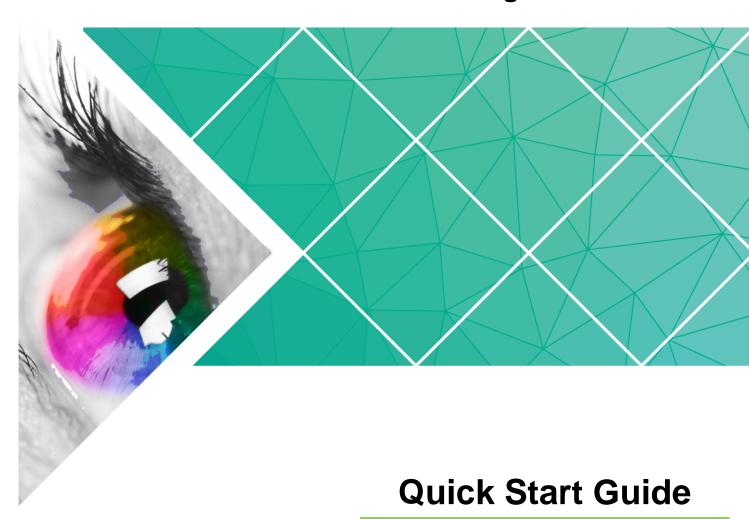


### **VNNOX**

### **Cloud-Based Publishing Service**



Version: V5.7.0

Document Number: NS170100046

#### Copyright © 2017 Xi'an NovaStar Tech Co., Ltd. All Rights Reserved.

No part of this document may be copied, reproduced, extracted or transmitted in any form or by any means without the prior written consent of Xi'an NovaStar Tech Co., Ltd.

#### **Trademark**



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

#### **Statement**

You are welcome to use the product of Xi'an NovaStar Tech Co., Ltd. (hereinafter referred to as NovaStar). 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. Any problem in use or any good suggestion, please contact us through ways provided in the document. We will do our utmost to solve the problems and adopt the suggestions after evaluation as soon as possible.

V5.7.0 i

### **Table of Contents**

Table of Contents	ii
1 About This Document	1
2 Operation Overview	2
3 Registering and Logging in VNNOX	3
3.1 Registering VNNOX	3
3.2 Logging in VNNOX	3
4 Editing Solutions	5
4.1 Adding Media	5
4.1.1 Adding Images and Videos	5
4.1.2 Adding Webpages	6
4.1.3 Adding RSS	6
4.1.4 Adding Pages	
4.1.5 Adding Streaming Media	
4.2 Creating Playlists	
4.3 Creating Solutions	
5 Creating Players	13
6 Setting Player Authentication Information	14
7 Installing Terminal Players	15
7.1 Installing VNNOX Player (Synchronous Terminal)	
7.2 Installing ViPlex (Asynchronous Terminal)	16
7.2.1 Installing ViPlex Handy (Android and iOS)	16
7.2.2 Installing ViPlex Express (Windows)	16
8 Binding Players	17
8.1 Binding Synchronous Players (Synchronous Terminals)	17
8.2 Binding Asynchronous Players (Asynchronous Terminals)	18
8.2.1 Binding via ViPlex Handy (Android and iOS)	18
8.2.2 Binding via ViPlex Express (Windows)	19
9 Publishing Solutions	21

### 1 About This Document

The VNNOX offers a unified platform for users to edit and publish solutions. After players are bound to synchronous and asynchronous terminals, VNNOX can publish solutions remotely.

This document is to guide users to quickly get started with the VNNOX to edit and publish solutions.

# 2 Operation Overview

Table 2-1 Operation overview

No.	Operation	Description	Software Required
1	Register and log in to VNNOX	After successful registration, the role of the user is a system administrator and the user has all the permissions.	VNNOX
2	Edit solutions	Users add media to playlists and schedule the playlists. Then a solution is created.	
3	Create players	Players include synchronous players and asynchronous players.	
4	Set player authentication information	Authentication information is required when synchronous and asynchronous terminals bind players.	
5	Install terminal players	Terminal players can bind the players on the VNNOX.	VNNOX Player (synchronous terminal) ViPlex (asynchronous terminal)
6	Bind players	Solutions can be associated after players are bound.	VNNOX Player(synchronous terminal) ViPlex(asynchronou s terminal)
7	Publish solutions	After solutions are associated by players, the VNNOX will publish the solutions manually or automatically.	VNNOX

# Registering and Logging in VNNOX

### 3.1 Registering VNNOX

- Step 1 Visit http://www.vnnox.com and click **Register** at the top right of the page.
- Step 2 Select the server node and click Ok.
- Step 3 Enter the information required for the registration.

Registering by email is the default way of registration. Click **By Phone** to switch to the page for registering by phone.

Step 4 Click Register.

System prompts that the registration is successful and the login page appears.

After successful registration, the default role of the user is system administrator and the user has all the permissions. The default workgroup of the user is system workgroup and the user can manage all the resources. The default role and workgroup cannot be changed. The VNNOX will assign five free licenses to the user. Each of the licenses is valid for one month.

### 3.2 Logging in VNNOX

- Step 1 Visit http://www.vnnox.com and click **Login** at the top right of the page.
- Step 2 Select the server node and click Ok.
- Step 3 Enter the account name and password, then click Login.

After successful login, the Home page appears, as shown in Figure 3-1

Figure 3-1 The Home page

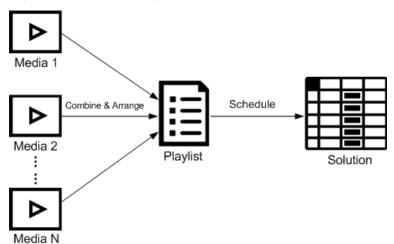


## 4 Editing Solutions

Users add media to playlists and schedule the playlists. Then a solution is created.

The relationship among media, playlist and solution is shown as Figure 4-1.

Figure 4-1 Media management



### 4.1 Adding Media

### 4.1.1 Adding Images and Videos

The types of images, videos, and documents supported by VNNOX are shown as Table 4-1.

Table 4-1 Types of images, videos, and documents

Media Type	Synchronous Terminal	Asynchronous Terminal
Image	PNG, JPG, BMP, GIF, JPEG	JPEG, BMP, GIF, PNG, WEBP
Video	MP4, RMVB, AVI	MPEG-1/2, MPEG-4,H.264/AVC, MVC, H.265/HEVC, Google VP8, H.263, VC-1, Motion JPEG

Document	Word, Excel, PPT, PDF	
----------	-----------------------	--

- Step 1 Select **Media Management**, **Media** in the pop-up menu of  $\blacksquare$  at the top right of the page.
- Step 2 Click Add and select Upload File.
- Step 3 Click Choose file.
- Step 4 Select the images, videos, and documents to be uploaded, then click Open.
- Step 5 (Optional) Specify the categories of the media. The media can be quickly found by the filter according to the categories.
- Step 6 Click **Ok**. After a message appears prompting the media files are uploaded successfully, the added media will be displayed in the media list.
- Step 7 Click the name of the media to enter the **Basic Info** tab of the media attribute page.
- Step 8 Set the validity of the images, videos, and documents. Expired media cannot be played. When the media type is document, you also need to set the duration and effect of each page of the document.
- Step 9 Click Save&Close.

### 4.1.2 Adding Webpages

- Step 1 Select **Media Management**, **Media** in the pop-up menu of at the top right of the page.
- Step 2 Click **Add** and select **Webpage** from the drop-down options.
- Step 3 Name the webpage and enter the address of the webpage.
- Step 4 (Optional) Specify the categories of the media. The media can be quickly found by the filter according to the categories.
- Step 5 Click **Ok** and enter the **Basic Info** tab of the webpage attribute page.
- Step 6 Set the validity of the webpage. Expired media cannot be played.
- Step 7 Click **Save&Close**. After the operation is successful, the added webpage will be displayed in the media list.

### 4.1.3 Adding RSS

- Step 1 Select **Media Management**, **Media** in the pop-up menu of  $\blacksquare$  at the top right of the page.
- Step 2 Click Add and select RSS from the drop-down options.
- Step 3 Name the RSS and enter the address of the RSS.
- Step 4 (Optional) Specify the categories of the media. The media can be quickly found by the filter according the categories of the media.
- Step 5 Click **Ok**. The **Basic Info** tab of the RSS attribute page appears.
- Step 6 Set the validity and refresh period of the RSS. Expired media cannot be played. The subscriptions will be refreshed automatically based on the refresh period.

Step 7 Click **Save&Close**. After the operation is successful, the added RSS will be displayed in the media list.

### 4.1.4 Adding Pages

A page includes one or more media and widgets. Media in the page are restricted to the attributes of the page and the attributes of the media doesn't take effect.

- Step 1 Select **Media Management**, **Media** in the pop-up menu of at the top right of the page.
- Step 2 Click Add and select Page in the drop-down options.
- Step 3 Name the page and click Next.
- Step 4 Select a page template and click **Ok**. Then the **Edit** page appears, as shown in Figure 4-2. Description of the **Edit** page is shown in Table 4-2.

Figure 4-2 The Edit page

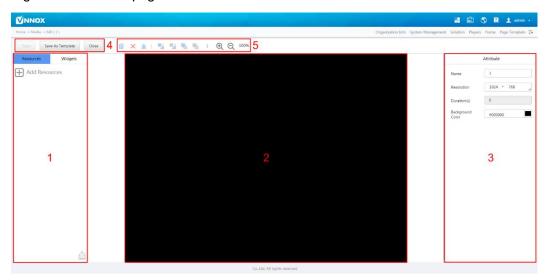


Table 4-2 Description of the Edit page

No.	Function	Description
1	Resources and widgets	<ul> <li>Resources: Add media to the resource list. Click</li></ul>
2	Editing the page	Edit contents of the page, including media and widgets.
3	Editing attributes	Click and select the media and widgets in the page editing area to edit their relevant attributes.
4	Common buttons	Save and close pages and save pages as templates.

5	Icon buttons	From left to right, meanings of the icons are as
		follows:
		Copy an object
		X: Delete an object
		• 🚔 : Clear objects
		• 🛂: Bring forward
		Send backward
		• 🖳: Bring to front
		• 🖳: Send to back
		• Q: Zoom out
		All the operation objects of the above buttons are the media and widgets in the page editing area. Click and select an object before operating.

- Step 5 (Optional) Click **Add Resources** in the **Resources** tab on the left. Select one or more media in the pop-up dialog box and click **Ok**.
- Step 6 Drag the media or widgets in the left side of the page to the editing area.
- Step 7 Click and select one media or widget to edit the attributes and adjust the layout.
- Step 8 Click Save after the attributes and layout of all the contents in the page are edited.
- Step 9 (Optional) Click **Save As Template** to save the page as a template.
- Step 10 Click **Close**. After the operation is successful, the added page will be displayed in the media list.

### 4.1.5 Adding Streaming Media

The Streaming Media formats supported by the VNNOX are shown as Table 4-3.

Table 4-3 Streaming Media formats

Media Type	Synchronous Terminal	Asynchronous Terminal
Streaming Media	<ul> <li>HLS, RTMP: Can be previewed online and played.</li> <li>RTSP: Can be played but cannot be previewed online.</li> </ul>	Currently not supported.

- Step 1 Select **Media Management**, **Media** in the pop-up menu of  $\stackrel{\blacksquare}{\coprod}$  at the top right of the page.
- Step 2 Click **Add** and select **Streaming Media** from the drop-down options.
- Step 3 Name the Streaming Media and enter the address of the webpage.
- Step 4 (Optional) Specify the categories of the media. The media can be quickly found by the filter according to the categories.
- Step 5 Click **Ok** and enter the **Basic Info** tab of the Streaming Media attribute page.

- Step 6 Set the validity of the Streaming Media. Expired media cannot be played.
- Step 7 Click **Save&Close**. After the operation is successful, the added webpage will be displayed in the media list.

### 4.2 Creating Playlists

- Step 1 Select **Media Management**, **Playlists** in the pop-up menu of  $\blacksquare$  at the top right of the page.
- Step 2 Click New.
- Step 3 Name the playlist.
- Step 4 (Optional) Specify the categories of the playlist. The playlist can be quickly found by the filter according to its categories.
- Step 5 Click **Ok**. The **Media Item** tab of the playlist attribute page appears.
- Step 6 Click Add media.
- Step 7 Select media items and click Ok. The media items are added to the playlist.
- Step 8 Select an added media item and click **Attribute**, or select multiple added media items and click **Bulk edit** to set the item duration time and play plan.
  - Item duration time: Set the duration time of images, webpages and RSS. For videos, pages, and documents, this parameter cannot be modified.
  - Valid range: When this parameter is set to Yes, you can set the validity of the media item. The valid range is valid in current playlist only.
  - Time solution: Specify the play plan of the media item. The time solution is valid in current playlist only.
- Step 9 Click Ok.
- Step 10 Select the Basic Info tab.
- Step 11 Set parameters below and click Save&Close.
  - Default image duration time: Set the default play duration of images. The value of this parameter is the play duration while adding images in the **Media Item** tab.
  - Default web/RSS duration time: Set the default play duration of webpages and RSS. The value of this parameter is the play duration while adding webpages and RSS in the **Media Item** tab.
  - Default Streaming media duration time: Set the default play duration of streaming media. The value of this parameter is the play duration while adding streaming media in the **Media Item** tab.
  - Entrance effect: Set the default entrance effects of static images.
  - Entrance effect duration: Set the default entrance effect duration of static images. If the duration of a static image is 30 seconds and the duration of entrance effect is set to 10 seconds, the static image will played for 20 seconds after the entrance.

### 4.3 Creating Solutions

- Step 1 Select **Media Management**, **Solution** in the pop-up menu of at the top right of the page.
- Step 2 Click New.
- Step 3 Name the solution and click Next.
- Step 4 Select a frame template and click **Ok**. Then the **Solution Settings** tab of the frame template attribute page and the **week** timetable appear. Assume that the solution only have one frameset, as shown in Figure 4-3. Description of the page is shown in Table 4-4. If the solution has more framesets, it will be required to schedule each of the framesets respectively.

Figure 4-3 The Solution Settings tab

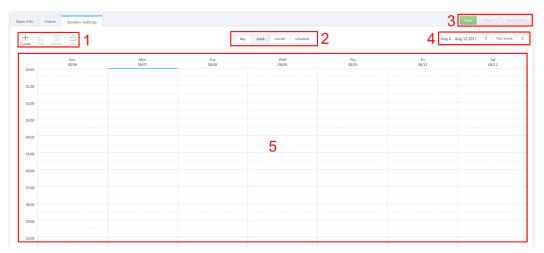


Table 4-4 Description of the Solution Settings tab

No.	Function	Description
1	Schedule buttons	Create: Click this button, and the <b>Create</b> dialog box appears.
		<ul> <li>Edit: Select a schedule in the timetable and click this button. Then the Edit dialog box appears.</li> </ul>
		<ul> <li>Delete: Select a schedule in the time table and click this button to delete the schedule.</li> </ul>
		Clear: Click this button to clear schedules.
2	Date buttons	<ul> <li>Day: Show the timetable in day view.</li> <li>Week: Show the timetable in week view.</li> <li>Month: Show the timetable in month view.</li> <li>Schedule: Show all schedules in a list.</li> </ul>
3	Common buttons	<ul><li>Save: Save configuration.</li><li>Reset: Restore configuration.</li><li>Save&amp;Close: Save configuration and close the</li></ul>

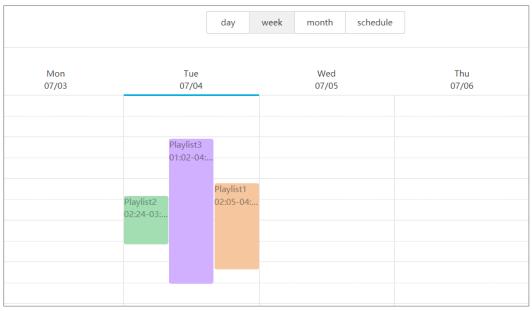
		attribute page.
4	Date switching buttons	Switch to a previous date by day, week or month.
		Switch to a subsequent date by day, week or month.
		Today: Switch the timetable to current day.
		This Week: Switch the timetable to current week.
		This Month: Switch the timetable to current month.
5	Schedules	The default way to show timetable is by week.

- Step 5 Click **day**, **week** or **month** to enter relevant timetables. Perform any of the following operations to create the solution.
  - Click Create.
  - Click a cell in the timetable and click . Each cell of the timetable in **day** and **week** views stands for one hour, while in month view stands for one day.
- Step 6 Select a playlist in the Playlist tab of the Create dialog.
- Step 7 Select the **Play plan** tab and set play duration and date or play duration and period.
  - When the Repeat is set to Not repeating, the solution can be played normally
    according to the plan if the date is set to the current day or after 7 days. The
    solution will not be played if the date is set to other days.
  - If the Repeat is set to Every day, Weekly, Per month or Per year, the solution will be played repeatedly according to the period you set.
- Step 8 Select the **Option** tab and set the schedule color displayed in the timetable.
- Step 9 After the configuration is completed, click **Ok**. The schedule is graphically displayed in the timetable.

For the timetable in **day** and **week** views, the schedules will be displayed side by side in the timetable if the schedules have overlapped timeslot. In Figure 4-4, three schedules in the **week** timetable are taken as an example. The VNNOX supports following operations on the schedules:

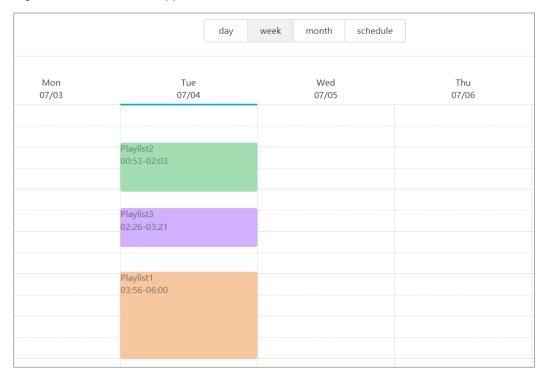
- Drag the top and bottom edges of a schedule to modify its timeslot.
- Drag a schedule to any position of the date when the schedule will be played to modify the timeslot.
- Drag the schedules to modify the playback priority order during the overlapped timeslot, for example, the priority order of the three playlists in Figure 4-4 is: Playlist3 > Playlist2 > Playlist3. After the playback of Playlist2 is over, Playlist3 will be played from the beginning. Playlist1 will not be played.
- Double click a schedule and the **Edit** dialog box appears.

Figure 4-4 With overlapped timeslot



Drag the three schedules in Figure 4-4 until they don't have overlapped timeslot. Then the schedules is displayed as the Figure 4-5.

Figure 4-5 Without overlapped timeslot



## **5** Creating Players

### **Related Information**

Players are tools for information transmission between the VNNOX and synchronous and asynchronous terminals.

Players include following two types:

- Synchronous player: Used for synchronous terminals and bound on VNNOX Player.
- Asynchronous player: Used for synchronous terminals and bound on ViPlex.

### Operating Steps

- Step 1 Select **Players Management**, **Players** in the pop-up menu of at the top right of the page.
- Step 2 Click New.
- Step 3 Choose synchronous player or asynchronous player and click **Next**.
- Step 4 Name the player, associate a license, set solution distribution type and click **Ok**. Then the **Basic Info** tab of player attribute page appears.

The available licenses are displayed in the drop-down options of **Associated license**. The associated and expired licenses are not displayed. After successful association, the license number and validity will be displayed in the **Player License** of the player list.

The meanings of distribution types are shown as follows:

- Manual: After a solution is bound to players or modified, users need to click Update solution in the player list page to distribute the solution manually.
- Auto: After a solution is bound to players or modified, VNNOX will distribute the solution automatically without any operation.

# 6 Setting Player Authentication Information

#### Related Information

After successful registration, The VNNOX generates the following default authentication information.

- Certified user name: <u>Username\_player</u>
- Certified password: 123456

Authentication information is required when synchronous and asynchronous terminals bind players. To prevent terminals accessing VNNOX illegally, we suggest modifying the default authentication information.

### **Operating Steps**

- Step 1 Select **Organization Management**, **System Management** at the pop-up menu of at the top right of the page.
- Step 2 Select the Player Authentication tab.
- Step 3 Set certified user name and password, then click **Save**.
- Step 4 Record the **Server address**, **Certified user name** and **Certified password** which will be required while binding the player.

### Installing Terminal Players

Terminal players can bind the players on the VNNOX, including VNNOX Player and ViPlex.

The ViPlex includes ViPlex Handy and ViPlex Express.

### 7.1 Installing VNNOX Player (Synchronous Terminal)

### Before You Begin

- Visit www.vnnox.com, and click Windows Player Downloads to download the installation program "VNNOX Player.exe" of the VNNOX Player.
- Make sure the antivirus software is stopped.
- Make sure the .NET Framework V4.0 or above is installed.

#### **Operating Steps**

- Step 1 Double click the installation program "VNNOX Player.exe".
- Step 2 Select a language and click OK.
- Step 3 Click Next in the installation wizard.
- Step 4 Select an installation path and click Next.
- Step 5 Select a start menu folder and click **Next**.
- Step 6 Select the additional tasks and click Next.
- Step 7 Click Install.
- Step 8 After the installation, **Launch VNNOX Player** is optional. Click **Finish** to complete the installation.

### 7.2 Installing ViPlex (Asynchronous Terminal)

### 7.2.1 Installing ViPlex Handy (Android and iOS)

### Before You Begin

Scan the QR code below to download the ViPlex Handy installation package.



### **Operating Steps**

Installation of the ViPlex Handy is the same as other applications.

### 7.2.2 Installing ViPlex Express (Windows)

### Before You Begin

Visit www.novastar.tech to download the installation program "ViPlex Express V1.0.0 Setup.exe".

### **Operating Steps**

- Step 1 Double click the installation program "ViPlex Express V1.0.0 Setup.exe".
- Step 2 Click Next in the setup wizard.
- Step 3 Select the installation path and click Next.
- Step 4 Select the start menu folder and click **Next**.
- Step 5 Select additional task and click Next.
- Step 6 Click Install.
- Step 7 After the installation, **Run ViPlex Express** is optional. Click **Finish** to complete the installation.

# 8 Binding Players

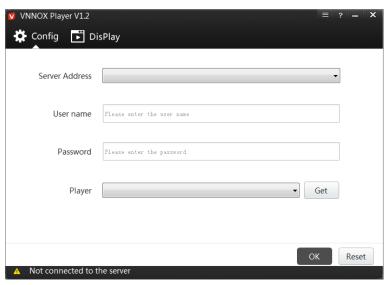
After being bound, players could associate solutions. One terminal player can bind one player on the VNNOX only.

- Synchronous terminal: Bind synchronous players on the VNNOX via VNNOX Player.
- Asynchronous terminal: Bind the asynchronous players on the VNNOX via ViPlex.

### 8.1 Binding Synchronous Players (Synchronous Terminals)

Step 1 Start the VNNOX Player, as shown in Figure 8-1.

Figure 8-1 The Config tab



- Step 2 Click the drop-down arrow on the right of **Server Address** in the **Config** tab and select **New**.
- Step 3 Enter the server name and address in the **New** dialog box and then click **OK**. The **Server Address** must be the same as the server address in VNNOX.

- Step 4 Enter certified user name and password which must be the same as the user name and password in the VNNOX.
- Step 5 Click Get on the right of Player to get the player list.
- Step 6 Click the drop-down arrow on the right of **Player** to select a player and then click **OK**.
- Step 7 Click **OK** in the pop-up prompt box which reminds that the player is bound successfully.

• The server connection is successful is shown in the bottom left corner of the page.

### 8.2 Binding Asynchronous Players (Asynchronous Terminals)

Taurus is an asynchronous terminal and can bind player via the ViPlex. The Viplex includes ViPlex Handy, ViPlex Express both of which are capable of binding players.

### 8.2.1 Binding via ViPlex Handy (Android and iOS)

### Before You Begin

- Get the SSID and password of WiFi AP of the Taurus. The default SSID is "AP+the last 8 digits". The default password is "12345678".
- Get the password of the user "admin". The default password of the user "admin" is "123456".
- Connect the Taurus to Internet.

### **Operating Steps**

The ViPlex Handy can connect any number of the Taurus products.

- Step 1 Connect the WiFi AP of the Taurus products.
- Step 2 Start ViPlex Handy.

System can automatically detect the Taurus series products and refresh **Screen list**. Users can also slide down **Screen list** to manually refresh the list.

- Lead that Taurus is online and you can log into it.
- denotes that Taurus is offline and you cannot log into it.
- denotes that Taurus login is successful.
- Step 3 Click **Connect** behind the screen name.
- Step 4 Enter username and password, and click **Login**.
- Step 5 Click a screen name to enter the **Screen management** page.
- Step 6 Select Remote Management, Player Binding.



- Step 7 Select the VNNOX server and enter the certified user name and password of the player. The information must be the same as the information on the VNNOX.
- Step 8 Click **Obtain** and select an asynchronous player from the drop-down options.
- Step 9 Click **OK** after the settings are completed. A message appears prompting the operation is successful.

### 8.2.2 Binding via ViPlex Express (Windows)

### Before You Begin

- Get the SSID and password of WiFi AP of the Taurus. The default SSID is "AP+the last 8 digits". The default password is "12345678".
- Get the password of the user "admin". The default password of the user "admin" is "123456".
- Connect the Taurus to Internet.

### **Operating Steps**

ViPlex Express can connect any number of the Taurus products.

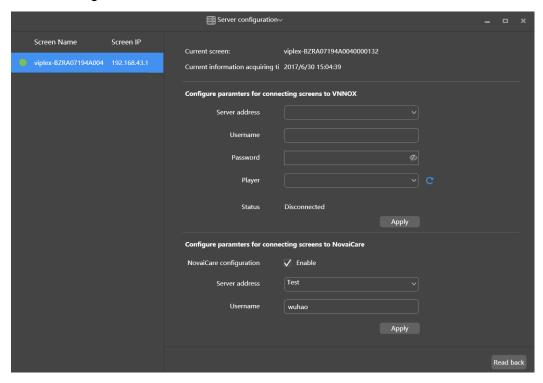
- Step 1 Connect the WiFi AP of the Taurus products.
- Step 2 Start ViPlex Express.
- Step 3 Click Refresh.
  - Denotes the Taurus is online and you can log into it.
  - Denotes the Taurus is offline and you cannot log into it.
  - Denotes logging into the Taurus is successful.

After the Taurus is found by ViPlex Express, the ViPlex express will try to log into to the Taurus with the default account or the account used for last login.

Step 4 Loging in Taurus is successful or not.

- Yes. appears and then perform Step 7.
- No. appears and then perform Step 5.
- Step 5 Click **Connect** on the right of the screen information.
- Step 6 Enter user name and password, and click OK.
- Step 7 Select Screen Control.

- Step 8 Click Server configuration.
- Step 9 Select the target terminal in the terminal list.



- Step 10 Select the VNNOX server and enter the certified user name and password of the player. The information must be the same as the information on the VNNOX.
- Step 11 Click on the right of **Player** and select an asynchronous player from the drop-down options.
- Step 12 Click **Apply**, and a message appears prompting the player is bound successfully.
- Step 13 Click Read back. The Status is shown as Connected.

# 9 Publishing Solutions

#### Related Information

After solutions are bound to the player, the solutions will be distributed by VNNOX automatically or manually. After the solutions are downloaded by terminal players, the solutions will be played according to the play plan.

### **Operating Steps**

- Step 1 Visit http://www.vnnox.com and click **Login** at the top right of the page.
- Step 2 Select the server node and click Ok.
- Step 3 Enter your account name and password, then click Login.
- Step 4 Select **Players Management**, **Players** in the pop-up menu of the page.
- Step 5 Enter player attribute page.
  - For a single player: Select a player and click Attribute, or click the player name.
  - For multiple players: Select the players and click **Bulk edit**.
- Step 6 Select a solution from the drop-down options of the **associate solution** parameter.
- Step 7 The distribution type is **Manual** or not.
  - Yes, click Save&Close to return to the player list page. Select the target player and click Update solution.
  - No, click Save&Close.