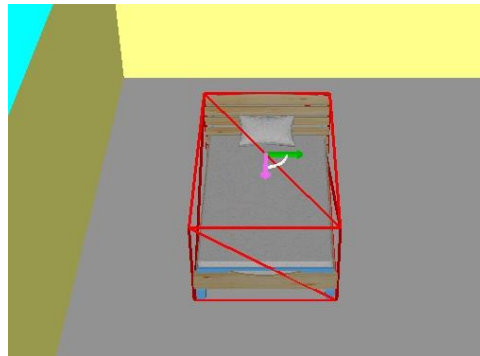


Left click at any location on the floor. You can add the selected device.

When you press Space key once on your keyboard, the mode is changed to Edit mode. In this mode, you can move or rotate already-added devices, though it's impossible to add new ones. You can confirm the current mode at status bar.



When you left click on a device, it changes to be highlighted in red, which means it is selected.

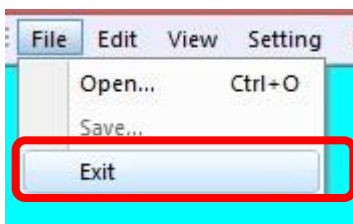


You can move selected devices by left drag.

You can rotate selected devices by pressing 4 or 6 numeric key, keeping Ctrl key pressed.

Please do these operations repeatedly to add some devices.

Once you finish your operations, select [File]-[Exit] from the main menu. Please close the system without data save.



Chapter 5 – Room File

5 Room File

5.1 Creating Room File

Room file is to keep room size and color on floor, placed devices on wall such as window, and so on.

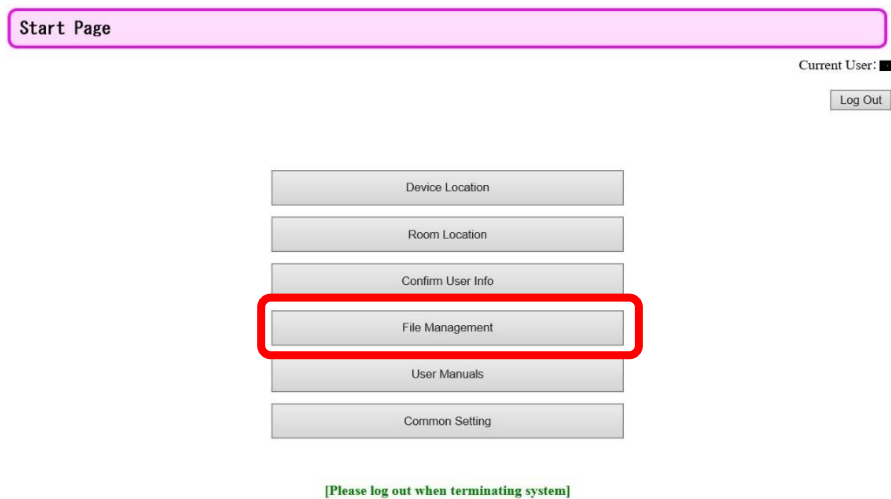
You can create a room file in the system for Web only. You are supposed to download created files, and then you can use them in the system for Windows.

Please see the manual for the system for Web, for the detailed operations.

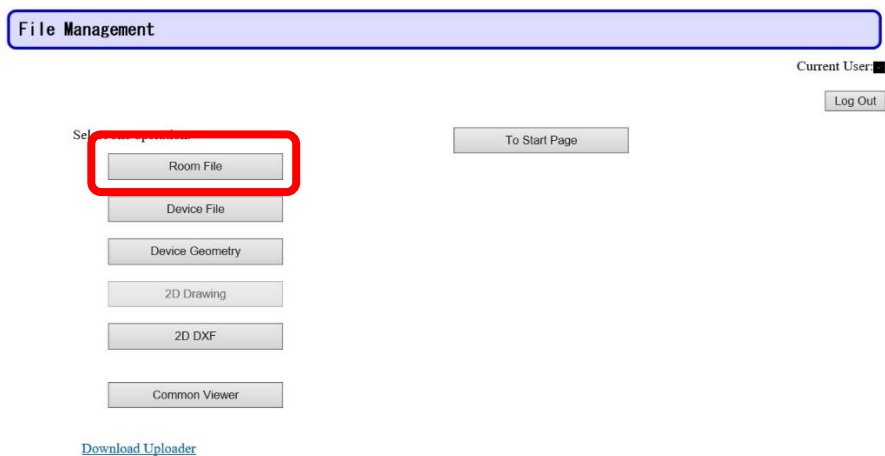
5.2 Downloading Room File

The extension of room file is .rmw. If you assigned a texture to a wall, you should prepare the image file as well, so that the system can render it in the system for Windows. The following is to download room file and image file, and then create a folder hierarchy.

Start Page in the Web system has <File Management> button. Press this button.



[File Management] page opens. Press <Room File> button.



[Room File] page opens.



By changing <File Type>, you can select whether you download a room file or image file. You can copy a file on your PC by selecting it in File List, and press <Download> button.

5.3 Placing File in Specific Folder

Downloaded files should be placed in a specific folder.

You have a folder called SampleData in your installation folder. The folder hierarchy should be the same as this.

Images	2017/12/14 16:01	ファイル フォルダー	
10F-B2F.rmw	2017/02/22 7:55	RMW ファイル	48 KB
factory.rmw	2017/02/22 7:55	RMW ファイル	28 KB
Home.rmw	2017/07/28 10:40	RMW ファイル	24 KB
hospital.rmw	2017/04/12 12:43	RMW ファイル	25 KB

Place room files directly in the specific folder. Image files should be in Images folder.

Keeping this hierarchy is important to avoid any problem when you use your room file in Windows system.

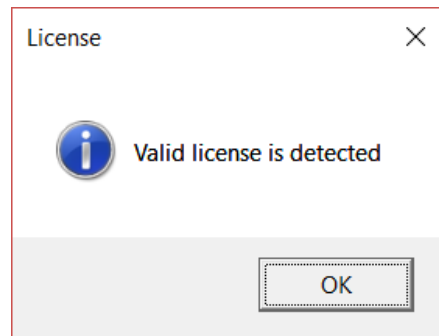
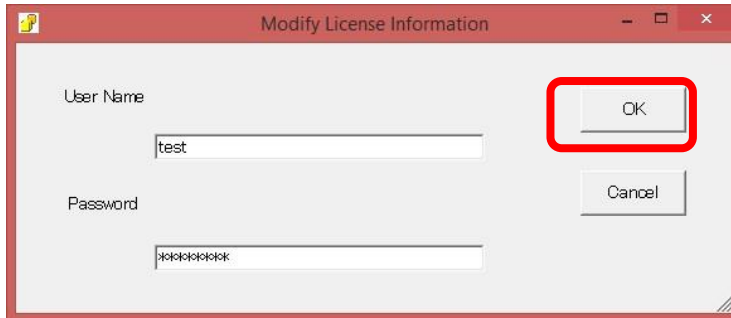
Chapter 6 – License

6 License

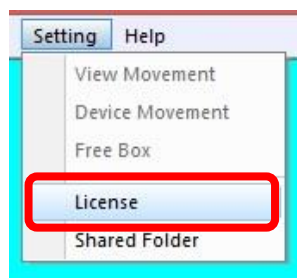
6.1 Specifying License

The license server for this system is placed on Web, and the system acquires the license through internet access.

When you start the system, [Modify License Information] dialog box opens. Specify a correct user name and a password, and press <OK> button. The system notifies the license detection succeeds, and then you can use charged features.

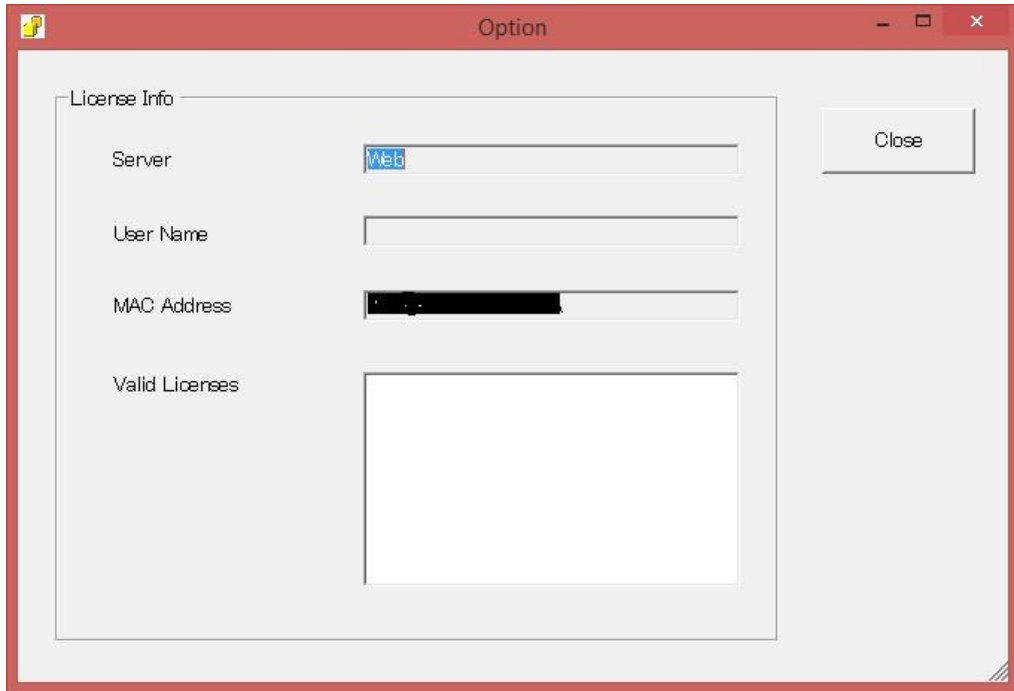
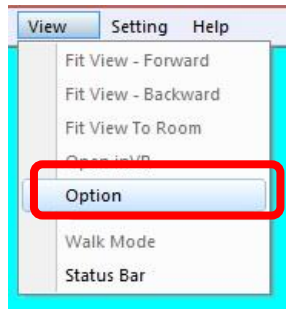


By selecting [Setting]-[License] from the main menu, you can open Modify License Information dialog box at any time.



6.2 Confirming License Setting

When you select [View]-[Option] from the main menu, [Option] dialog box opens. You can see if any valid license exists on this dialog box.



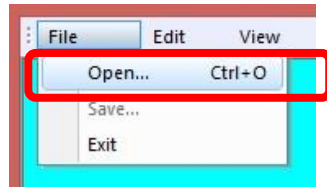
Chapter 7 – Basic Features

7 Basic Features

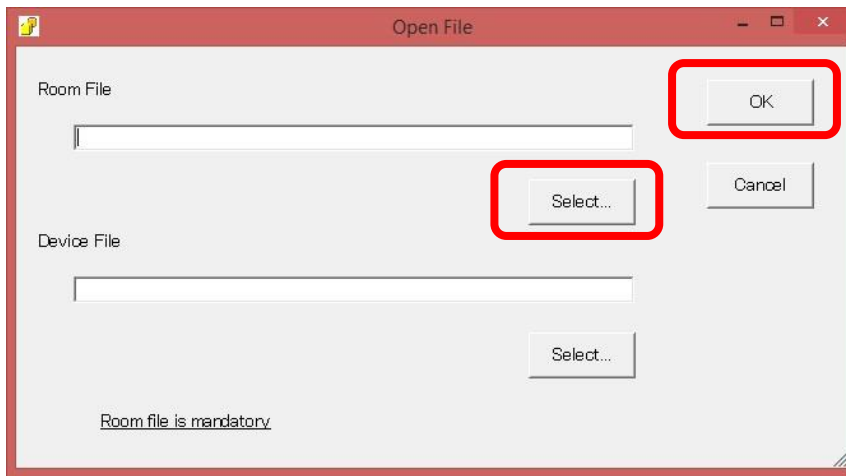
7.1 Preparation

You cannot do anything before you open a room file. Do the following operations to open any file.

(1) Select [File]-[Open] from the main menu.

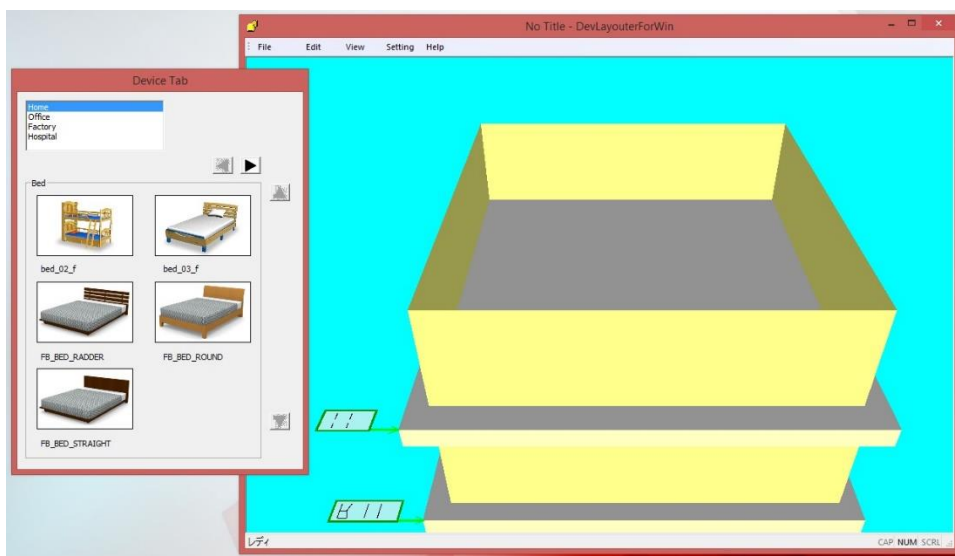


[Open File] dialog box opens.



(2) Press <Select> button for Room File, select a room file, and press <OK> button.

The geometry in the selected room file is shown.



7.2 View Change

The following is how to change the view.

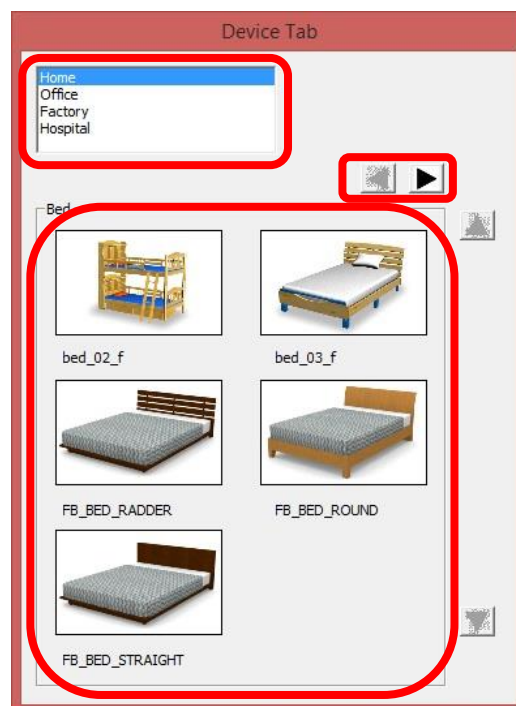
- Operations by mouse middle button
Dragging is to move the viewpoint to upper / lower / left / right.
Scrolling is to move the viewpoint to forward / backward, which means zooming.
- Operations by mouse right button
Dragging is to rotate the viewpoint to upper / lower / left / right.
- Operations by arrow keys
Pressing up / down key is to move the viewpoint to forward / backward, which means zooming.
Pressing left / right key is to move the viewpoint to left / right.
- Operations by numeric keys
Pressing 8 key is to rotate the viewpoint to upper.
Pressing 2 key is to rotate the viewpoint to lower.
Pressing 4 key is to rotate the viewpoint to left.
Pressing 6 key is to rotate the viewpoint to right.

7.3 Adding Device

Device Tab is available at the left of the display.

The list box on the tab is the first level items. You can change the second level items by pressing left or right button at the top right of the tab.

Tab page shows registered devices with corresponding images. Select an image and move your mouse pointer to the floor. The selected device is shown at the mouse location and now you can add the device.



It's possible to import your own 3D data into Device Tab. The detailed steps are described at the other chapter.

The following is to add a new device.

(1) Select a device on Device Tab.

[Device Load Confirmation] dialog box opens.



(2) Press <Yes> button.

Device Load starts.

(3) Once the data load finishes, move your mouse pointer to the floor.

The selected device is shown at the mouse pointer location.



(4) Left click where you want to place.

The selected device is added.

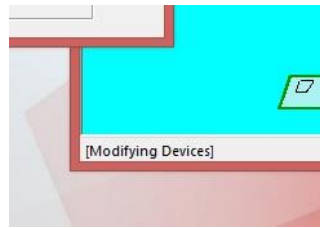
7.4 Modifying and Deleting Device

This system has Adding, and Modifying Mode.

When you want to modify or delete a device, you should switch to Modifying Mode.

- (1) Press space key once on your keyboard.

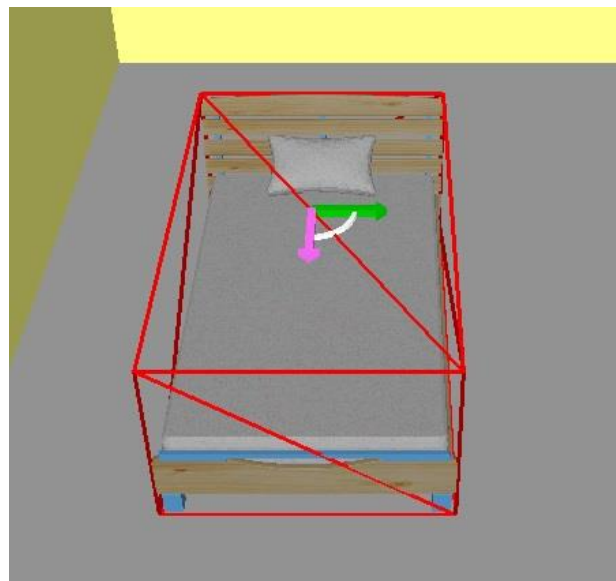
You can see Modifying mode as the current mode at the status bar.



- (2) Left click on a device.

The device is highlighted in red, as it is selected.

When you click keeping Ctrl key pressed, you can select multiple devices.



- (3) Drag a device by left mouse button.

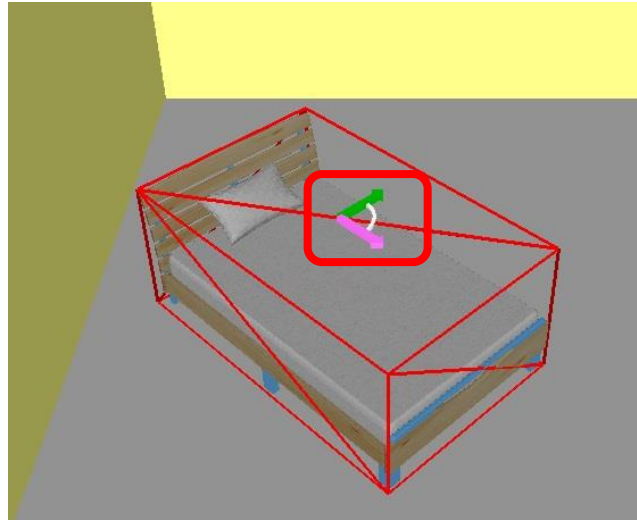
You can change the device location.

- (4) When any device is selected, press an arrow key keeping Ctrl key pressed.

The selected device is moved along the selected arrow key direction.

- (5) When any device is selected, press a numeric key 4 or 6 keeping Ctrl key pressed.

The selected device is rotated clockwise or counter-clockwise.



- (6) Double click on Manipulator at the center of the device.
 [Manipulator Operation] dialog box opens, which is to modify the location and the angle.
 Specify a value and press <Apply> button to apply a new value.



- (7) Press <Close> button on [Manipulator Operations] dialog box.
- (8) Drag an arrow or arc of manipulator
 When you drag an arrow, you can move the device along the arrow direction. When you drag an arc, you can rotate the device.
- (9) When any device is selected, press Delete key on the keyboard.
 The selected device is deleted.

7.5 Features in Edit Menu

Edit menu has the following features.



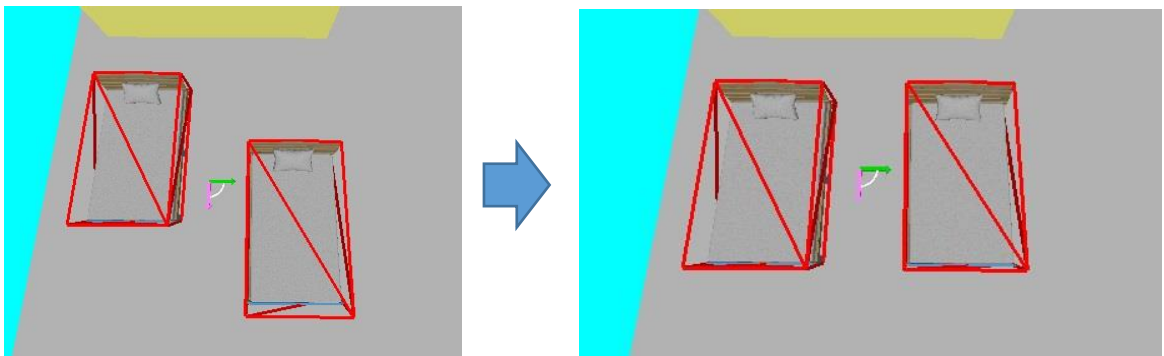
(1) Select All

You can select all devices on the floor.

(2) Align Devices

You can align multiple devices vertically or horizontally.

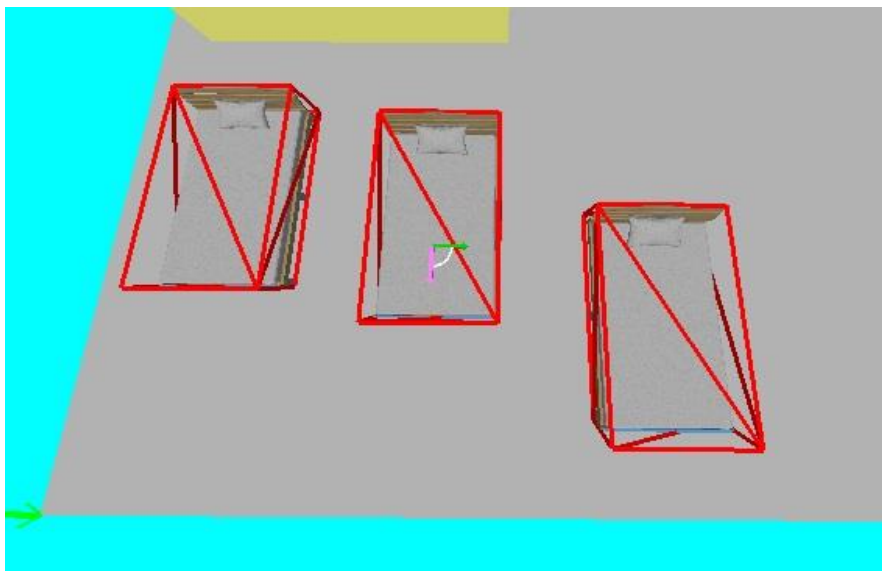
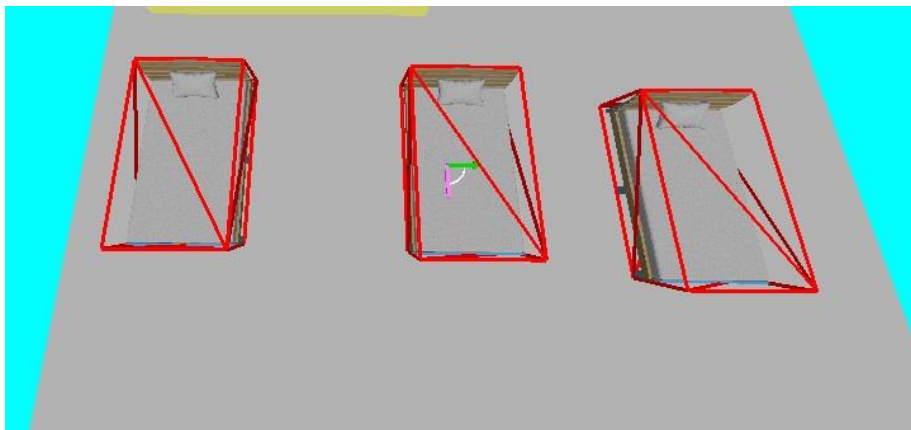
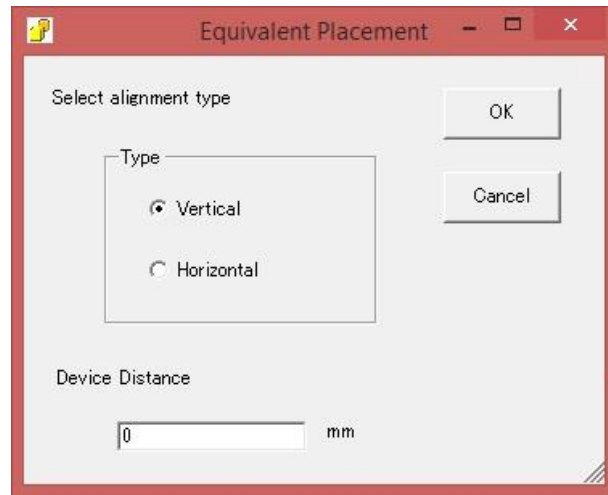
When you select this menu after you select multiple devices, [Align Devices] dialog box opens. Select Vertical or Horizontal and press <OK> button. The selected devices will be aligned.



(3) Equivalent Placement

You can place three or more devices with equivalent distances vertically or horizontally.

When you select three or more devices, select the menu. [Equivalent Placement] dialog box opens. Select Vertical or Horizontal and device distance, and press <OK> button. The selected devices are placed keeping the specified distance.



(4) Fit Device To Floor

You can move selected devices to the location where the bottom is coincident with the floor.

(5) Add Free Box

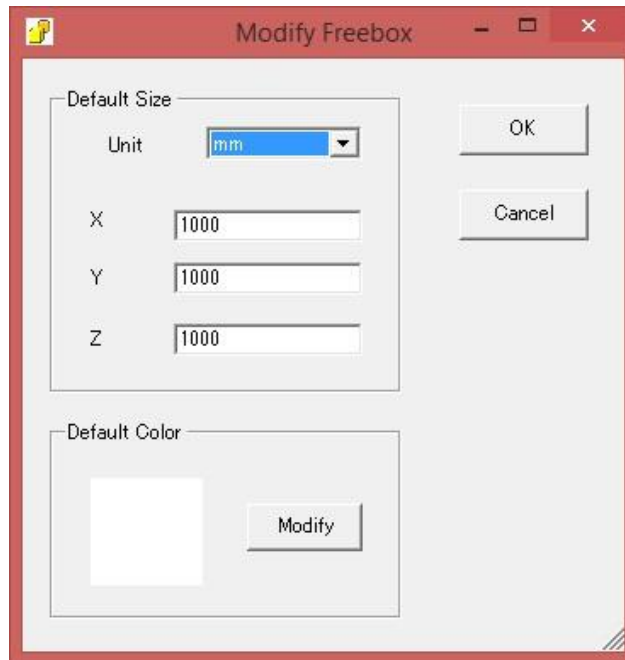
Free Box is a kind of box with arbitrary size and color.

When you select the menu, a new free box is added on the floor.

(6) Edit Free Box

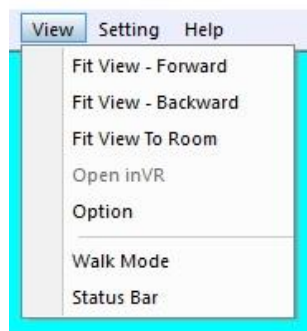
You can change the size or color of a selected free box.

When any free box is selected, select the menu. [Modify Freebox] dialog box opens. Specify size and color as you want, and press <OK> button. The new setting will be applied.



7.6 Features in View Menu

View menu has the following features.



(1) Fit View - Forward

Change the view watching overall from forward.

(2) Fit View - Backward

Change the view watching overall from backward.

(3) Fit View To Room

When you select the menu, [Room Selection] dialog box opens. Select any room and press <OK> button. The viewpoint is moved to the room.



(4) Open in VR

Refer to the other chapter.

(5) Option

Option dialog box opens.

(6) Walk Mode

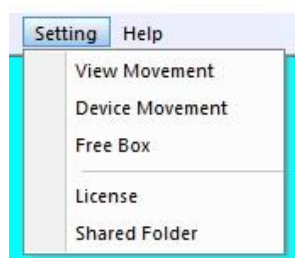
This feature is to move around in the 3D environment keeping the eye height. You can see your building inside with arrow or numeric keys.

(7) Status Bar

Switch between shown / hidden of status bar.

7.7 Features in Setting Menu

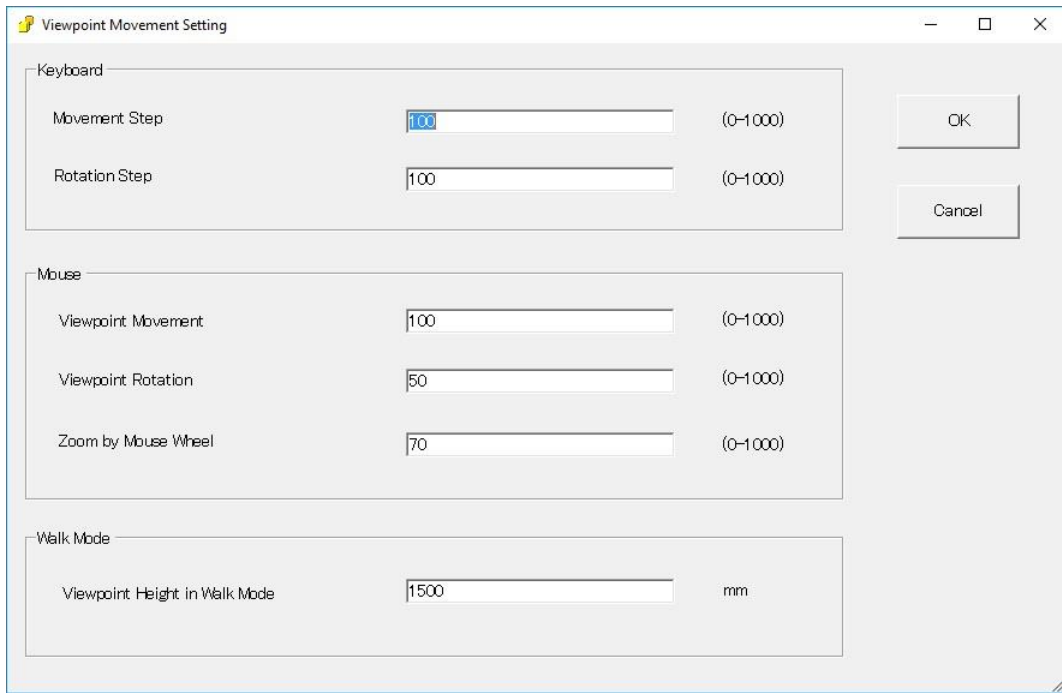
Setting menu has the following features.



(1) View Movement

Change the setting for view movement.

When you select the menu, [Viewpoint Movement Setting] dialog box opens.



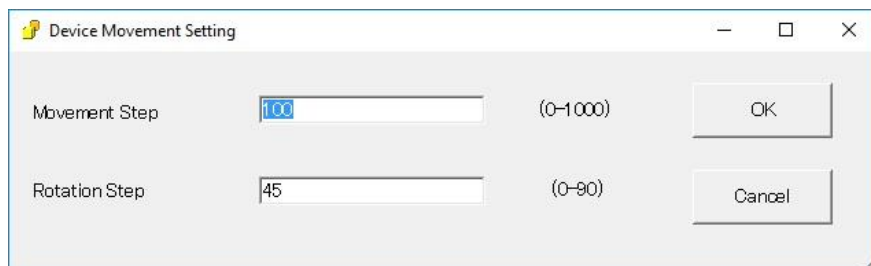
You can modify the following settings.

- **Keyboard**
Modify the sensitivity of movement by arrow keys, and rotation by numeric keys.
- **Mouse**
Modify the sensitivity of movement by middle mouse drag, rotation by right mouse drag, and zoom by middle mouse scroll.
- **Walk Mode**
Modify the viewpoint height during walk mode.

(2) Device Movement

Modify the setting on device movement.

When you select the menu, [Device Movement Setting] dialog box opens.

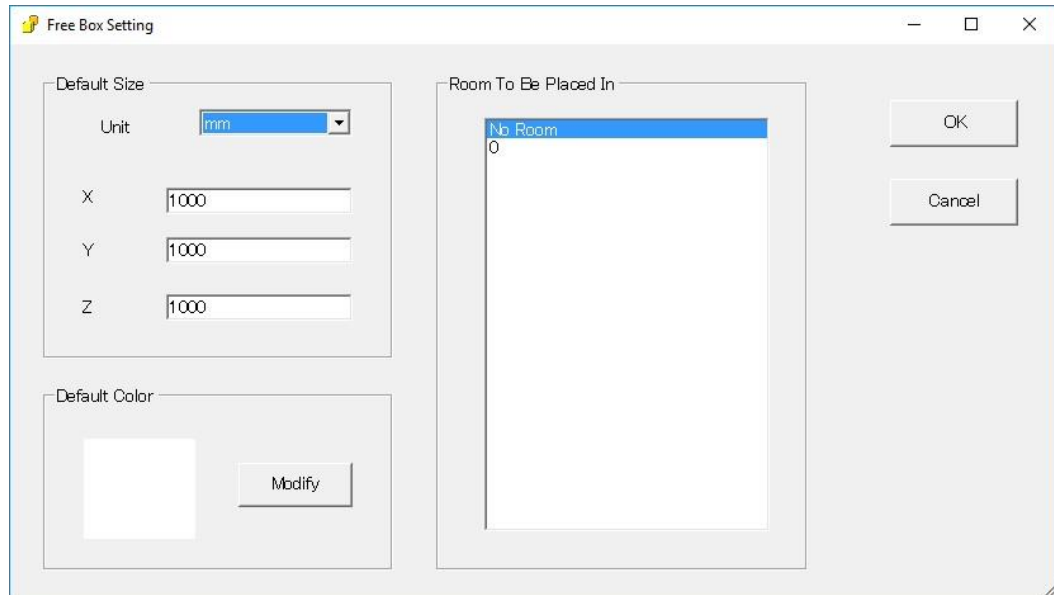


You can specify the sensitivity, when you press arrow or numeric keys, keeping Ctrl key pressed.

(3) Free Box

Modify the setting on free box.

When you select the menu, [Free Box Setting] dialog box opens. You can modify the default setting when you add a free box.



(4) License

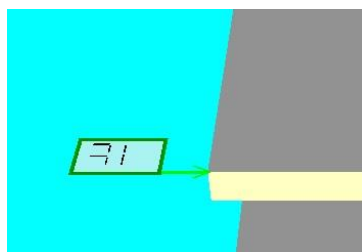
Refer to the chapter on license.

(5) Shared Folder

This setting is to integrate your own 3D data. Refer to the other chapter for the details.

7.8 Navigating through Multiple Floors

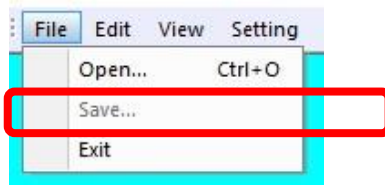
When your building file has multiple floors, you can confirm the current floor number at the bottom left of the floor.



In order to change the current floor, use Page Down key or Page Up key. Page Down key is to move to the lower floor, and Page Up key to the upper floor.

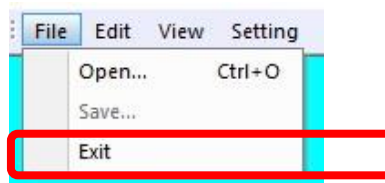
7.9 Saving File

Select [File]-[Save] to save your data. You can specify the location and the file name as you want.



7.10 Terminating Application

Select [File]-[Exit] to terminate the application.



Chapter 8 – 3D File Import

8 3D File Import

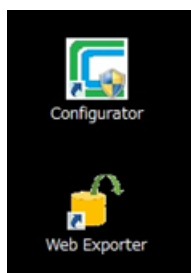
8.1 Outline

You can integrate external data in FBX or DXF format with this software.

Data translation software is provided separately. When you import your 3D data, you are supposed to use it as well.

8.2 Translating 3D File

When you translate any external data, use Web Exporter.



Refer to the manual with the software for the details.

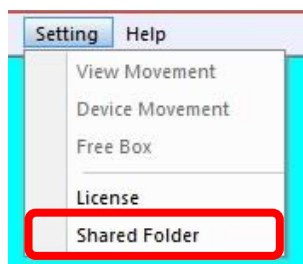
8.3 Integrating External 3D File

(1) Use Web Exporter to export your 3D data to the target folder.

The following folders are created at the target folder, and translated files are saved there.

名前	更新日時	種類	サイズ
2DDXF	2017/12/15 11:06	ファイル フォルダー	
DeviceGeometry	2017/12/15 11:06	ファイル フォルダー	
DeviceSetting	2017/12/15 11:06	ファイル フォルダー	

(2) Start this software, and select [Setting]-[Shared Folder] from the main menu.



[Specify Shared Folder] dialog box opens.



(3) Press <Modify> button to specify the target folder, and then press <OK> button.

Don't modify the contents in the target folder. If you change the folder hierarchy or the file name, this system doesn't work properly.

Chapter 9 – Virtual Reality

9 Virtual Reality

9.1 Outline

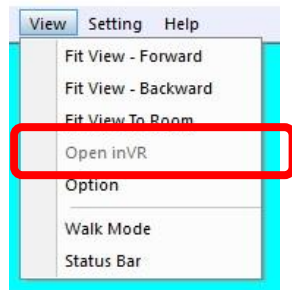
When you have virtual reality license, you can see your data created in this software in 3D stereoscopic environment.

You can evaluate your layout using a head mounted display just after you finish your data creation, by the following operations.

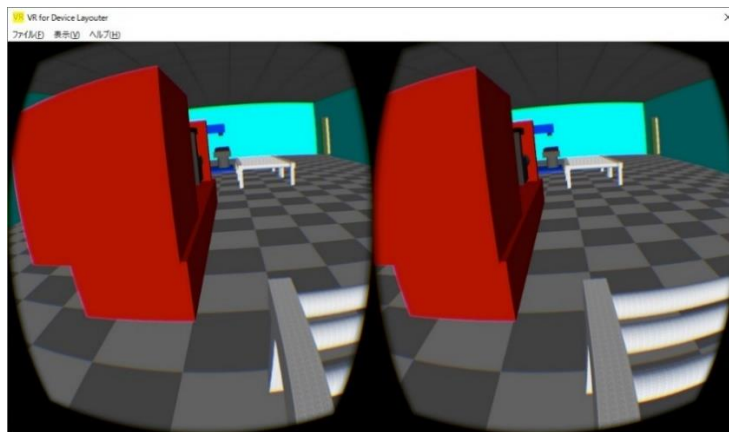
9.2 Taking Advantage of Virtual Reality Viewer

Please install Virtual Reality Viewer on the same PC before you start the following operations.

- (1) Create your layout using this software.
- (2) Save your data.
- (3) Select [View]-[Open in VR] from the main menu.



Data loading starts, and Virtual Reality Viewer opens using the data you opened just before the system initiation.



- (4) When you finish your evaluation, terminate Virtual Reality Viewer.

If you just go back to this software, Virtual Reality Viewer doesn't close automatically. Please confirm if Virtual Reality Viewer is closed, before you select the menu [Open in VR].

Chapter 10 – Technical Support

10 Technical Support

10.1 Installation Support

Installation support is provided for free within thirty days after your purchase.

This is to solve your issues during installation. We help you through mails or phones. The contact information will be notified.

10.2 Support Contract

Please contact us if you want to make support contract. We will send you an application form with the details of the service.

Chapter 11 – Contact

11 Contact

If you have any question on this software, please contact the following address.

Support@realinite.co.jp

Please keep in mind that we are not able to answer any technical questions without a support contact.