ViPlex Express

Display Content Publishing Management System for PC

V2.8.0

Studio Mode User Manual

Contents

1 Software Introduction

ViPlex Express is a display content publishing management system for PC, which is installed in the Windows operating system and allows you to edit solutions and play the solutions on LCD or LED displays. In async mode, ViPlex Express is also used to control multimedia players. This document introduces you to the functions and operations in studio mode.

ViPlex Express is part of the NovaStar cloud solution. On the startup page of studio mode, clicking **Cloud Platform** on the left menu allows you to view the related information.

Two Working Modes

ViPlex Express has two working modes and you can switch to your desired mode based on the application scenario.

- **Studio Mode**

  When a solution is being played in ViPlex Express, the solution is also played synchronously on the display. This mode is applicable to synchronous playback.

  The playback window is on the extended display. You can use the screen monitoring function to view the playback on your primary monitor.

- **Async Mode**

  ViPlex Express sends solutions to multimedia players. The solutions will be stored in the multimedia players and played according to their playback plans. This mode is applicable to the scenario when multimedia players load displays.

Professional Solution Editing

ViPlex Express is designed with a professional solution editing function allowing you to edit solutions with various contents and complex schedules as required.

- **Multiple pages**

  A solution can be added with multiple pages that are played in order from top to bottom.

- **Flexible layout**

  You can use a system template or customize a template when adding a page. In a template, you can set the number, coordinates, width, and height of windows based on your needs.

- **A variety of media**

  On a page, you can add general windows, cut-to-display window, Office documents, images, videos, GIF, text, colorful text, digital clocks, analog clocks, timers, weather, RSS, streaming media and web pages.

- **Multiple properties**

  Every type of media has multiple properties that can satisfy your needs and present a variety of solutions.

- **Scheduling as you wish**

  You can set a period and cycle for each page to play. The schedules of a page can be batch applied to other pages. If the periods of several pages overlap, the pages will be played in order from top to bottom

- **Quick preview**

  Clicking the preview button allows you to preview the current page. The preview window refreshes immediately when you move on to another page.

All-round Terminal Control

In async mode, ViPlex Express enables you to fully control multimedia players, such as brightness adjustment, time synchronization, font management, terminal upgrade, video source switching, screen status control, play log query, network configuration, and RF management.

2 Getting Started

2.1 Preparing a PC

Minimum requirements:

- OS: Windows 7 SP1 64-bit
- CPU: i5
- RAM: 4 GB
- HDD: 60 GB

2.2 Installing Software

Prerequisites

- Framework 4.6.x is installed.
- The official version of Visual C++ 2017 runtime components are installed.
- The installation package of ViPlex Express is obtained.

Where to Obtain

http://www.en.vnnox.com/download

Installing Software

Double click the installer to install ViPlex Express by following the wizard.

2.3 Checking PC Configuration Options

To ensure stable playback, please check the Windows configuration options shown in Table 2-1. If a configuration option does not conform to the target status, please change it. This chapter takes Windows 10 as an example.

Table 2-1 Configuration options

Configuration Options	Target Status
Windows automatic update	Off
Firewall	• Off • Allow program connection Conforms to any of the above statuses.
Turn off screen	Never
Sleep	Never
Scaling size	100%
Multiple displays	Duplicate these displays
UAC	Never notify
Antimalware Service Executable	Disabled
Superfetch	Manual

2.3.1 Windows Automatic Update

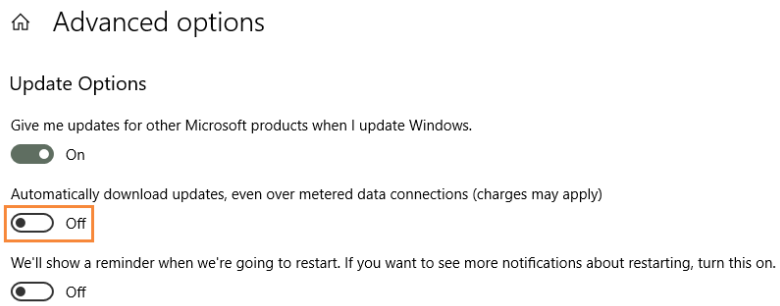
Step 1 Click  on the Windows Start menu.

Step 2 Choose Update & Security.

Step 3 On the Windows Update page, click Advanced options.

Step 4 Check whether Windows automatic update is turned off.

Figure 2-1 Windows automatic update



2.3.2 Firewall

Step 1 Click  on the Windows Start menu.

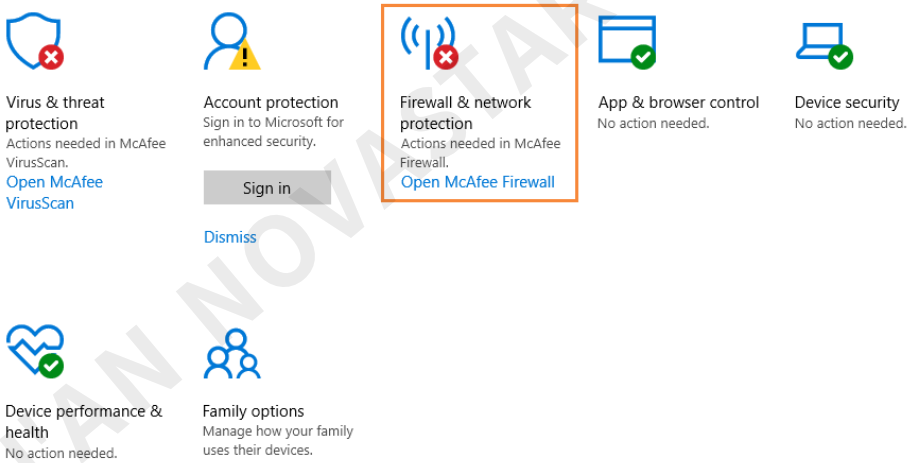
Step 2 Choose **Update & Security**.

Step 3 Select Windows Security.

Step 4 Click **Open Windows Defender Security Center**.

Step 5 Check whether the firewall is turned off. If the firewall needs to be turned on, check whether the connection is allowed. For the method to allow program connection, see 7.1 How to set the inbound firewall rules?

Figure 2-2 Firewall



2.3.3 Screen off and Sleep

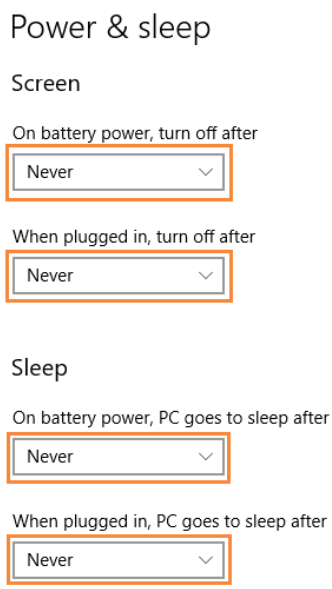
Step 1 Click  on the Windows Start menu.

Step 2 Choose **System**.

Step 3 Choose **Power & sleep**.

Step 4 Check whether all the four configuration options are set to **Never**.

Figure 2-3 Screen off and sleep



2.3.4 Scaling Size and Multiple Displays

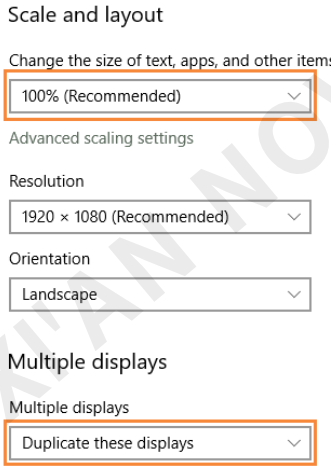
Step 1 Click on the Windows Start menu.

Step 2 Choose **System**.

Step 3 Check whether the scaling size is 100% and the option of multiple displays is set to **Duplicate these displays**.

Note: When multiple monitors are connected, the configuration option for multiple displays will appear.

Figure 2-4 Scaling size and multiple displays



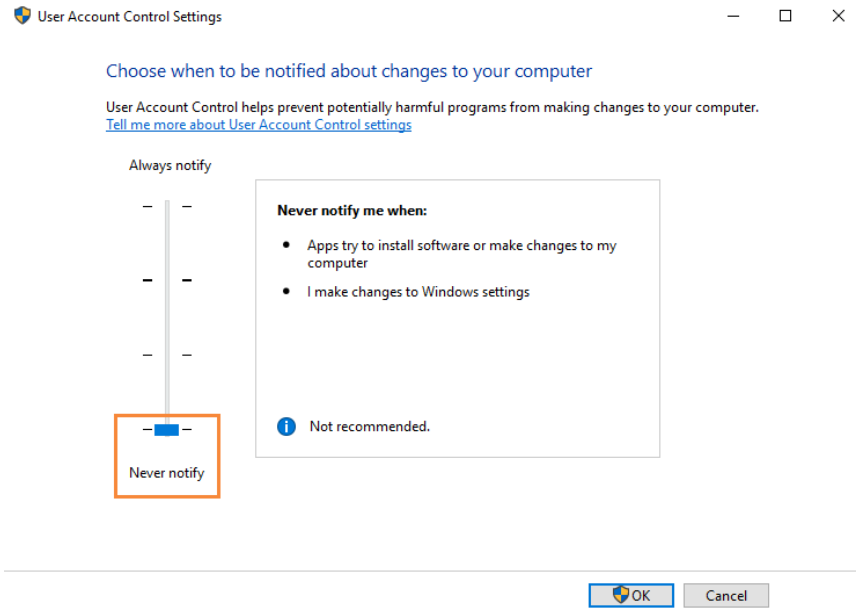
2.3.5 UAC

Step 1 Click on the Windows Start menu.

Step 2 Type "User Accounts" in the search box and select **Change User Account Control Settings**.

Step 3 Check whether UAC is set to **Never notify**.

Figure 2-5 UAC



2.3.6 Antimalware Service Executable

Step 1 Press **Win**+**R** buttons to open the **Run** window.

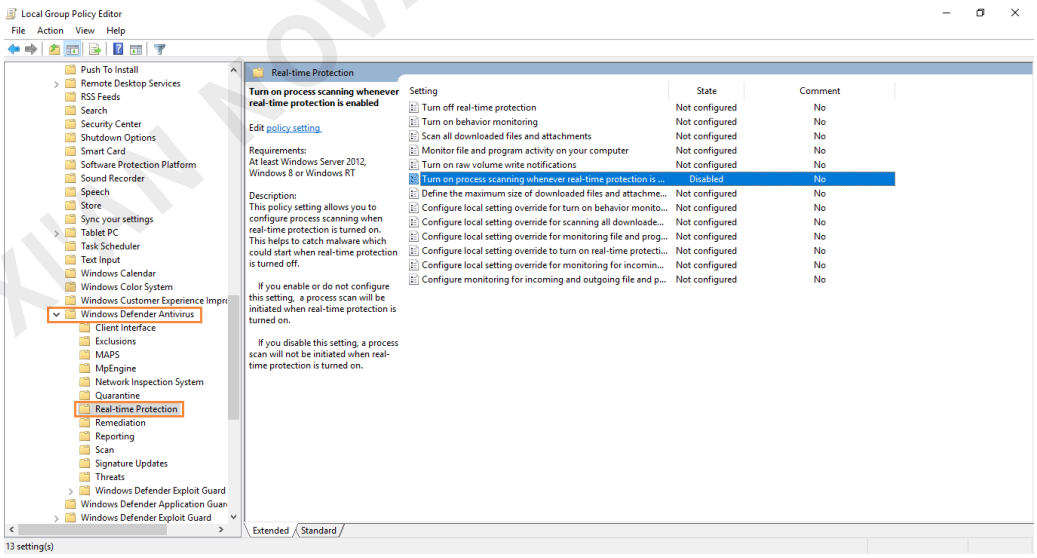
Step 2 Type **gpedit.msc** command and press **Enter** to open the **Local Group Policy Editor** dialog box.

Step 3 Expand **Computer Configuration** > **Administrative Templates** > **Windows Components** > **Windows Defender Antivirus**.

Step 4 Click **Real-time Protection**.

Step 5 Check whether the status of **Turn on process scanning whenever real-time protection is enabled** is **Disabled**.

Figure 2-6 Antimalware service executable



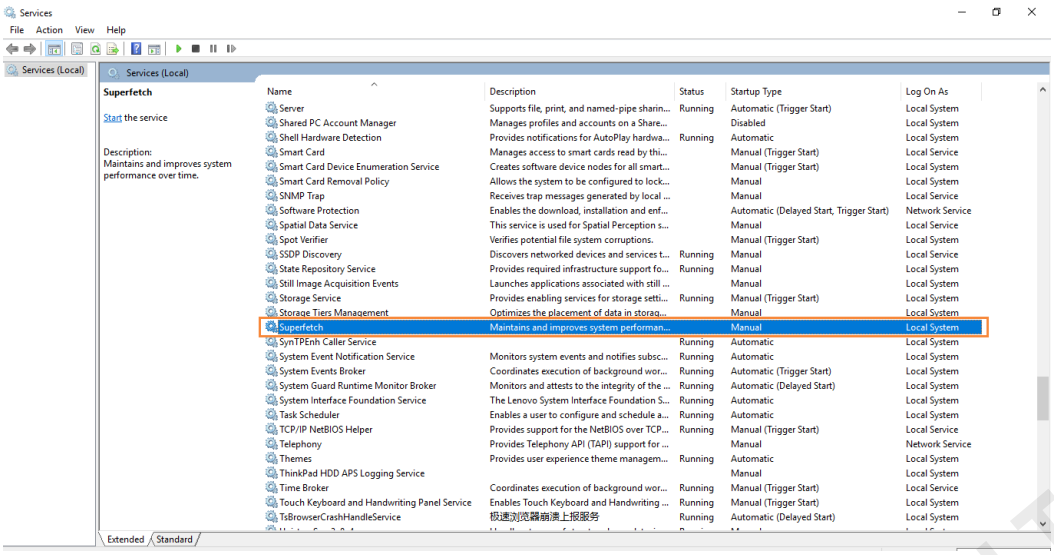
2.3.7 Superfetch

Step 1 Press **Win**+**R** buttons to open the **Run** window

Step 2 Type **services.msc** command and press **Enter** to open the **Services** dialog box.

Step 3 Check whether the startup type of Superfetch is **Manual**.

Figure 2-7 Superfetch



2.4 Connecting to Displays

Figure 2-8 Connecting to displays

- **Connection 1**

  The PC with ViPlex Express installed is connected to a sending card and serves as a video source for the LED display. Figure 2-8 uses the MCTRK4K sending device as an example.

- **Connection 2**

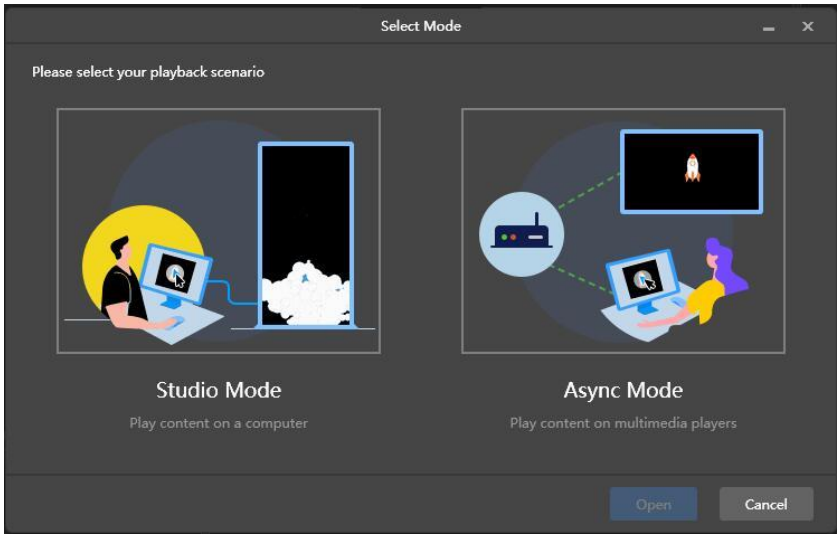
  The PC with ViPlex Express installed is connected to an LCD and serves as a video source for the LCD.

2.5 Selecting Working Mode

First Installation

After ViPlex Express is first installed, a **Select Mode** dialog box appears when you open ViPlex Express. Select **Studio Mode** and click **Open**.

Figure 2-9 Selecting a working mode



Other Situations

If you have installed ViPlex Express or selected a working mode before, the dialog box shown in Figure 2-9 will not appear. If ViPlex Express is in async mode by default after opened, switch to studio mode by following the steps below:

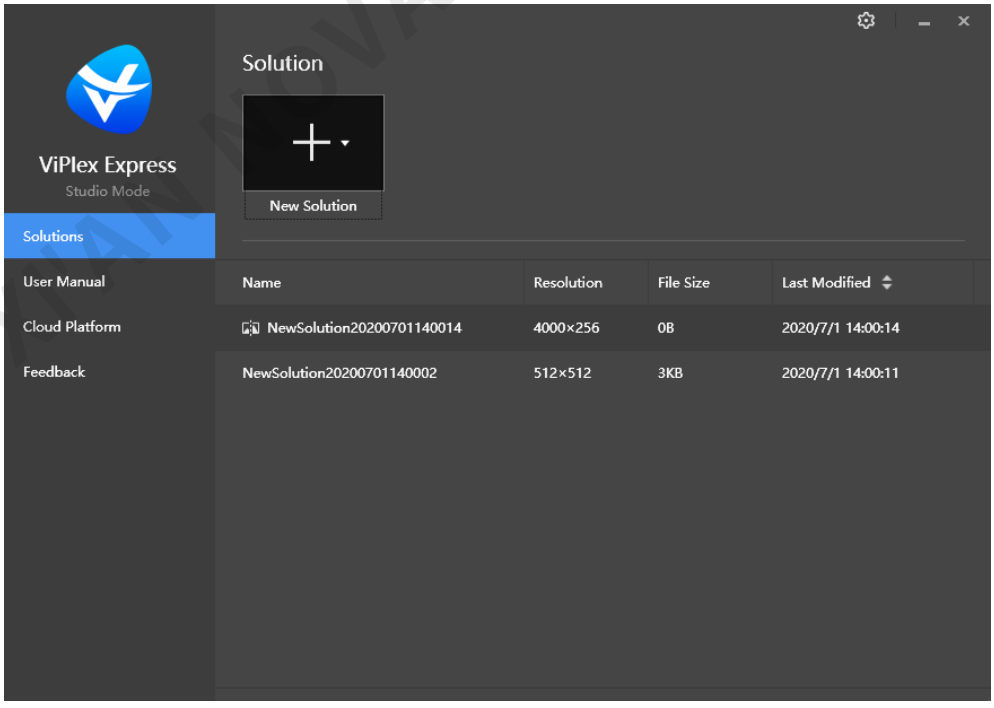
In the top-right corner, choose > **Working Mode** > **Studio Mode** and click **OK**. ViPlex Express will be in studio mode after restarted.

2.6 Creating Solutions

After updated, the solution data in async mode will be synchronized to studio mode.

Step 1 After you select studio mode, the startup page of studio mode is displayed.

Figure 2-10 Startup page of studio mode

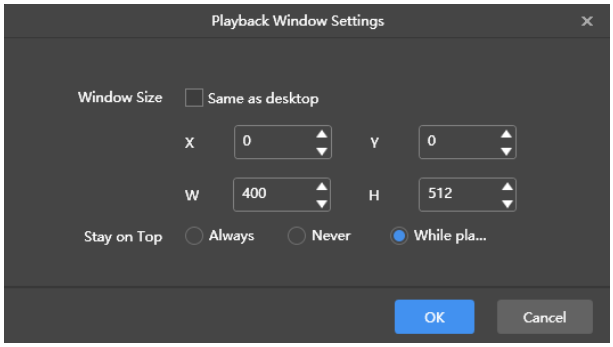


Step 2 Click and select **Regular Screen** or **Ultra-Long Screen**.

- Select **Regular Screen** to access the solution editing page.

On the solution editing page, choose **Playback Window** > **Playback Window Settings** from the menu bar and set the coordinates, width, and height of the playback window and select an option of keeping the window on top. If **Same as desktop** is selected, the size of the playback window will be the same as the size of your desktop.

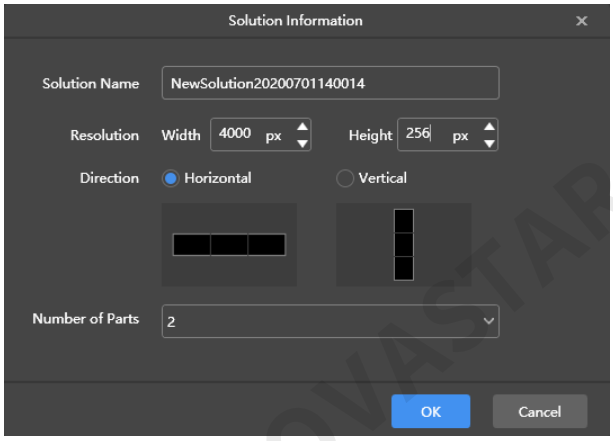
Figure 2-11 Playback window settings



- Select **Ultra-Long Screen** to open the **Solution Information** dialog box, as shown in Figure 2-12.

  Set a name, resolution, direction and the number of parts for the solution, then click **OK** to access the solution editing page.

Figure 2-12 Solution information



Step 3 After the solution editing is done, click **Save**.

Step 4 (Optional) At the upper right of the page, click  to view the schedule of each page in the solution.

Step 5 (Optional) At the upper right of the page, click  to preview the current page.

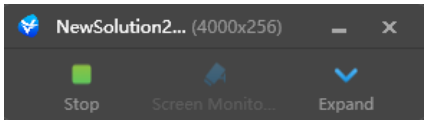
When the preview window is opened, you can also select other pages to preview. If you make changes to the current page, click  to refresh the preview window.

2.7 Playing Solutions

Step 1 On the solution editing page, click  at the upper right to play a solution.

Step 2 The solution editing page is not displayed and a playback control bar appears.

Figure 2-13 Playback control bar



-  : Click the button to stop playback and display the solution editing page.
-  : Click the button to expand the solution editing page.
-  : Click the button to collapse the solution editing page.

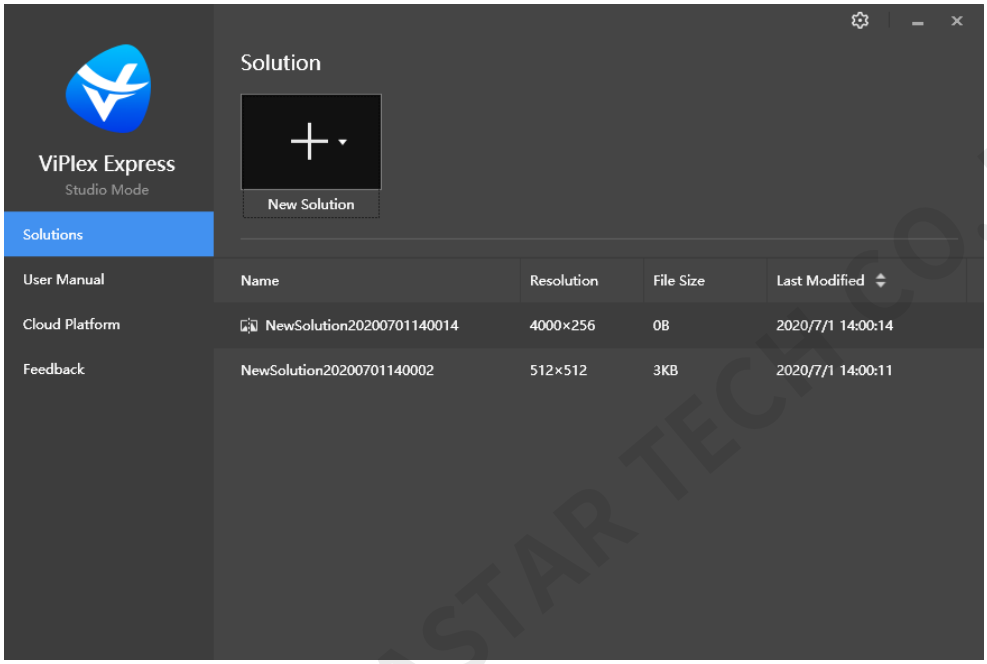
3 Solution Management

3.1 Creating Solutions

Step 1 After you select studio mode, the startup page of studio mode is displayed.

- You can create solutions for regular screens (hereinafter referred to as "regular-screen solutions") and solutions for ultra-long screens (hereinafter referred to as "ultra-long-screen solutions".
- After updated, the solution data in async mode will be synchronized to studio mode.

Figure 3-1 Startup page of studio mode



3.1.1 Creating a Regular-Screen Solution

Related Information

- A regular-screen solution contains one or more pages and each page contains one or more media items.
- The pages of a solution are played in order from top to bottom.

Operating Procedure

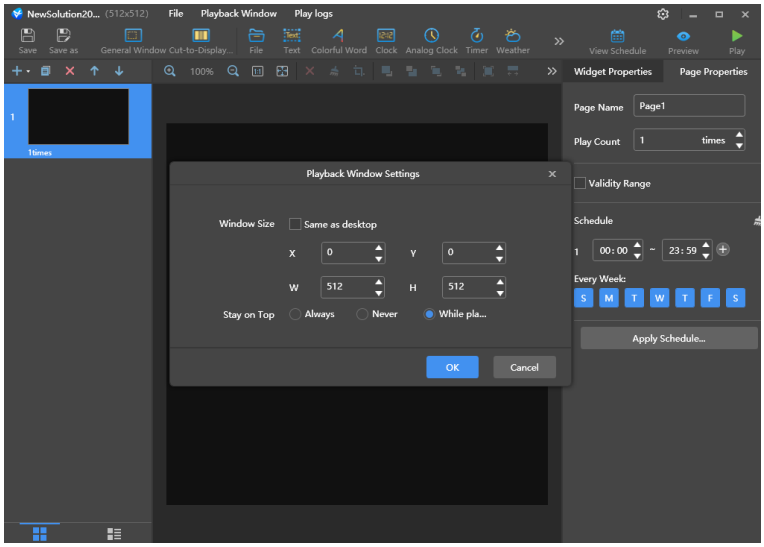
Before you create a solution, get the screen resolution in advance.

Step 1 Click + and select **Regular Screen** from the drop-down menu.

- When you access the studio mode for the first time to create a regular-screen solution, you are prompted to set the playback window, as shown in Figure 3-2.

  The playback window and screen must be consistent in resolution.

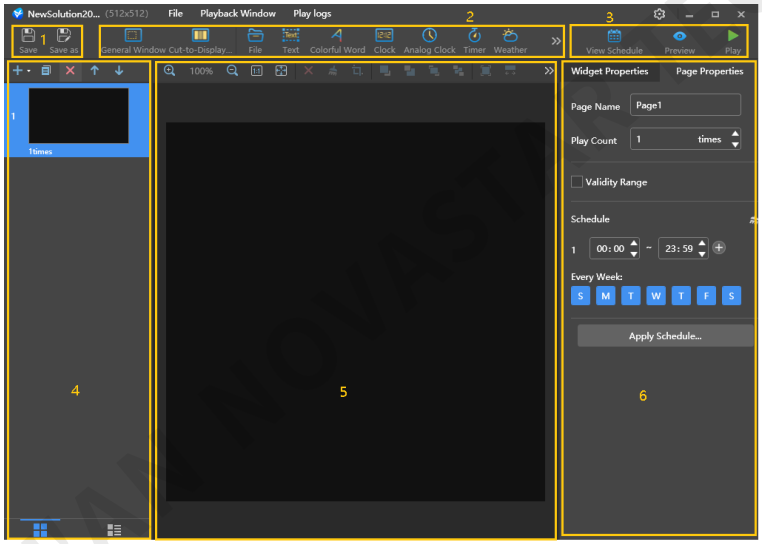
Figure 3-2 Playback window settings



- In other situations, the solution editing page is displayed when you access the studio mode to create a regular-screen solution, as shown in Figure 3-3.

  You can resize and reposition the playback window and choose to show or hide the playback window. For details, see 4 Playback Management.

Figure 3-3 Solution editing page



The description of the solution editing page is shown in Table 3-1.

Table 3-1 Description of the solution editing page

No.	Function	Description	
1	Saving a solution and saving a solution as another solution	Used for saving a solution and saving a solution as another solution	
2	Adding media You can click an icon to add a corresponding type of media.	: General window	: Cut-to-display window
		: File	: Text
		: Colorful text	: Digital clock
		: Analog clock	: Timer

No.	Function	Description	
		 : Weather	 : RSS
		 : Streaming media	 : Web page
3	Viewing schedules, previewing pages and publishing solutions	Used for viewing schedules, previewing the current page and publishing solutions	
4	Editing solution pages You can add, copy and delete pages and adjust the order of pages. Pages are played in order from top to bottom.	 : Add	 : Open the **Page Template** dialog box
		 : Copy	 : Delete
		 : Move up	 : Move down
		 : Thumbnail view (Only the thumbnails of pages are displayed.)	 : List view: (The thumbnails of pages and the names of the media items contained in the currently selected page are displayed.)
5	Editing media on pages	 : Zoom editing area in	 : Zoom editing area out
		 : Show the editing area in the original size	 Automatically fit the editing area according to the software interface
		 : Delete selected media	 : Clear all media
		 : Crop image	 : Bring forward
		 : Send backward	 : Bring to front
		 : Send to back	 : Fill the entire screen
		 : Fit the screen horizontally	 : Fit the screen vertically
		 : Align top	 : Center vertically
		 : Align bottom	 : Align left
		 : Center horizontally	 : Align right
6	Editing media on pages	Used for editing widget and page properties • Widget Properties: Widgets are the media added to a page. The properties of different types of media vary. Click a widget to select it before you edit its properties. • Page Properties: Set the name, play count, validity range and playback schedule of a page. – Play Count: Set the number of times to play a page continuously. – Validity Range: After this option is selected, the **Start Date** and **End Date** parameters are displayed. Expired pages will be skipped during solution playback. – Schedule: Allows you to specify the timeslots to play a page and select the days to repeat the playback. If the timeslots of different pages overlap, the pages will be played in order from top to bottom. – Apply Schedule: Allows you to apply the schedule of the	

No.	Function	Description
		current page to other pages. You can select multiple pages and apply a schedule to them at the same time.

Notes

- When you add an Excel file, the number of rows of the Excel file must be less than or equal to 600 and the total width of the columns must be less than or equal to the width of an A4 landscape paper. It is recommended that you set the page layout of the Excel file to A4 landscape.
- A valid URL is required when you add RSS, streaming media, or web page media.
- When you add weather media, the terminal must be connected to the Internet so that it can obtain real-time weather information.
- For the limitations on cut-to-display windows, see 7.3 Limitations on Cut-to-Display Windows for Regular Screens.

Step 2 After the solution editing is done, click **Save**.

Step 3 (Optional) At the upper right of the page, click  to view the schedule of each page in the solution.

Step 4 (Optional) At the upper right of the page, click  to preview the current page.

When the preview window is opened, you can also select other pages to preview. If you make changes to the current page, click  to refresh the preview window.

3.1.2 Creating an Ultra-Long-Screen Solution

Applications

If the pixel width of the resolution of a screen is greater than the pixel width of the maximum loading capacity of a multimedia player or the pixel height of the resolution of a screen is greater than the pixel height of the maximum loading capacity of a multimedia player, but the screen resolution does not exceed the maximum loading capacity of the multimedia player, you can use ultra-long-screen solutions.

Note:

For the limitations on the playback parameter specifications for ultra-long screens, see 7.4 Limitations on Playback Parameters for Ultra-long Screens.

Application Example

The resolution of a screen is 9000×128 or 128×9000 and the maximum loading capacity of a TB8 multimedia player is 2,300,000 pixels with a maximum width of 4096 pixels and a maximum height of 1920 pixels.

Screen Configuration

- The screen width and height to be configured cannot exceed the maximum width and height of the loading capacity of the TB8, as shown in Figure 3-4 and Figure 3-5.

Ultra-wide screen (9000×128)

- Number of parts: 9000/4096=2.20 (Here an integer is required, so the number of parts is 3.)
- Screen width to be configured: 9000/3=3000
- Screen height to be configured: 128×3=384

Ultra-tall screen (128×9000)

- Number of parts: 9000/1920=4.69 (Here an integer is required, so the number of parts is 5.)
- Screen width to be configured: 128×5=640
- Screen height to be configured: 9000/5=1800

Figure 3-4 Ultra-wide screen configuration

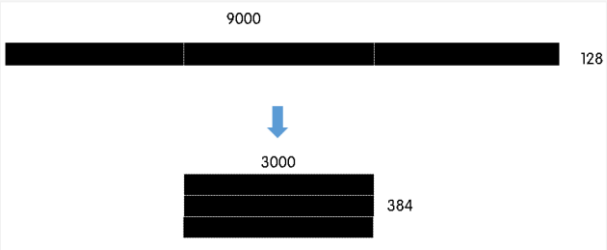
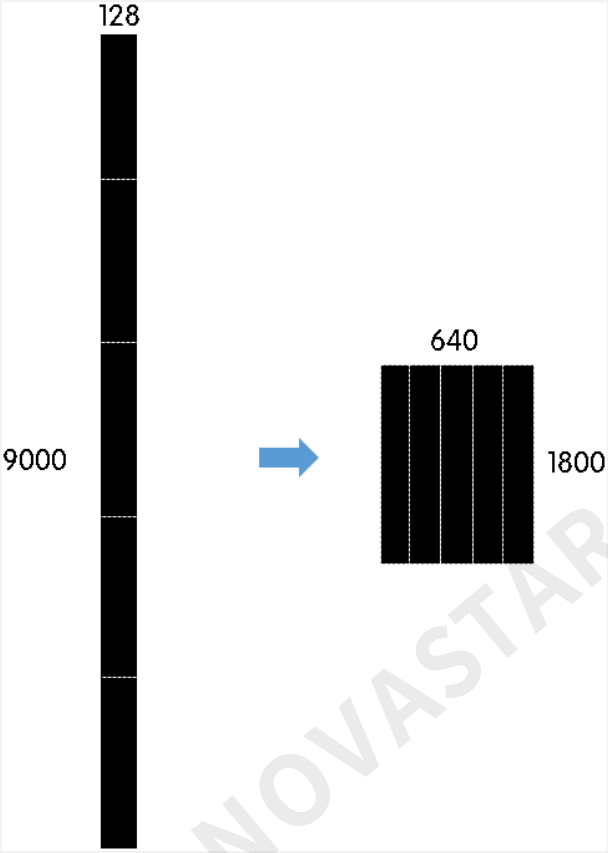


Figure 3-5 Ultra-tall screen configuration



- When you set the connection of receiving cards and an Ethernet port loads two rows/columns or more, the connection must follow the shape of the letter Z, as shown in Figure 3-6 and Figure 3-8.

Figure 3-6 Ultra-wide screen connection

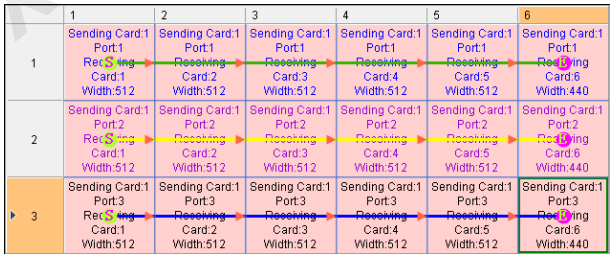
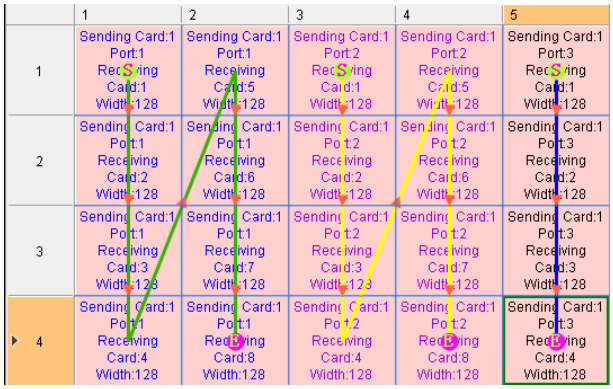


Figure 3-7 Ultra-tall screen connection



- If you want to set receiving cards to blank, you can only set the receiving cards at both ends to blank, as shown in Figure 3-8 and Figure 3-9.

Figure 3-8 Blank receiving cards of an ultra-wide screen

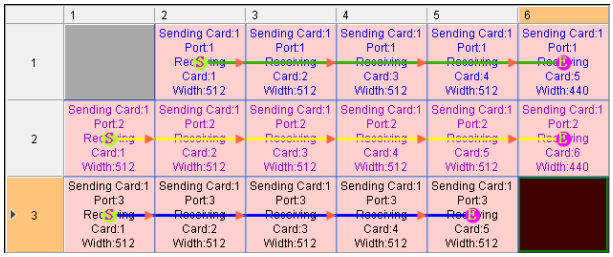
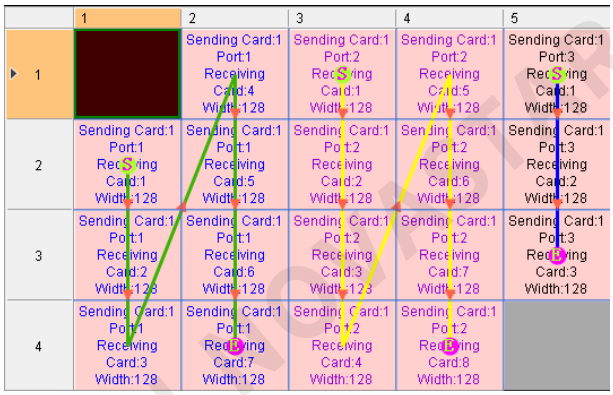


Figure 3-9 Blank receiving cards of an ultra-tall screen



Operating Procedure

The preceding application will be used as an example to introduce how to create an ultra-long-screen solution.

Step 1 Click + and select **Ultra-Long Screen** from the drop-down menu.

The **Solution Information** dialog box appears.

Figure 3-10 Solution information of an ultra-wide screen

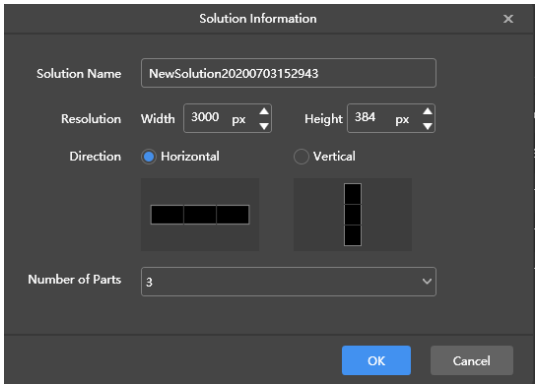
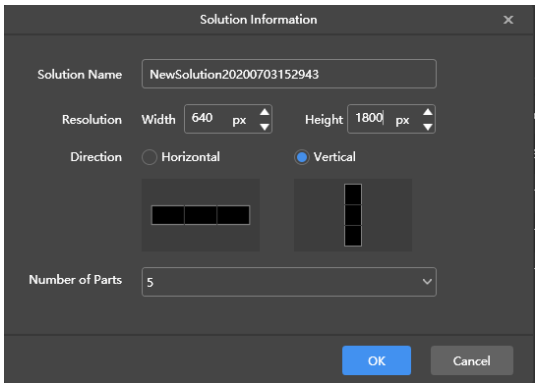


Figure 3-11 Solution information of an ultra-tall screen



Step 2 Set a name, resolution, direction and the number of parts for the solution, then click **OK**.

- The resolution of the solution must be consistent with the configured screen width and height.

  Here the width of the ultra-wide screen is 3000 and its height is 384, and the width of the ultra-tall screen is 640 and its height is 1800. For details, see the preceding Screen Configuration.

- Set the direction according to the actual situation, For an ultra-wide screen, select **Horizontal**, while for an ultra-tall screen, select **Vertical**.

  Here the direction is **Horizontal**.

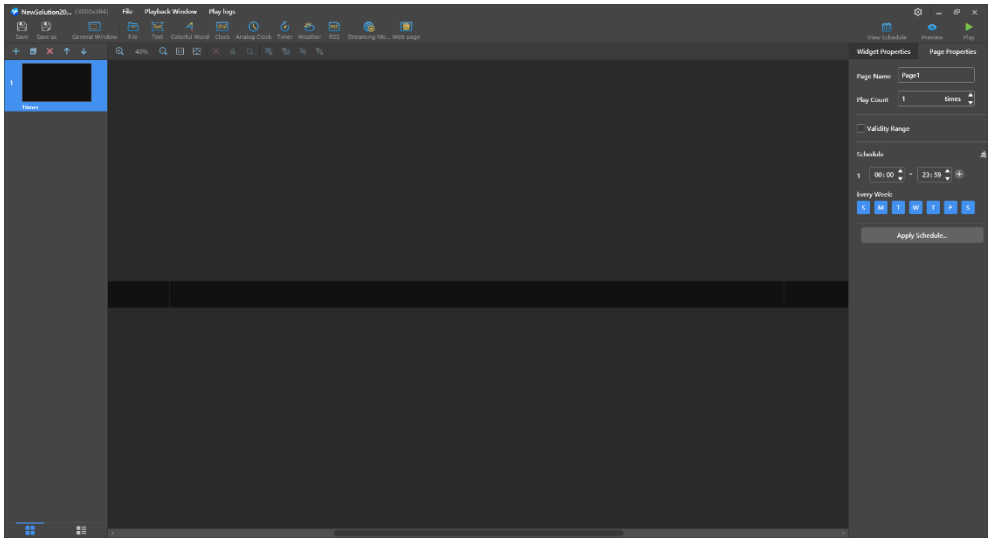
- The number of parts is calculated according to the actual screen width and height and the configured screen width and height.

  Here the number of parts of the ultra-wide screen is 3 and the number of parts of the ultra-tall screen is 5. For details, see Screen Configuration,

Step 3 Edit the solution on the solution editing page, as shown in Figure 3-12.

- In the page media editing area, the page is displayed based on the actual screen resolution and boundaries appear according to the number of parts.
- Only images, text and colorful text can be placed across the boundary.

Figure 3-12 Ultra-long-screen solution editing page



Step 4 After the solution editing is done, click **Save**.

Step 5 (Optional) At the upper right of the page, click to view the schedule of each page in the solution.

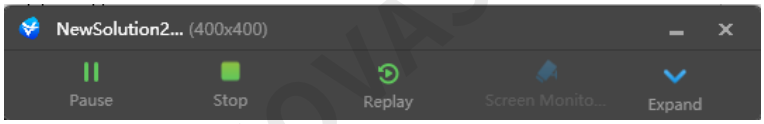
Step 6 (Optional) At the upper right of the page, click to preview the current page.

The preview window is displayed based on the configured screen aspect ratio.

3.2 Playing Solutions

On the top right of the page, click to play a solution. The solution editing page is not displayed and a playback control bar is displayed.

Figure 3-13 Playback control bar

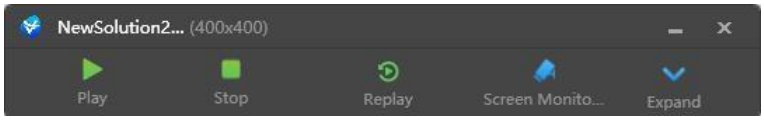


- : Pause playback. After the playback is paused, this button changes to the **Play** button.
- : Stop playback and display the solution editing page.
- : Restart the playback from the beginning.
- : Expand the solution editing page.
- : Collapse the solution editing page.

3.3 Screen Monitoring

If you have an extended display connected and the solution is played on that display, click on the playback control bar to monitor on the main display the image currently being played.

Figure 3-14 Screen monitoring

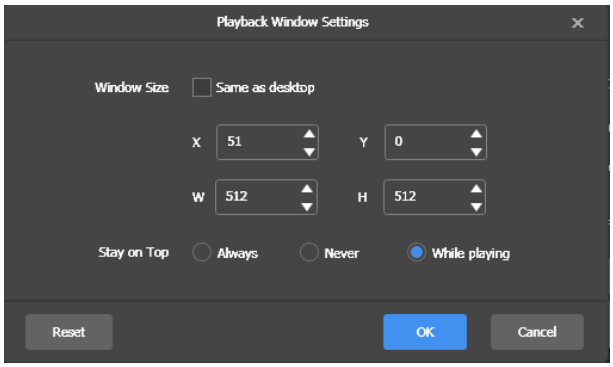


4 Playback Management

4.1 Setting Playback Window

On the menu bar of the solution editing page, choose **Playback Window** > **Playback Window Settings**. Set the coordinates, width, and height of the playback window and select an option of keeping the window on top. If **Same as desktop** is selected, the size of the playback window will be the same as the size of your desktop.

Figure 4-1 Playback window settings



4.2 Showing and Hiding Playback Window

- When the playback window is shown, choose **Playback Window** > **Hide Playback Window** on the menu bar to hide the playback window.
- When the playback window is hidden, choose **Playback Window** > **Show Playback Window** on the menu bar to show the playback window.

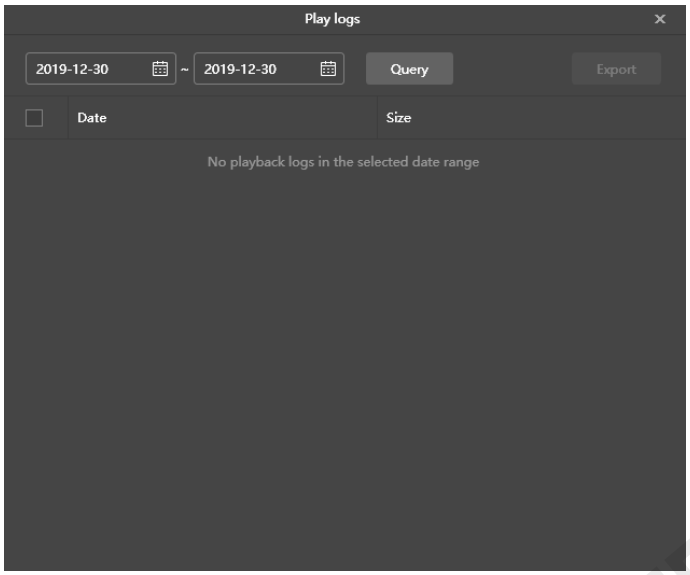
The default shortcut of showing and hiding playback window is **Ctrl**+**H**. You can change it in > **Preferences**.

5 Play Logs

5.1 Querying Play Logs

Step 1 On the solution editing page, select **Play logs** on the menu bar.

Figure 5-1 Play logs



Step 2 Set the date range and click **Query**.

Querying play logs of the current day is not supported.

Step 3 In the displayed query result list, click the date to view the general information and details of the play logs.

Step 4 (Optional) Click **Back** to go back to the query result list.

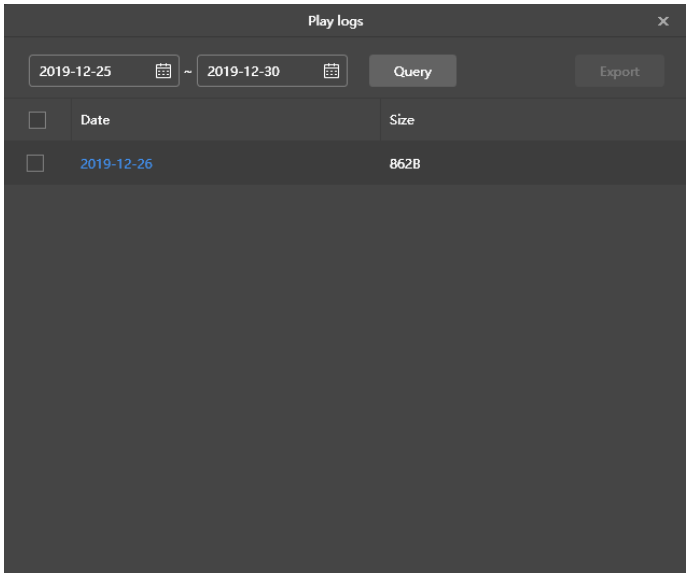
5.2 Exporting Play Logs

Step 1 On the solution editing page, select **Play logs** on the menu bar.

Step 2 Set the date range and click **Query**.

Querying play logs of the current day is not supported.

Figure 5-2 Query result



Step 3 Select the logs you want to export and click **Export**.

Step 4 In the displayed dialog box, set the export path and format.

Step 5 Click **OK**.

6 System Settings

To enter system settings, click  in the top-right corner of the startup page or solution editing page in studio mode.

6.1 Switching Language

Choose  > **Language** and select the target language from the submenu.

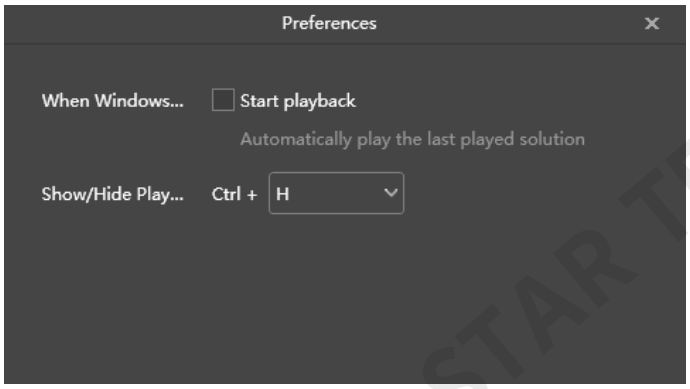
6.2 Switching Working Mode

Choose  > **Working Mode** > **Async Mode** to switch to the async mode.

6.3 Setting Preferences

Choose  > **Preferences** to open the **Preferences** dialog box.

Figure 6-1 Setting preferences



6.3.1 Starting Playback

Select **Start playback** and the software will automatically play the last played solution when Windows starts.

6.3.2 Setting Shortcut of Showing and Hiding Playback Window

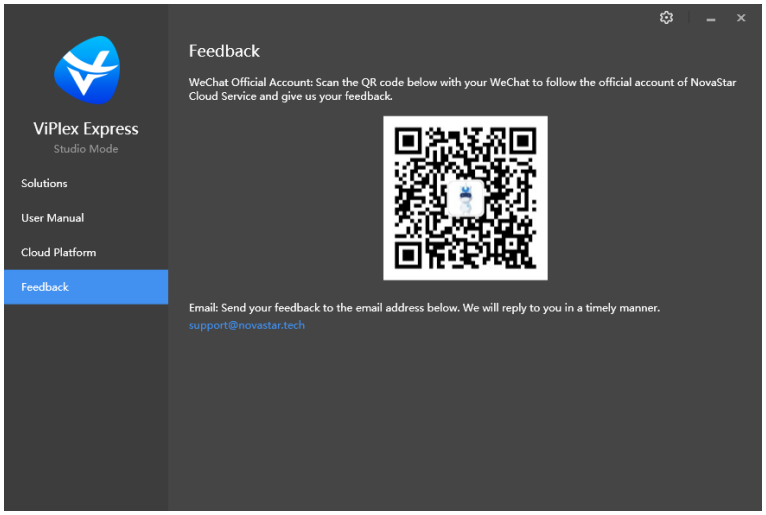
Select a letter from the drop-down list. The selected letter and **Ctrl** constitute the shortcut of showing and hiding the playback window.

6.4 Viewing User Manual

Choose  > **User Manual** to view the user manual of this software.

You can also click **User Manual** on the left menu on the startup page in studio mode, as shown in Figure 6-2.

Figure 6-2 Menu on the startup page



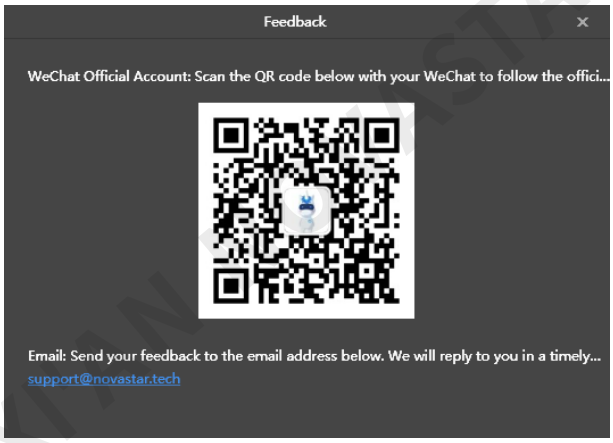
6.5 Checking for Updates

Choose > **Check for Updates**. In the displayed dialog box, check whether a software update is available. If there is an update available, click **Download** to start the online update.

6.6 Submitting Feedback

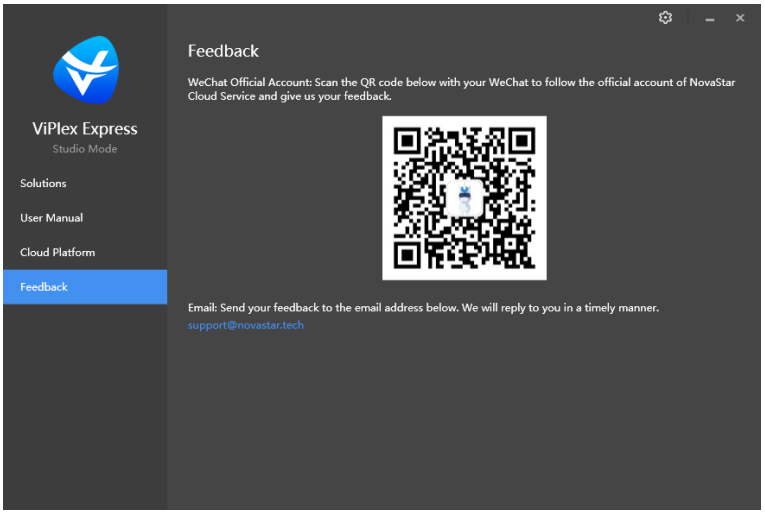
Choose > **Feedback**. In the displayed dialog box, scan the QR code with your WeChat to follow the official account and submit feedback, or send the feedback to the service email address.

Figure 6-3 Submitting feedback



You can also click **Feedback** on the left menu on the startup page in studio mode, as shown in Figure 6-4.

Figure 6-4 Menu on the startup page



6.7 Viewing Software Information

Choose > **About**. In the displayed dialog box, view the software related information.

7 FAQs

7.1 How to set the inbound firewall rules?

Step 1 Click  on the Windows Start menu.

Step 2 Choose **Update & Security**.

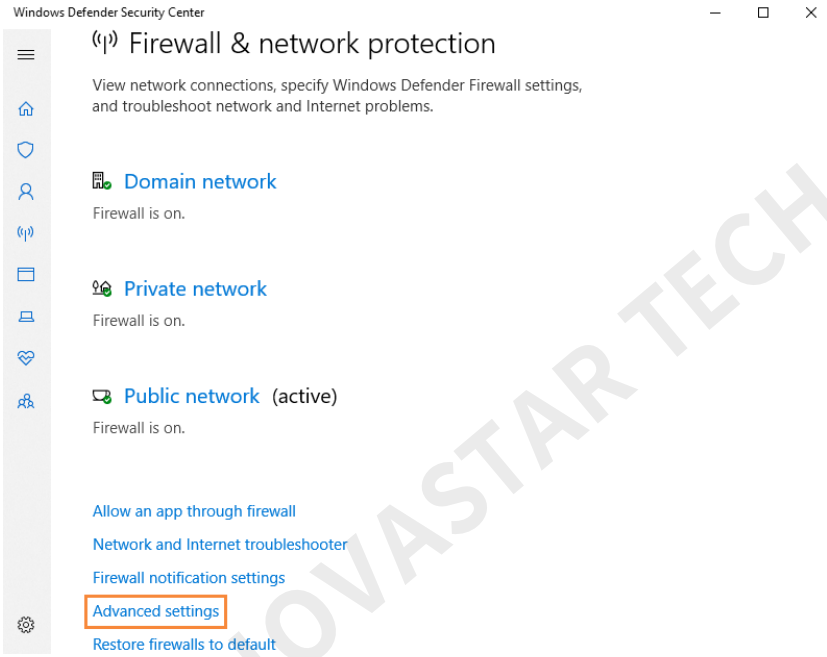
Step 3 Choose **Windows Security**.

Step 4 Click **Open Windows Defender Security Center**.

Step 5 Click Firewall & network protection.

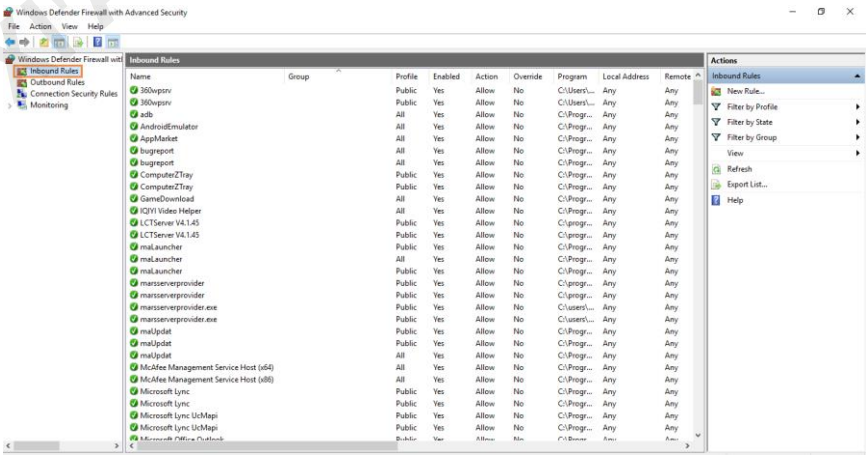
Step 6 Click **Advanced Settings** and then click **Yes** to open the **Windows Defender Firewall with Advanced Security** dialog box.

Figure 7-1 Advanced settings



Step 7 Click Inbound Rules.

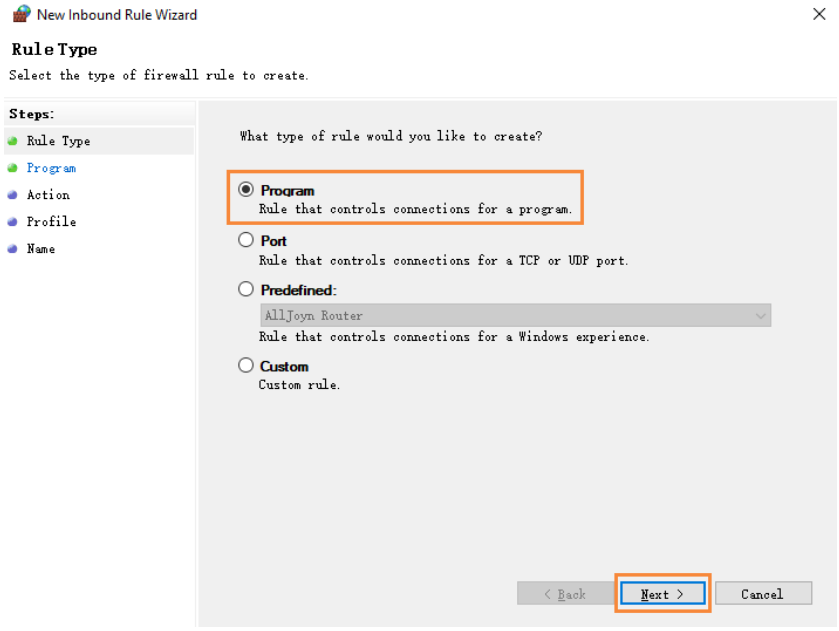
Figure 7-2 Inbound rules



Step 8 On the right of the page, click **New Rule** to open the **New Inbound Rule Wizard** dialog box.

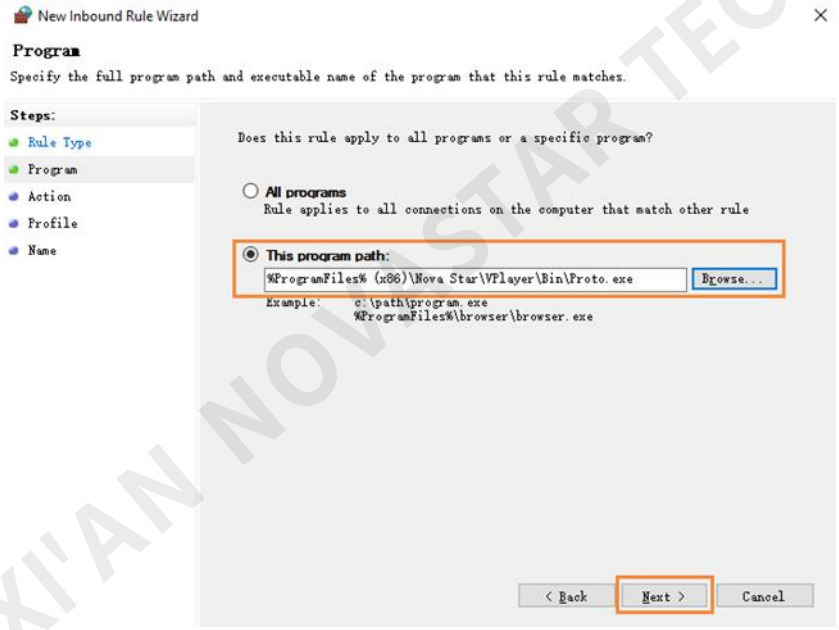
Step 9 Select **Program** and click **Next**.

Figure 7-3 Rule type



Step 10 Click **Browse**, select **Proto.exe** from the local PC, and then click **Next**.

Figure 7-4 Program selection



Step 11 Select **Allow the connection** and click **Next**.

Step 12 Select **Domain**, **Private**, and **Public** and click **Next**.

Step 13 Enter a name and click **Finish**.

7.2 What video formats are supported in studio mode?

The following video formats are supported in studio mode:

*.3g2, *.3gp, *.3gp2, *.3gpp, *.amv, *.asf, *.avi, *.bik, *.bin, *.divx, *.drc, *.dv, *.f4v, *.flv, *.gvi, *.gxf, *.iso, *.m1v, *.m2v, *.m2t, *.m2ts, *.m4v, *.mkv, *.mov, *.mp2, *.mp4, *.mp4v, *.mpe, *.mpeg, *.mpeg1, *.mpeg2, *.mpeg4, *.mpg, *.mpv2, *.mts, *.mxf, *.mxg, *.nsv, *.nuv, *.ogg, *.ogm, *.ogv, *.ps, *.rec, *.rm, *.rmvb, *.rpl, *.thp, *.tod, *.ts, *.tts, *.txd, *.vob, *.vro, *.webm, *.wm, *.wmv, *.wtv, *.xesc

AVI only supports the following video coding formats: MPEG-2, MPEG-4, MPEG-4 ASP, H.264, DivX 4/5/6, XviD, SV1, 3ivX D4, H.264/MPEG-4 AVCMKV, AMR, WebM, WMV, MP3. For instance, AVI videos in DX50 and MP4V formats cannot be played.

When a video format is not supported, you are advised to convert the video to MP4 format with a professional video format conversion software.

7.3 Limitations on Cut-to-Display Windows for Regular Screens

Table 7-1 Limitations on the playback of cut-to-display windows

Playback Window Size (Solution Resolution)	Maximum width	3840 px
	Maximum height	2160 px
Number of Parts	• Cut horizontally: Actual screen width/Playback window width ≤8 • Cut vertically: Actual screen height/Playback window height ≤8	

7.4 Limitations on Playback Parameters for Ultra-long Screens

Table 7-2 Media playback test values

Playback Window Size	Maximum width	3840 px
	Maximum height	2160 px
Number of Parts	Up to 8 parts	
Scrolling Text	Maximum font size	256px
	Maximum number of characters	2000
Number of Videos (Resolution x Number)	Number of videos that can be played simultaneously: (Choose one from the following 4 options) • 4K x 1 • 1080P x 2 • 720P x 4 • (480×50) x 6	
Other Media	None	

Trademark

NOVASTAR is a trademark of Xi'an NovaStar Tech Co., Ltd.

Statement

Thank you for choosing NovaStar's product. This document is intended to help you understand and use the product. For accuracy and reliability, NovaStar may make improvements and/or changes to this document at any time and without notice. If you experience any problems in use or have any suggestions, please contact us via the contact information given in this document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

Official website
www.novastar.tech

Technical support
support@novastar.tech