NovoTouch

Remote Viewer

User Manual

(For LK6530i, LK7530i, and LK8630i models)

A brand of DELTA

Table of Contents

1. GETTING STARTED 5

1.1 Introduction 5

1.2 Hardware Setup 5

1.3 NovoTouch Remote Viewer Home Screen 5

1.4 Basic Device Configuration 7

1.5 Client software download and installation 9

2. SETTING UP NETWORK 11

2.1 Network connection 11

2.1.1 Ethernet 12

2.1.2 Wi-Fi client mode 13

2.1.3 Wi-Fi hotspot mode 15

2.1.4 Dual-Network Configuration 15

2.2 Port numbers and intranet firewall 16

3. MAKING A PRESENTATION 17

3.1 Presenting with Windows/Mac/Chromebook 17

3.1.1 Step 1: Set up session parameters 18

3.1.2 Step 2: Connect to your NovoTouch 19

3.1.3 Step 3: Make a presentation 21

3.1.4 Step 4: Presentation management 22

3.1.4.1 Moderator 22

3.1.4.2 Role assignment 23

3.1.4.3 Role change, screen preview, 4-to-1 projection, withdraw projection, and remove a participant 24

3.1.4.4 Pause, resume, disconnect and lock session 28

3.1.4.5 Lock/Unlock students' tablets/phones (*Education Edition* only) 29

3.1.4.6 Terminate session (*Education Edition* only) 29

3.2 Presenting with Android/iOS Devices 30

3.2.1 Step 1: Connect to your NovoTouch 30

3.2.1.1 Connect via QR Code 30

3.2.1.2 Connect via Manual Input 32
3.2.2 Step 2: Make a presentation 35
3.2.2.1 My Notes 35
3.2.2.2 Gallery 39
3.2.2.3 Documents (Local Storage) 40
3.2.2.4 Documents (Dropbox) 42
3.2.2.5 Web 44
3.2.2.6 Annotation 47
3.2.2.7 Screenshot 49
3.2.3 Step 3: Manage the presentation 50
3.2.3.1 Moderator 50
3.2.3.2 Role assignment 51
3.2.3.3 Role change, screen preview, four-way split screen, withdraw projection, and remove a user 52
3.2.3.4 Pause, resume, disconnect and lock session 56
3.2.3.5 Reset 57
3.2.3.6 Lock/Unlock students' tablets (*Education Edition* only) 58
3.2.3.7 Terminate session (*Education Edition* only) 58
3.3 iOS/Android Full Mirroring 59
3.3.1 iOS Full Mirroring 60
3.3.2 Android Full Mirroring 62
4. COLLABORATION TOOLS 66
4.1 Voting/Polling 67
4.1.1 Edit voting/polling 67
4.1.2 Administer voting/polling 70
4.1.3 Respond to voting/polling 72
4.2 Video Clips and YouTube Streaming 73
4.2.1 Streaming local video files 74
4.2.2 Streaming YouTube video 75
4.2.3 Video controls 75
4.3 File Sharing 76
4.3.1 File Sharing in Desktop Streamer 76
4.3.1.1 Sending 77
4.3.1.2 Receiving 79
4.3.2 File Sharing in NovoPresenter App 80
4.3.2.1 Sending 80

4.3.2.2 Receiving 82
4.3.3 Troubleshooting and rules about File Sharing 82
4.4 User groups 82
4.4.1 Organizing a Group 83
4.4.2 Creating User Group 84
Creating User Groups Manually 84
Saving a Presentation Session as a User Group 86
4.4.3 Managing Existing User Group 86
4.4.4 Applying User Group 87
4.5 AirNote Annotation Tool 90
4.5.1 Enabling AirNote 91
4.5.2 Using AirNote 91
5. DNS MAPPING 92

1. Getting Started

1.1 Introduction

Remote Viewer is the application that runs on NovoTouch machines with the Android OPS installed. It allows users to present content located on their own devices wirelessly on the NovoTouch display in either a conference room or a classroom setting.

This document describes how to use Remote Viewer and its associated applications.
For information on the NovoTouch display itself including how to setup the display, please refer to the NovoTouch user manual.

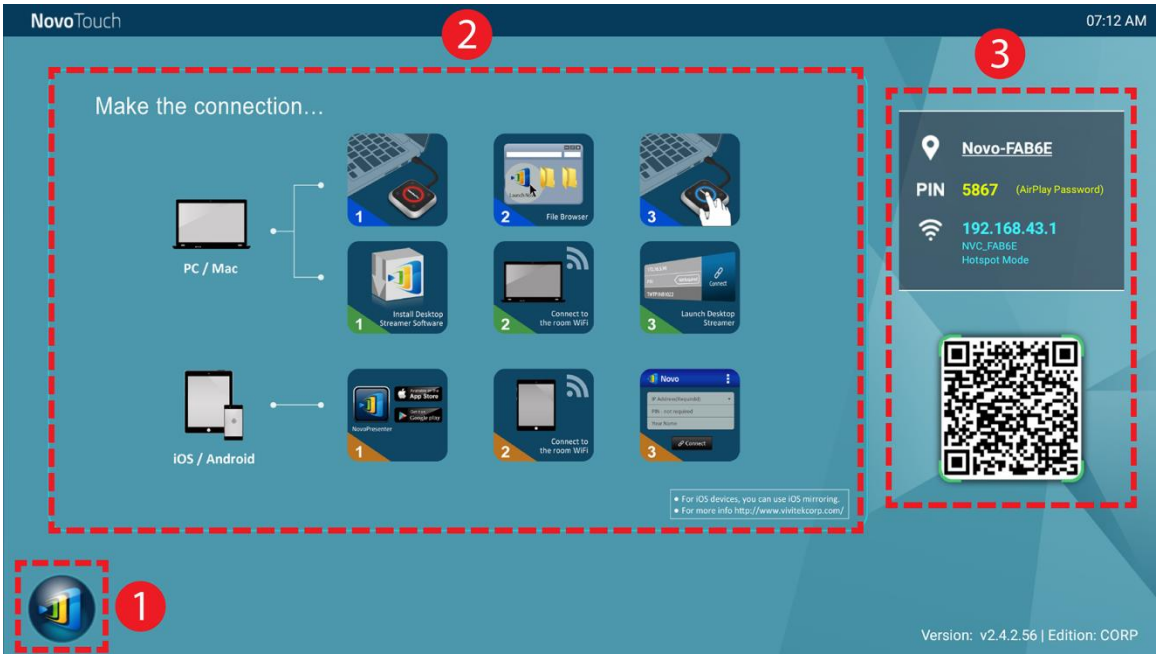
1.2 Hardware Setup

In order to run the Remote Viewer software you must first install the Android OPS module included with the NovoTouch display and then properly power on the display, see the NovoTouch user manual for more information on how to install the OPS module and power on the display.

After installing the Android OPS module you may also connect an optional USB mouse/keyboard to any of the display's USB ports for navigation of the Remote Viewer outside of touch gestures.

1.3 NovoTouch Remote Viewer Home Screen

After launching the Remote Viewer application on the NovoTouch, the NovoTouch will show the following screen, which is referred to as "NovoTouch Remote Viewer home screen" or just "home screen" in this document.



1 Basic Device Configuration and Settings

NovoTouch Remote Viewer is default at Wi-Fi Hotspot mode with its SSID name displayed at the home screen (e.g. NVC_528FB in box 3). Alternatively, you can connect the NovoTouch to any existing network via a wireless and/or a wired connection. Click on the button, then "WiFi" to make the necessary changes.

Similarly, click on the button, then "Settings" to change other general settings.

2 Software Installation

Windows/Mac Users:	Open Desktop Streamer's download link shown on the home screen with your web browser and follow the on-screen instructions. Or simply visit http://vivitekcorp.com/ for the software download.
iOS/Android Users:	Install NovoPresenter from App or Play Store. (See Section 1.5)
Chomebook Users:	Install Desktop Streamer from Chrome Web Store (See Section 1.5)

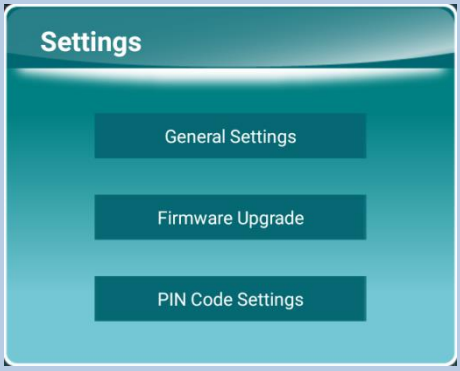
3 Connection Information

- **Device Name / Location** – Users can change this to a meaningful room name.
- **PIN** – This is an optional PIN code to join a presentation session.
- **IP address** – Ethernet and WiFi IP address respectively.
- **QR code** – It has all the above-mentioned information. With tablets/phones, users can use *NovoPresenter* to connect to a presentation session by scanning this QR code. You can also click on the QR code to get an enlarged version of the connection information:

1.4 Basic Device Configuration

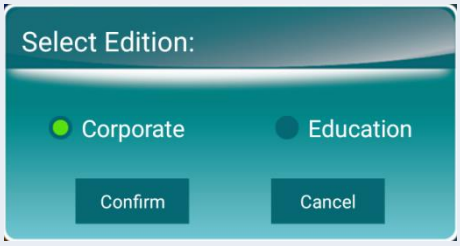
Before being deployed, the NovoTouch may require some basic configuration such as setting up its network connection, etc. To access the various settings menus click the button on the Remote Viewer home screen and click the respective menu you want to open.

Function	Description
	Wi-Fi: Click on **WiFi** to bring up the Wi-Fi configuration dialog. • To use the NovoTouch as the Wi-Fi host, select "**Enable WiFi Hotspot"** and click **Apply**. • To connect to an existing WiFi network, ○ Select "**Connect to WiFi"**. ○ Click on **Configure** to bring up a new WiFi configuration page. ○ Enable Wi-Fi connection. Select the SSID of the external router. Enter the WiFi's password if prompted. ○ Click on **Connect** to start the connecting.



Settings:
Click on **Settings** for more device settings.

- **General Settings**: Access the Android system settings.
- **Firmware Upgrade**: Upgrade the NovoTouch Remote Viewer to the latest version
- **PIN Code Settings:** Select whether to allow the PIN code to also act as the AirPlay password (for screen casting of iOS devices), and whether to make using a PIN code mandatory for login.



Device Edition:
Click on **Device Edition** to set the edition to use.

- Select either Corporate or Education, then click Confirm to make the edition change official, or click Cancel to abort the edition change.
- The main differences between these two editions are as follows:

Feature	Education Edition	Corporate Edition
Projection Control	• Only HOST (teacher) can switch users • Switch users without permission	Two modes 1) Moderator On • Only moderator can switch users • Users' permission is required 2) Moderator Off • Everyone can switch users • Users' permission is required
Screen Preview *(Ability for Moderator to preview participants' screen)*	Yes	No
Encryption	No	AES-128
Lock Tablet Screen	Yes	No
Disconnect Everyone	Yes	No

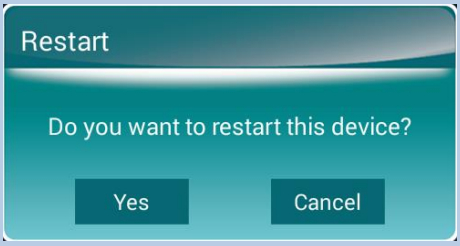
NOTE: This manual primarily references the Corporate Edition for instructional examples. Special notes will accompany instructions that are specific to the Education Edition.

About:
Click on About to view the version of the NovoPRO software.

Hide Session Info:
Click on **Hide Session Info** to hide/reveal the login info located at the top right side of the NovoTouch Remote Viewer home screen.

Hide QR Code:
Click on **Hide QR Code** to hide/reveal the QR code for quick login located at the right side of the NovoTouch Remote Viewer home screen.

Configure Slideshow:
Click on Configure Slideshow to customize the image(s) in the software installation box of the NovoTouch Remote Viewer home screen.



Restart:
Click **Restart** to restart NovoTouch Remote Viewer.

You can also configure the name for the NovoTouch to more easily identify the display:

Room Name:
Click on the associated text in the connection information box to bring up the "*Edit Room Name*" dialog.

- Enter the new name.
- Click **Save** to confirm the name change, or click **Cancel** to abort the name change.

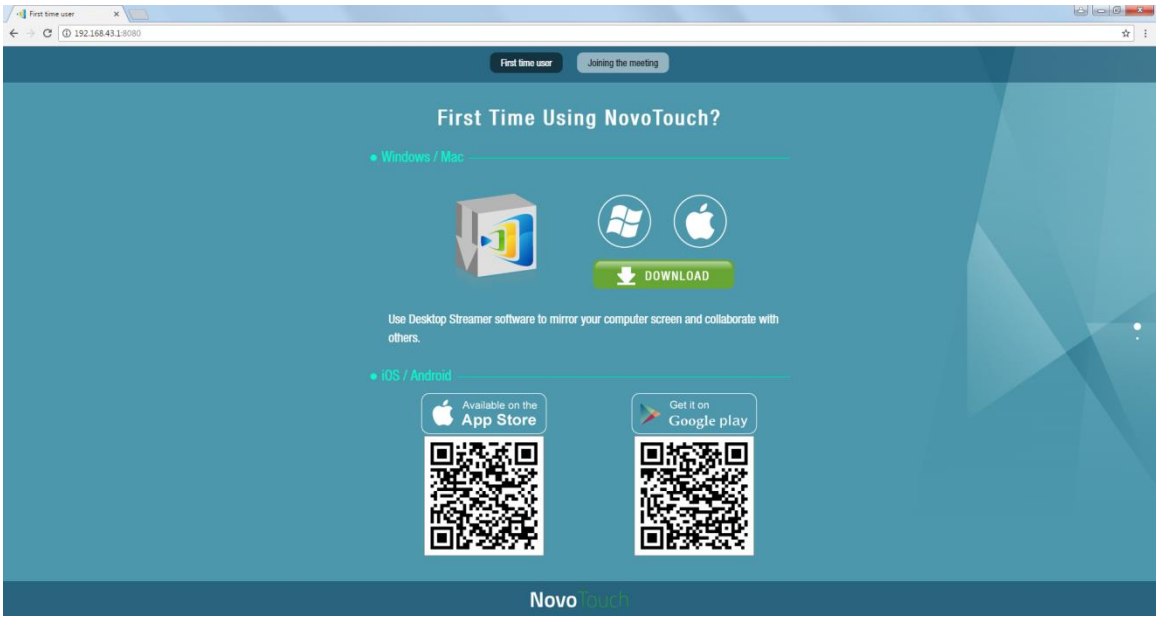
1.5 Client software download and installation

To connect to NovoTouch Remote Viewer, one of two client applications may be needed on your device. They are:

Desktop Streamer :	Windows, Mac, Chromebook
NovoPresenter :	Android, iOS

Software Download/Installation for Windows and Mac

You can download the software directly from http://www.vivitekcorp.com. Alternatively, you can download it from the NovoTouch.



(1) Connect your computer to the same network as NovoTouch.

(2) Open the IP address shown on the Remote Viewer home screen with a :8080 suffix with your web browser and follow the on-screen instructions. For the example home screen shown above, you would use http://192.168.43.1:8080. You will be able to see the download page, as shown in the following figure.

(3) Select the appropriate OS and then click the **DOWNLOAD** button to start the download.

(4) Execute the downloaded file to start the installation. Following the on-screen instructions and you should be able to finish the installation in a couple minutes.

App Download/Installation for Android/iOS

(1) For iPhones/iPads, download and install *NovoPresenter* App from the Apple App Store.

(2) For Android phones/tablets, download and install *NovoPresenter* App from the Google Play Store.

App Download/Installation for Chromebooks

Download and install *Novo Desktop Streamer* from the Google Chrome Web Store.

2. Setting Up Network

To fully take advantage of NovoTouch Remote Viewer's capabilities, it should be properly deployed in a school or corporate's network. Some aspects should be carefully considered and planned, for example, Wi-Fi interference and channel selection and intranet firewall. In this chapter, these aspects will be illustrated to facilitate a successful NovoTouch Remote Viewer deployment in your network.

2.1 Network connection

NovoTouch Remote Viewer has three network connection types, Ethernet, Wi-Fi Client, and Wi-Fi Hotspot.

A) **Ethernet** – NovoTouch can be plugged into your Ethernet via its RJ45 port. Namely, you can connect NovoTouch to your organization's backbone network. It is recommended to use Ethernet connection (when possible) since it gives you better robustness and higher performance.

B) **Wi-Fi** – NovoTouch's built-in 802.11ac Wi-Fi operates at dual bands (2.4/5GHz). With its 2T2R antenna, it can achieve a maximum bandwidth of 300Mbps[1]. This high-performance Wi-Fi module can operate at two modes.

   a) **Client Mode** – NovoTouch can be connected to your organization's Wi-Fi network via its built-in Wi-Fi module.

   b) **Hotspot Mode** – NovoTouch can create its own Wi-Fi network, allowing users to connect their mobile devices to this ad hoc network.

The following table summarizes their feature difference and typical usage.

	Ethernet/Wi-Fi Client Mode	Wi-Fi Hotspot Mode
Number of Users Allowed	64	8
Internet/Intranet Access	Yes	No
Typical Usage	Pre-configured for School or Corporate	Quick setup for small-group meetings

It is worth mentioning that Ethernet and Wi-Fi connections can coexist on NovoTouch. Namely, you can configure NovoTouch in Ethernet and Wi-Fi Client mode, or in Ethernet and Wi-Fi Hotspot mode.

1 300Mbps is the maximum value while the actual bandwidth may vary depending on operating environment.

2.1.1 Ethernet

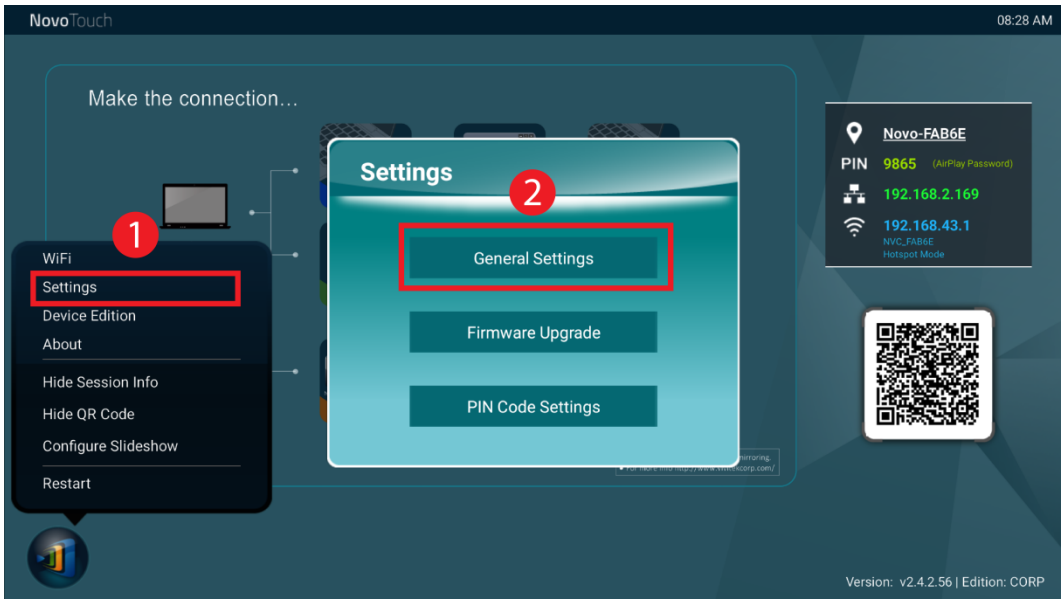
The following home screen shows NovoTouch is in Ethernet mode, where its Ethernet IP is highlighted in a red box.

When connecting to a wired network, NovoTouch supports both DHCP and Static IP connection types.

- **DHCP**: NovoTouch obtains its IP address from the DHCP server on the network.
- **Static IP:** NovoTouch is assigned a fixed IP address manually.

"**DHCP**" is the default connection type. However, "**Static IP**" might be more preferable as it makes remote management much easier.

The following diagram illustrates how to select one of these two connection types (→ Settings → General Settings → … More → Ethernet.



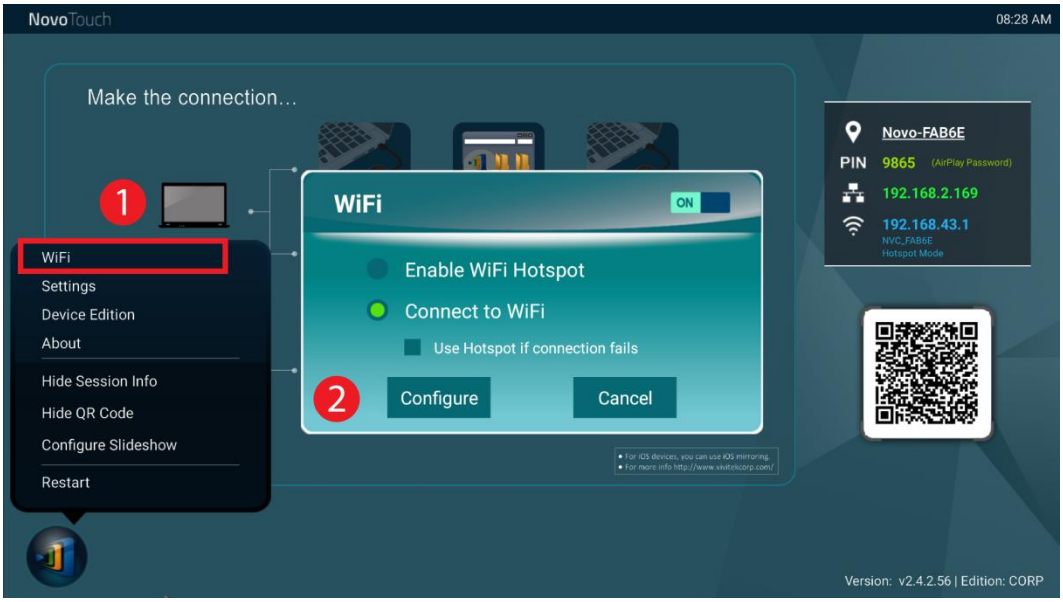
To set up "Static IP" properly, you need to have the following information, as shown in the diagram on the right.

- An unallocated IP address;
- Netmask;
- DNS address;
- Gateway address.

2.1.2 Wi-Fi client mode

In this mode, NovoTouch functions as a client to join an existing Wi-Fi network. As illustrated in the following diagram, to set up the Wi-Fi connection, on NovoTouch home screen, click on → WiFi → Connect to WiFi → Configure → Wi-Fi (ON). Then select the desired Wi-Fi SSID (the name associated with the Wi-Fi network) and enter the proper credentials when necessary.

You may notice that you have the choice of using "**DHCP**" or "**Static IP**" in the connection dialog, which is exactly the same as Ethernet connection.



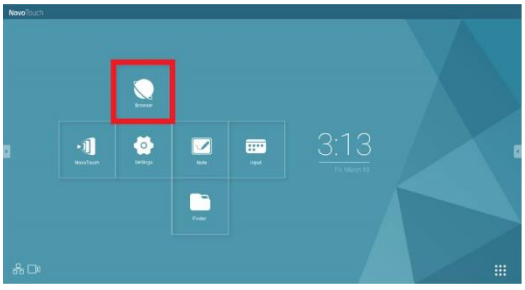
Wi-Fi Network Optimization: To achieve good user experience with NovoTouch deployed in your organization's Wi-Fi network, it is recommended that you keep an eye on RF interference, Wi-Fi signal strength, Wi-Fi channel utilization, etc. It is worth mentioning that two popular Apps can help determine whether there is any wireless network channel interference.

- "Wi-Fi Analyzer" on Android devices;
- "InSSIDer" tool on Windows OS.

The following is a screenshot from "Wi-Fi Analyzer" App. As you can tell, Wi-Fi channel 6 is heavily utilized. You might want to change one or some of them to other less-crowded channels.

Logging in a Wi-Fi Network via Captive Portal: Some Wi-Fi networks are equipped with a captive portal, which requires users to log in via a web browser before they can access the Internet. When NovoTouch is connected to this type of network, users can follow the following steps:

A. Follow the above configuration steps to connect to the organization's Wi-Fi network;
B. After the Wi-Fi is connected, click on button "Browser" on the home screen (see the picture below);
C. Open this web browser and you will be prompted for login credentials.
D. Enter the proper username and password, and you will be connected to the network;
E. Click **NovoTouch** on the home screen to return to the NovoTouch Remote Viewer main interface.

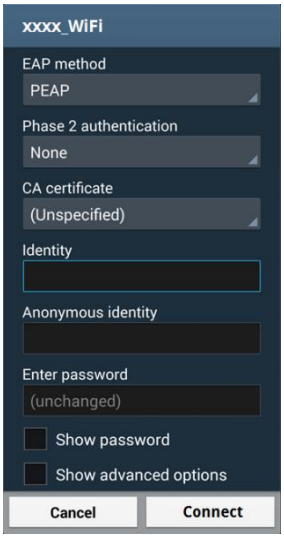


Logging in a Wi-Fi Network with 802.1x Authentication:

When you connect to a Wi-Fi network with 802.1x authentication (for example, radius server), you will need to enter the following fields to set up the connection properly:

- Network SSID → *Your network*
- Security → *802.1x Enterprise*
- Choose the right settings for
  - *EAP method*
  - *Phase 2 authentication*
- Identity → *Your username (such as `DOMAIN\John.Smith`)*
- Password → *Your password*

Click on button "Connect" to start the connection.



2.1.3 Wi-Fi hotspot mode

A newly unpacked NovoTouch starts up in Wi-Fi Hotspot mode, where you can start using it without any entanglement with networking setup. The default SSID for this Wi-Fi Hotspot is "NVC_XXXXX" where "XXXXX" is a device-generated text string. Please note that Android mirroring (Miracast) is disabled in this mode. In comparison, AirPlay mirroring has no such limitation.

2.1.4 Dual-Network Configuration

NovoTouch can even be connected to both your organization's wired network and wireless network simultaneously. This function is extremely useful for organizations with "guest" wireless network setup for external visitors. In such a case, NovoTouch's RJ-45 port is connected to a wired EMPLOYEE network for employees to securely access it; at the same time NovoTouch's Wi-Fi is connected to a GUEST network to allow visitors to access it. The following graph describes such a network setup scenario.

By doing so, the GUEST and EMPLOYEE networks are kept separated, while at the same time, the NovoTouch is available to both guest users and employees.

Notes on Network Security: Within NovoTouch, the Wi-Fi section is completely separated from the Ethernet section, namely, there is no network routing between these two sections. Therefore, users connecting to the Wi-Fi section will not be able to access any resource on the Ethernet at all, and vice versa. In short, security is not compromised in this configuration.

2.2 Port numbers and intranet firewall

NovoTouch is a TCP/IP-network-based device, and the communications between a NovoTouch and its client devices (e.g. laptops, tablets, etc.) are achieved through several TCP and UDP ports. The following table summarizes all the port numbers being used.

Port Number	Type	Description
20121	TCP	Port to transfer commands and status reports between the NovoTouch unit and users' devices. (For example, laptops/tablets use this port to establish "connection" to the NovoTouch unit.)
20122	TCP	Port to enable "Remote Mouse" functionality
20123	TCP	Port to transfer screen image
20124	UDP	Port to send discovery message (so that the NovoTouch unit can be discoverable by laptops/tablets.)
20125	TCP	Port to transfer preview image
20126	TCP	Port to transfer AV-streaming's command data
20127	TCP	Port to transfer AV-streaming's audio data
20128	TCP	Port to transfer AV-streaming's video data
20129	TCP	Port to transfer voting/polling data
20130	TCP	Port for video streaming service
20131	TCP	Port for file transfer service
20141	UDP	Port for device management
20142	UDP	Port for device reporting

To enable successful operations of a NovoTouch, these ports should not be blocked by your network's firewall.

3. Making a Presentation

NovoTouch supports up to 64 concurrent *participants* across a mix of PC, Chromebook, tablets, and smart phones. To make a presentation, each *participant's* device will need to connect to the NovoTouch to join the presentation session. There are four key features that help facilitate smooth collaboration and coordination of presentations using the NovoTouch:

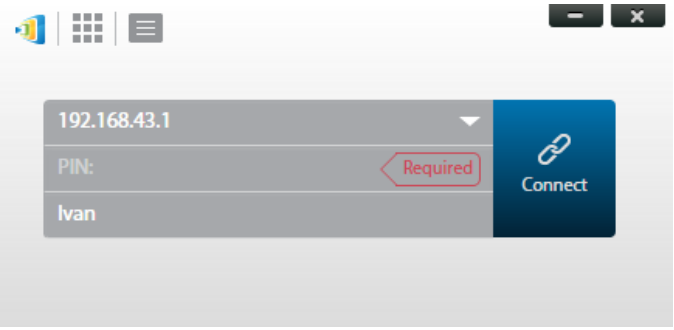
1) A *participant* list is included with the individuals' roles indicated by clear graphical representation.
2) A specific capability is defined for each role.
3) Up to 4 *participants* can show their screen simultaneously through a feature called "4-to-1 projection"
4) Annotation tools allow *participants* to highlight, draw or make notations on the display screen.

3.1 Presenting with Windows/Mac/Chromebook

Novo *Desktop Streamer* Windows/MAC/Chromebook versions have similar interfaces and operations, except that the Chromebook version has slightly fewer functionalities compared with the other two due to Chrome OS limitation. Here Windows version *Desktop Streamer* is used to illustrate key operation steps.

Launch Presentation Application

Launch the *Novo Desktop Streamer* Application by double clicking icon . Once launched, the *Desktop Streamer* will appear as follows.

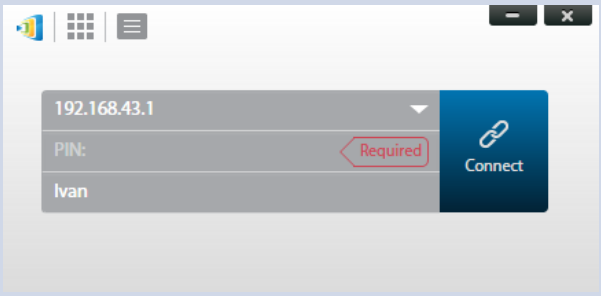
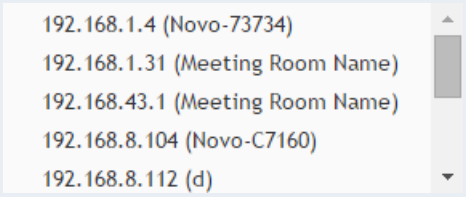
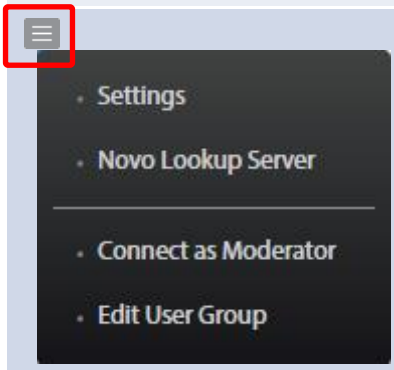


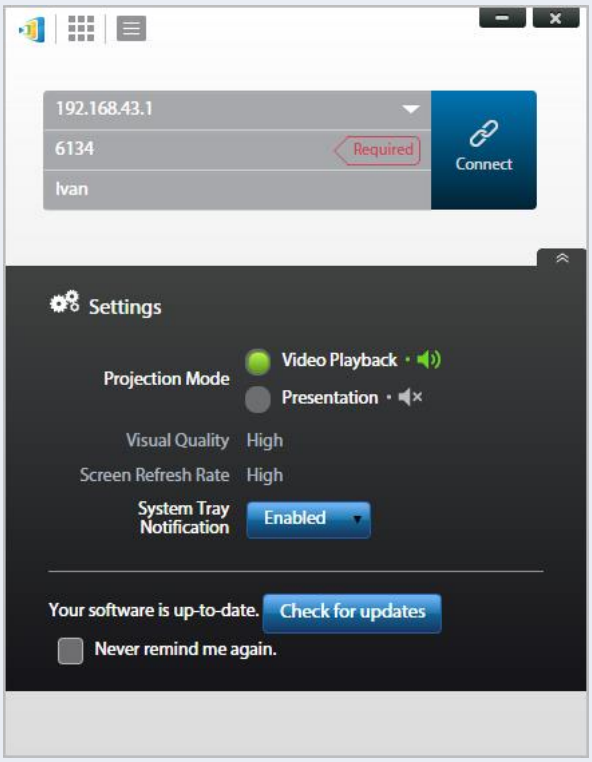
To make a presentation, follow the steps listed below:

Step 1: Set up session parameters
Step 2: Connect to your NovoTouch
Step 3: Make a presentation
Step 4: Manage the presentation

3.1.1 Step 1: Set up session parameters

Before clicking on the connection button , some session parameters needs to be set up.

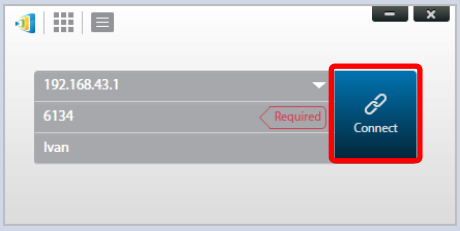
Function	Description
	The main window of *Novo Desktop Streamer* Application.
	Manually enter the IP address shown on the NovoTouch Remote Viewer home screen, or select an IP address entry from the drop-down menu that matches the IP address shown on the NovoTouch Remote Viewer home screen. *NOTE: For NovoTouch displays that have the device name and IP address bound via the DNS mapping procedure, you may also enter the NovoTouch's device name in this field. See 5.3 DNS Mapping for more information.*
	(Optional) Manually enter a name for this computer to be identified in the participant list among other *participants*. Example: Kevin (Note: If a name is not entered in this field, the default name of your device will be used.)
	If PIN is required for a presentation session, check the "PIN required" box and enter the four-digit PIN shown on the home screen.
	Click to expand the Settings tab to access additional settings options.



1. **Projection Mode:**
   Video Playback: Select this option for video-quality image, with synchronized audio. (You might notice some sluggishness in mouse movement due to the needs of buffering to ensure smooth video playback.)
   Presentation: Select this option for low-latency and fast-response presentation. Audio signal is not transmitted. Two additional drop-down configurations, *Visual Quality* and *Screen Refresh Rate*, will be enabled.
2. **Visual Quality:**
   High: This setting yields the best visual quality but has the most latency and may result in longer video delay.
   Normal: This setting yields the normal visual quality with the normal CPU consumption.
3. **Screen Refresh Rate:**
   High: This setting yields the enhanced visual quality but results in higher CPU consumption.
   Normal: This setting yields the normal visual quality with the normal CPU consumption.
4. **System Tray Notification:**
   Select enable to allow Desktop Streamer to notify you via a pop-up alert of any available software updates. The pop-up alert will appear each time you sign on until the software is updated, check the "Never remind me again" box if you only want the pop-up alert to appear once, and not each time you sign on.
5. **Check for updates:**
   Click to check whether *Novo Desktop Streamer* is the latest. If not, initiate an upgrade process.

3.1.2 Step 2: Connect to your NovoTouch

Once you have set up session parameters, you are ready to start or join a presentation.

Function	Description
	**Connect to your NovoTouch.** Click on button . If you are the first *participant*, this will start a presentation session. If you are not the first *participant*, you will be joining a presentation session.

After a successful connection, you will see the connection tab lit up .

If you are the first *participant*, you will see that your desktop is mirrored to NovoTouch 's screen.

Click the left button to access more login options, via the options menu, for other users to connect to this session.

Set login options for the presentation.

By clicking the QR code icon in the options menu, you can bring up the session information (including QR code) for other users to connect to this session, as seen in the second screenshot.

You can turn on/off the PIN switch to enable/disable the use of a PIN code for the presentation session.

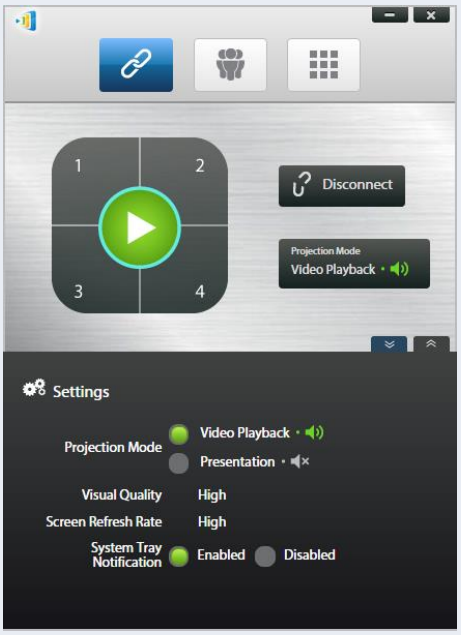
You can turn on/off the Lock Session switch to prevent any additional participants from joining the presentation session regardless of whether they have the presentation session's login information or not.
Note: This feature is available in Education Edition only.

Within the session information screen, click the button to ensure that the session information screen is expanded and shown on top regardless of the presentation being shown on the display.

More Options in the Options Menu:

: The Switch Mirroring Mode button allows you to return to the NovoTouch Remote Viewer home screen on the display without exiting the presentation session. By activating the Switch Mirroring Mode button, login information for the session will be accessible to users of iOS or Android devices who then have the ability to mirror their screens using AirPlay or Miracast during an already ongoing session. See 3.3 iOS/Android Full Mirroring, for more information.
NOTE: The Switch Mirroring Mode button can only be activated by the moderator of the session.

: The Extend Desktop button allows you to use NovoTouch as an extended desktop for your computer. Settings for the extended desktop mode must be configured in your computer's operating system.



: The Video Clip button allows you to directly play a stored video clip or a Youtube video on the display.

By clicking the right button you can bring up the Desktop Streamer settings menu described above.

Please note that your PC screen resolutions may change to match projector resolution. After disconnecting from NovoTouch, the original screen resolution will be restored.

3.1.3 Step 3: Make a presentation

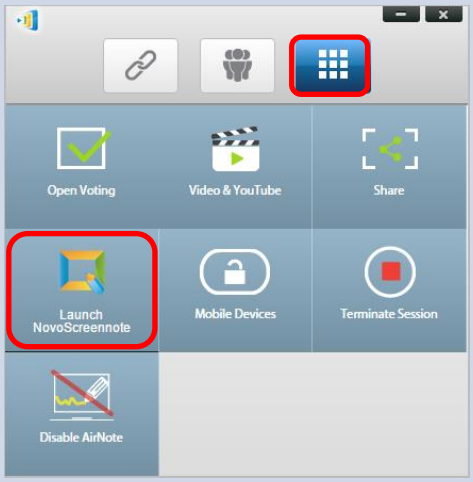
Once you have started/joined a presentation session you can make a presentation with the content stored on your PC, local network, or the Internet. Your desktop screen will be mirrored to the NovoTouch screen regardless of the applications you are running on your PC. A button pad will appear in the Desktop Streamer's connection page, this button pad gives you quick control of the where your desktop is mirrored on the display:

When you click the green play button in the middle of the button pad your desktop will be mirrored on the full screen of the display.

When you click one of the numbered buttons (#1 - #4) your desktop will be mirrored on one of the four corresponding quadrants of the display.

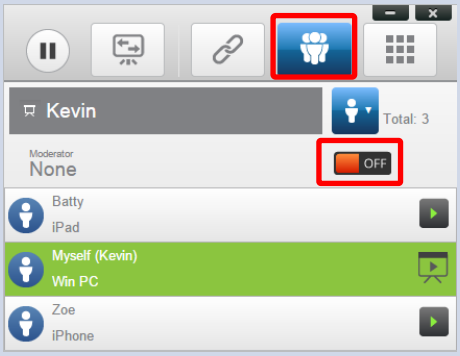
You can mute the audio from your computer by clicking the mute button .

Notes: There may be situations where you want to write, highlight, mark, or record video of your presentation. You could install free software, *NovoScreenote*, to do so. It is available for download at http://www.vivitekcorp.com. After you have installed *NovoScreenote*, you can launch it from your Novo Desktop Streamer. Or you can use the direct annotation tools described in the section *3.5 Direct Annotations*.

Function	Description
	**Launch NovoScreenote:** Click the tab to bring up the toolbar page, then click **Launch NovoScreenote**.

3.1.4 Step 4: Presentation management

3.1.4.1 Moderator

Function	Description
	**Set the moderator mode:** Click the tab and click the **Moderator On/Off** switch to turn the moderator function on or off : The moderator mode is off. : The moderator mode is on. *Note: This feature is available to Corporate Edition only.*

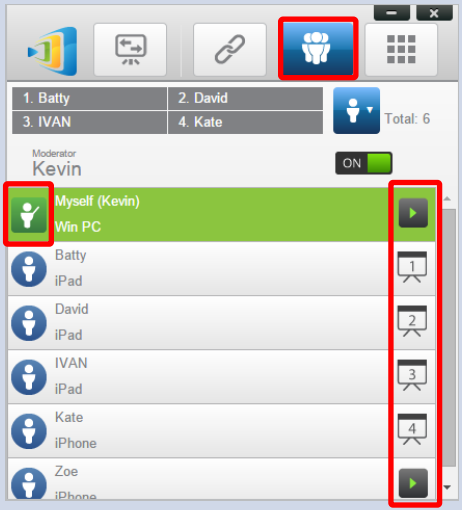
	Manage presentation: The moderator has the capability to select participant(s) for projection.

3.1.4.2 Role assignment

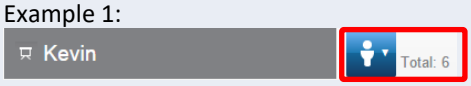
There are three roles in a presentation session, the *moderator*, the *presenter*, and the *participant*. The first *participant* to start the presentation session is assigned as the *moderator*. Individuals that join subsequently are *participants*.

By default, the *moderator* assumes the *presenter* role until he hands it over to another *participant*.

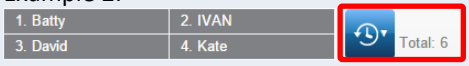
To show all current *participants* who have joined the presentation session, click the tab.

Function	Description
	Click the tab to show the participant list. : the *moderator* : *participant* : current *presenter*. : current *presenter* that is being projected in one of the screen quadrants (4-to-1 projection). (The icon shown here is for a *presenter* that is presenting in quadrant #1). For the *Education Edition*, the *moderator* can preview screens of all participants.

Example 1:



Example 2:



Indicate the names of the presenters, the participant list sorting method, and the total number of *participants*.

Sorting in the participant list

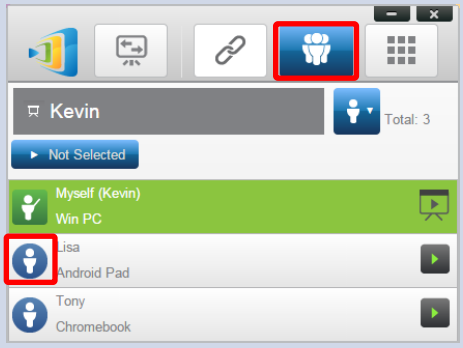
- : sorted by participants' name
- : sorted by the "join" time (most recent on top).

Toggle between or to change the list sorting method.

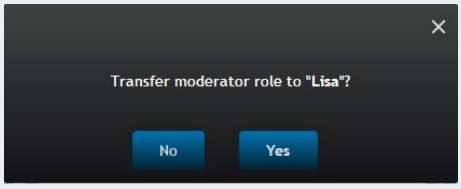
Example 1: Kevin is the only *presenter*. The participant list is sorted by participants' name. There are currently 6 *participants*.
Example 2: Batty, Ivan, David and Kate are 4 *presenters*. The participant list is sorted by the "join" time (most recent on top). And there are currently 6 *participants*.

3.1.4.3 Role change, screen preview, 4-to-1 projection, withdraw projection, and remove a participant

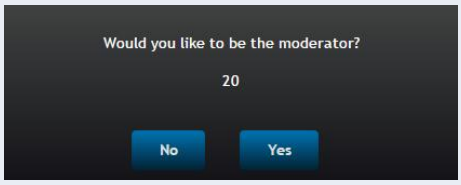
(Note: *For Education Edition* the moderator can preview screens of all participants.)

Function	Description
	**Role change: transfer the moderator role** Click the tab to list all participants. If you want to transfer the *moderator* role to another *participant*, click on the participant's icon. *Note: only the moderator is allowed for this operation.*

The *moderator*'s screen:

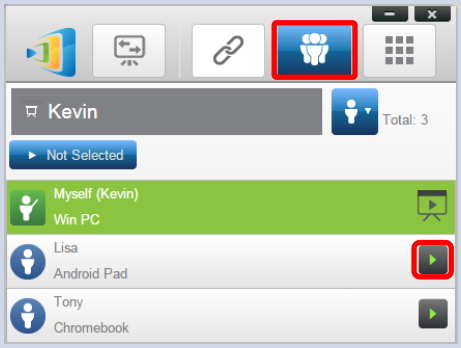


The *participant*'s screen:



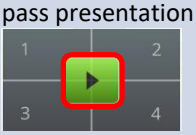
At the same time, a dialog box will appear on that *participant's* screen to ask for his/her confirmation. The *participant* has 20 seconds to click the **Yes** button to accept or click the **No** button to reject the requested role change.

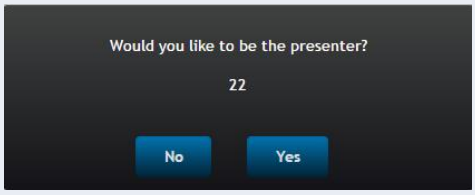
A dialog box pops up to ask for your confirmation. You have 20 seconds to click the **Yes** button to accept or click the **No** button to reject the requested *role change.*



Full-Screen Projection

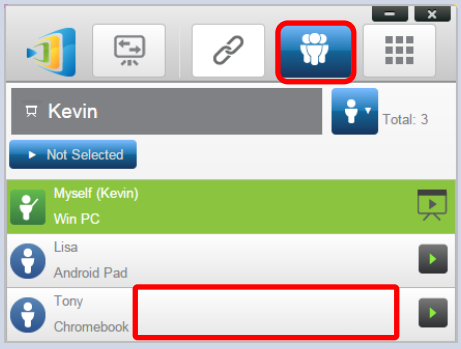
Click the tab to list all *participants*. If you want to promote one *participant* to be a presenter, click on the *participant's* icon. A bigger icon window pops up, where you can click the center button to pass presentation role to that *participant*.





For Corporation Edition, when a *participant* is asked to be a *presenter*, a dialog box will appear on the *participant*'s screen.
The *participant* has 20 seconds to respond.

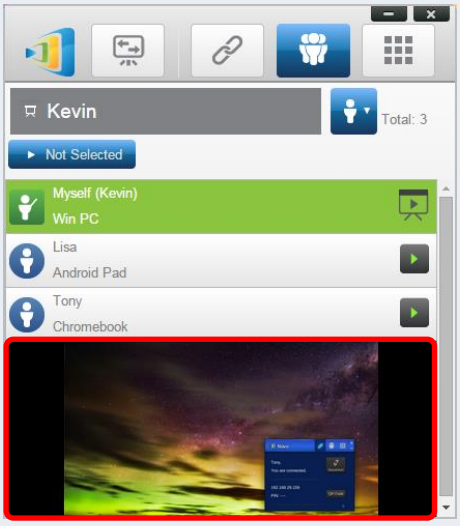
For Education Edition, this dialog box will not appear.



Screen preview (*Education Edition* only):

1. Click the tab to view the *participant* list.
2. Click on the *participant's* name.

Note: Only the moderator can preview the participant's screen.



That *participant's* screen will be shown below his/her name.

You can click on the *participant's* name again to close the screen preview.

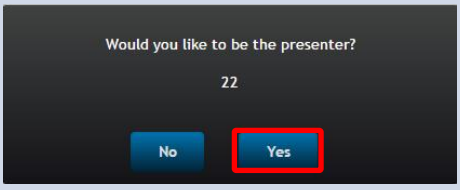
4-to-1 Projection:

Click the tab to view the *participant* list.

1. Move cursor over to highlight *participant* Kevin.

2. Click on a numbered box

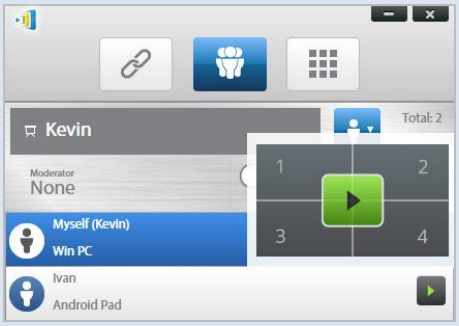
to assign the *presenter* to be projected at the corresponding screen quadrant. The user name will be shown in the quadrant his or her device has been assigned to on the display.



In the dialog box, we see that Kevin has received a request to assume the *presenter* role.

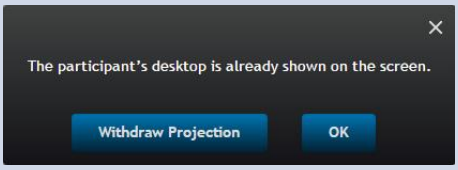
After Kevin clicks **Yes** to accept being a *presenter*, Kevin's screen will appear in one of the screen quadrants.

Note: This is for Corporate Edition only.

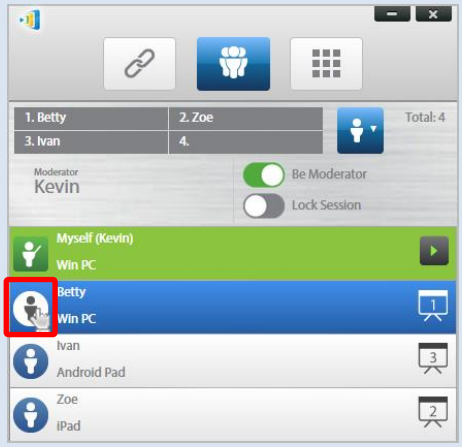


Withdrawing projection:
When a participant's screen is currently projected on the display and the participant wants to withdraw the projection of their screen from the display (while staying in the presentation session), click the numbered box assigned to the presenter.

Note: In presentations with a moderator, this function is only available to the moderator.

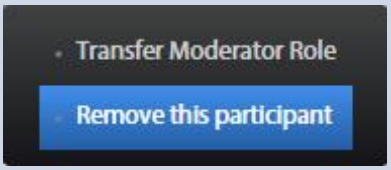


In the dialog box, click **Withdraw Projection** and the participant's screen will be withdrawn from the presentation display.



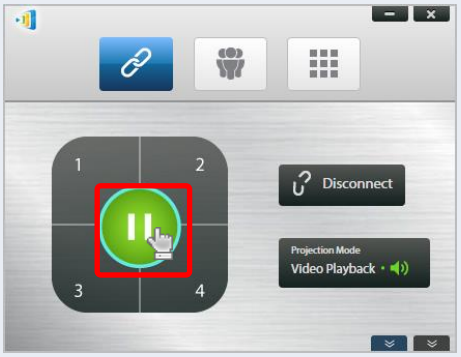
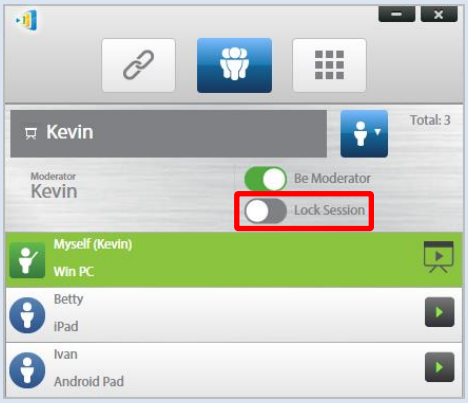
Removing a participant:
To remove a participant from the presentation session, click the icon next to the participant's name.

Note: In presentations with a moderator, this function is only available to the moderator.



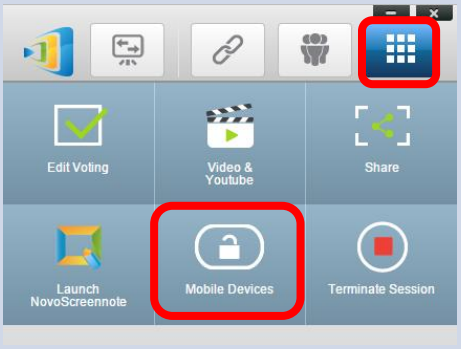
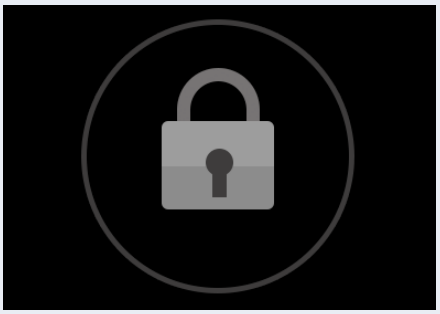
In the dialog box, click **Remove this participant**. The participant will be logged off from the presentation session.

3.1.4.4 Pause, resume, disconnect and lock session

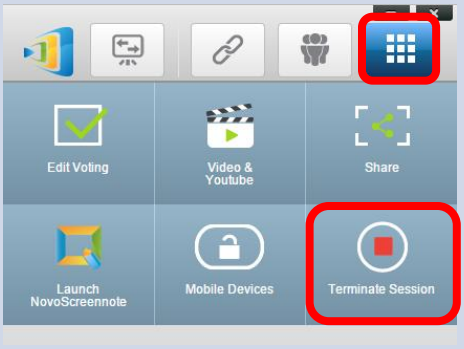
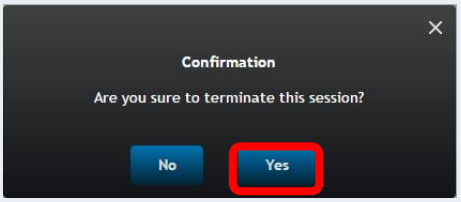
Function	Description
	To pause/resume a presentation: Click the tab to bring up the presentation control page.
	**Pausing and resuming a presentation:** Move your mouse cursor to hover on the presentation button. Toggle between and to pause and resume a presentation respectively.
	To disconnect from a presentation session: Click the button to exit the presentation session. If the *moderator* exits a presentation session without handing over the *moderator* role, all *participants* will receive a message prompting them to take over the *moderator* role. The first to respond to the prompt will assume the *moderator* role.
	**To lock the session (Education Edition only):** Click the **Lock Session** switch to prevent any other users from logging in and joining the current presentation session. *Note: This function is only available to the moderator.*

3.1.4.5 Lock/Unlock students' tablets/phones (*Education Edition* only)

This feature allows the moderator to lock down student tablets. This feature is only available in the *Education Edition.*

Function	Description
	**To lock/unlock mobile devices:** Click the tab to bring up the toolbar page, then click **Mobile Devices** to lock or unlock mobile devices. : mobile devices are unlocked. : mobile devices are locked.
	**Mobile device locked:** A lock icon will pop up on all mobile device' screens to show that the screen has been locked.

3.1.4.6 Terminate session (*Education Edition* only)

Function	Description
	**To terminate the session:** Click the tab to bring up the toolbar page, then click **Terminate Session**.
	**Confirmation:** Click **Yes** to terminate the session. All devices will be disconnected.

3.2 Presenting with Android/iOS Devices

NovoPresenter App has similar functionalities as Desktop Streamer software. It is available for both for iOS and Android devices. Here an iPad is used as an example to illustrate its key functions.

Launch Presentation Application

Launch the *NovoPresenter* application by tapping on the *NovoPresenter* app icon on your iPad.

To make a presentation, follow the steps below:

Step 1: Connect to your NovoTouch

Step 2: Make a presentation

Step 3: Manage the presentation

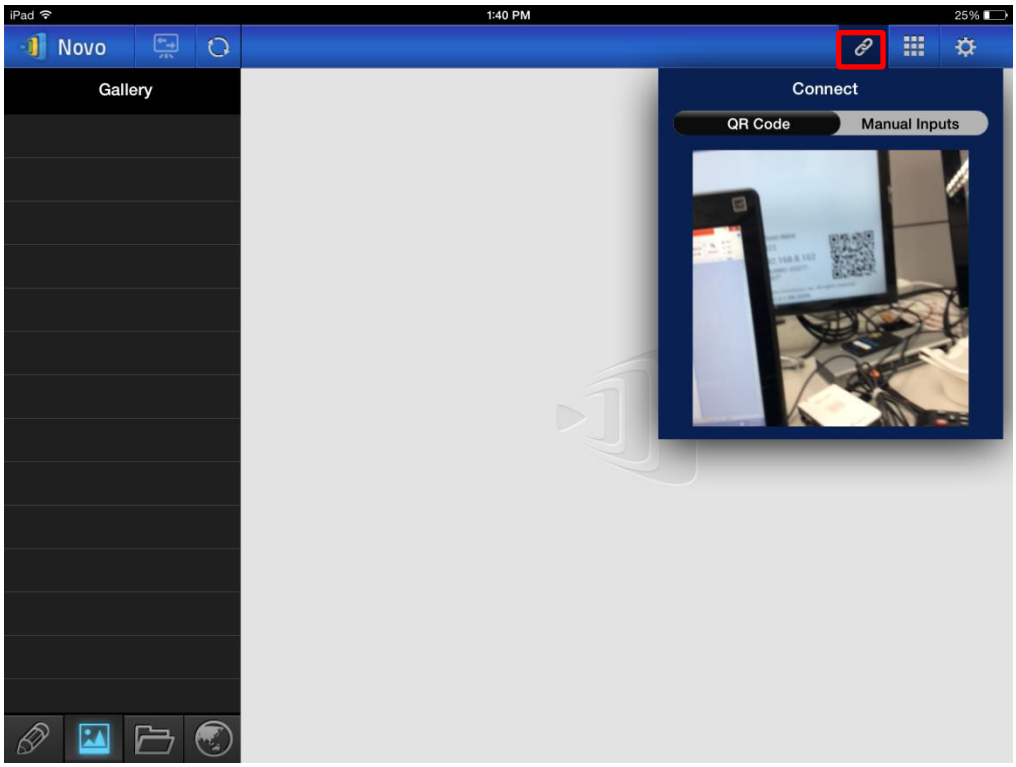
3.2.1 Step 1: Connect to your NovoTouch

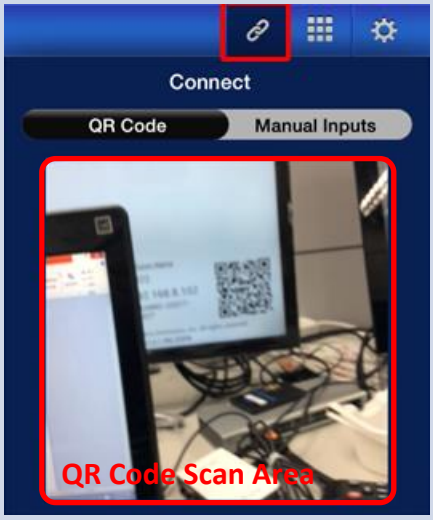
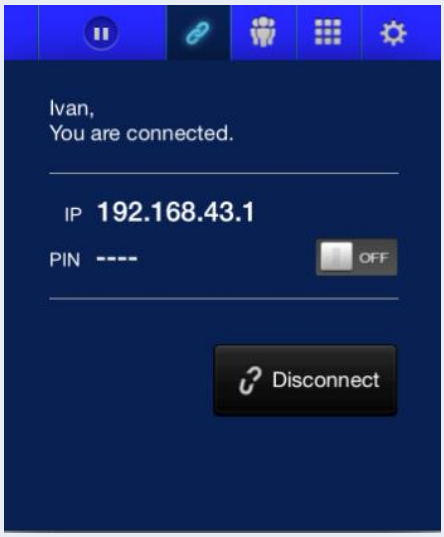
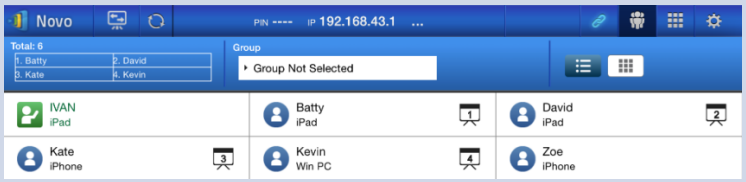
There are two ways to connect to your NovoTouch:

1. Connect to your NovoTouch automatically via QR code.
2. Connect to your NovoTouch device manually.

3.2.1.1 Connect via QR Code

The easiest way to connect to your NovoTouch is to use the QR-code scan feature in NovoPresenter App. After launching the app, tap the tab (as seen in the screenshot below).

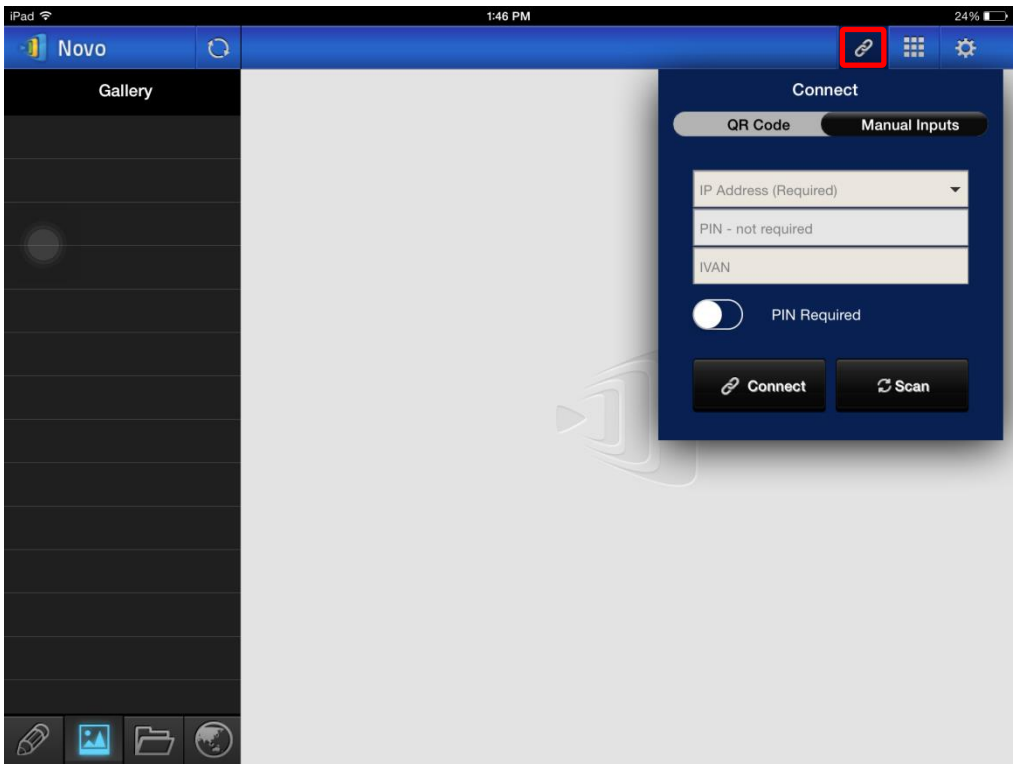


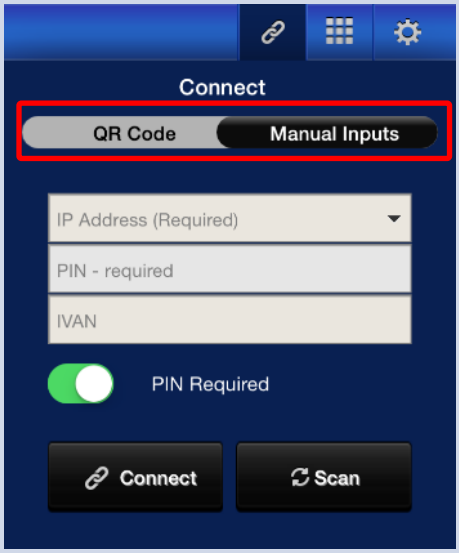
Function	Description
	**Connect via QR Code:** • The **QR Code / Manual Inputs** switch will be in the **QR Code** position by default (if not, just tap the switch once). • Aim your tablet's camera at the QR code. • If the network connection is set up properly, *NovoPresenter* will automatically login to your NovoTouch. Should automatic login fail, you may check for your network connection or try manual login (Section 3.2.1.2).
	**Successful Connection:** After *NovoPresenter* is connected successfully to your NovoTouch, the connection tab will become lit up . If you are the first *participant*, you will see that your iPad screen is mirrored to NovoTouch's screen. You can turn on/off the PIN switch to enable/disable the use of the PIN code for the presentation session.
	**View participants list:** You can tap the tab to see the *participant* list. Example: There are a total of six *participants* in the presentation group shown at left. • The *moderator* is Ivan. • Ivan is not making a presentation • Batty, David, Kate, and Kevin are assigned to be the four *presenters*.

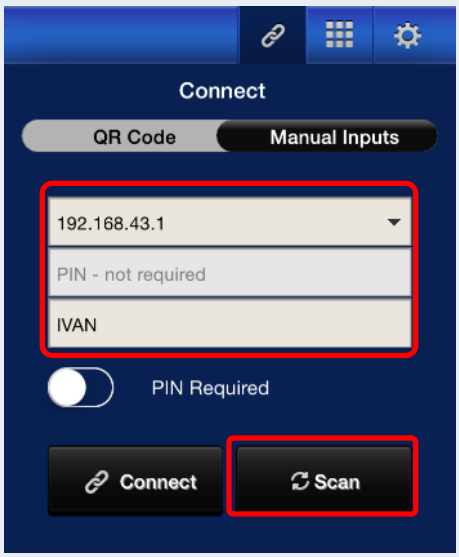
3.2.1.2 Connect via Manual Input

Use this method if you need to configure some login information before connecting to NovoTouch.

After launching the app, tap the tab (as seen in the screenshot below).



Function	Description
	**Manual configuration option:** Toggle **the QR Code / Manual Inputs** switch to the **Manual Inputs** position.

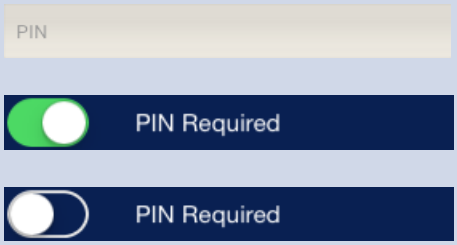


IP Address:
Manually enter the IP address shown on your NovoTouch Remote Viewer home screen, or select an entry from the drop down menu that matches the IP address shown on your NovoTouch Remote Viewer home screen.

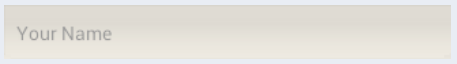
You can tap the Scan button to scan the IP addresses of all available NovoTouch displays within the same subnet. Select the drop-down menu to see the available NovoTouch displays within your area.

Example: 192.168.43.1.

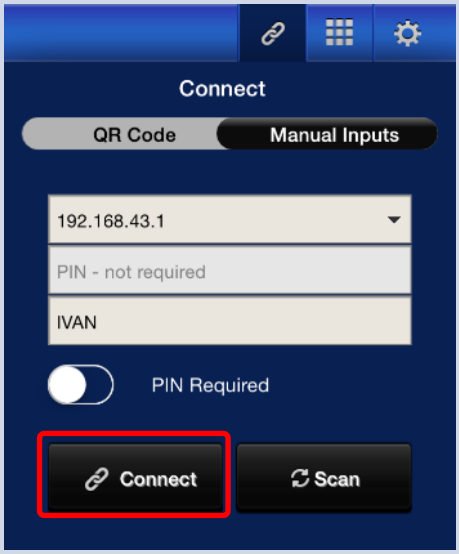
NOTE: For NovoTouch displays that have the device name and IP address bound via the DNS mapping procedure, you may also enter the NovoTouch's device name in this field. See 5.3 DNS Mapping for more information.



PIN:
- If a PIN code is required to connect to the NovoTouch, slide the **PIN Required** switch to the ON position and enter the PIN shown on the NovoTouch Remote Viewer home screen.
- If the PIN code is not required, slide the **PIN Required** switch to the OFF position.



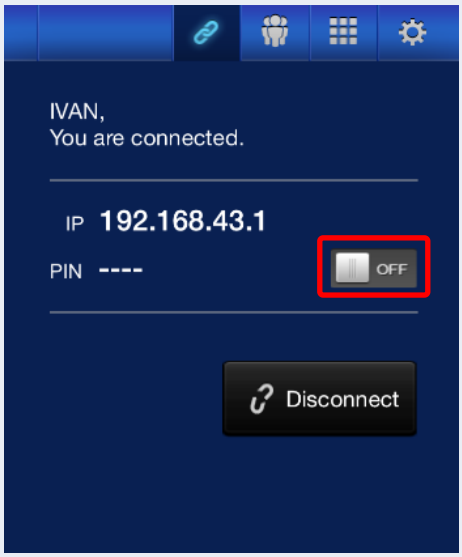
Your Name:
(Optional) Manually enter a name for this tablet to be identified by in this presentation session.
Example: Jennifer.
(Note: If a name is not entered in this field, your iPad's default will be used.)



Make Connection:
Tap the Connect button.

If you are the first *participant*, this will start a presentation session on your NovoTouch.

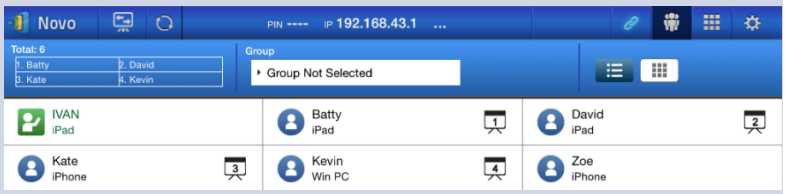
If you are not the first *participant*, you will be joining a presentation session.



Successful Connection:
After your *NovoPresenter* app connects successfully to your NovoTouch, the connection tab will become lit up .

If you are the first *participant*, you will see that your iPad screen is mirrored to NovoTouch's screen.

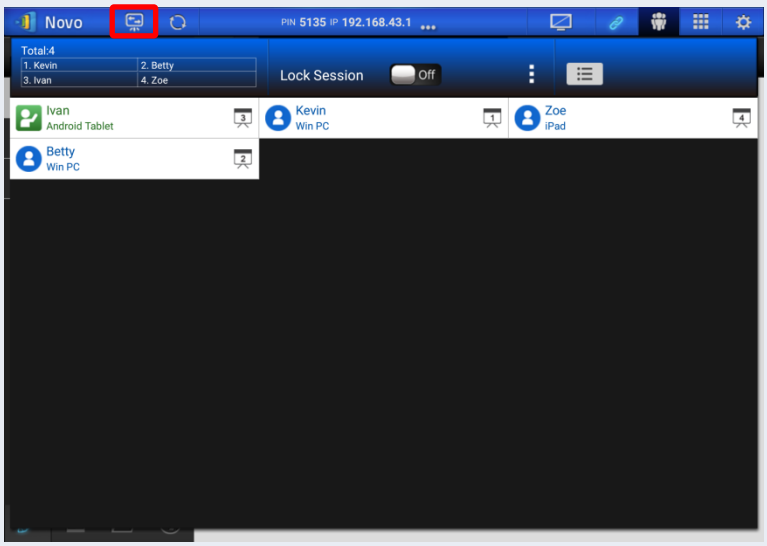
You can turn on/off the PIN switch to enable/disable the use of the PIN code for the presentation session.



View participants list:
You can tap the tab to see the current participant list.

Example: There are a total of six *participants* in the presentation group shown at left.

- The *moderator* is Ivan.
- Ivan is not making a presentation
- Batty, David, Kate, and Kevin are assigned to be the four *presenters*.



Switch Mirroring:
The Switch Mirroring Mode button allows you to return to the NovoTouch Remote Viewer home screen on the display without exiting the presentation session.

By activating the Switch Mirroring Mode button, login information for the session will be accessible to users of iOS or Android devices who then have the ability to mirror their screens using AirPlay or Miracast during an already ongoing session. See 3.3 iOS/Android Full Mirroring, for more information.
NOTE: The Switch Mirroring Mode button can only be activated by the moderator of the session.

3.2.2 Step 2: Make a presentation

Once you have started/joined a presentation session, you can present the content stored on your iPad, local network, or the Internet. There are four tabs at the bottom left corner of the *NovoPresenter* home screen:

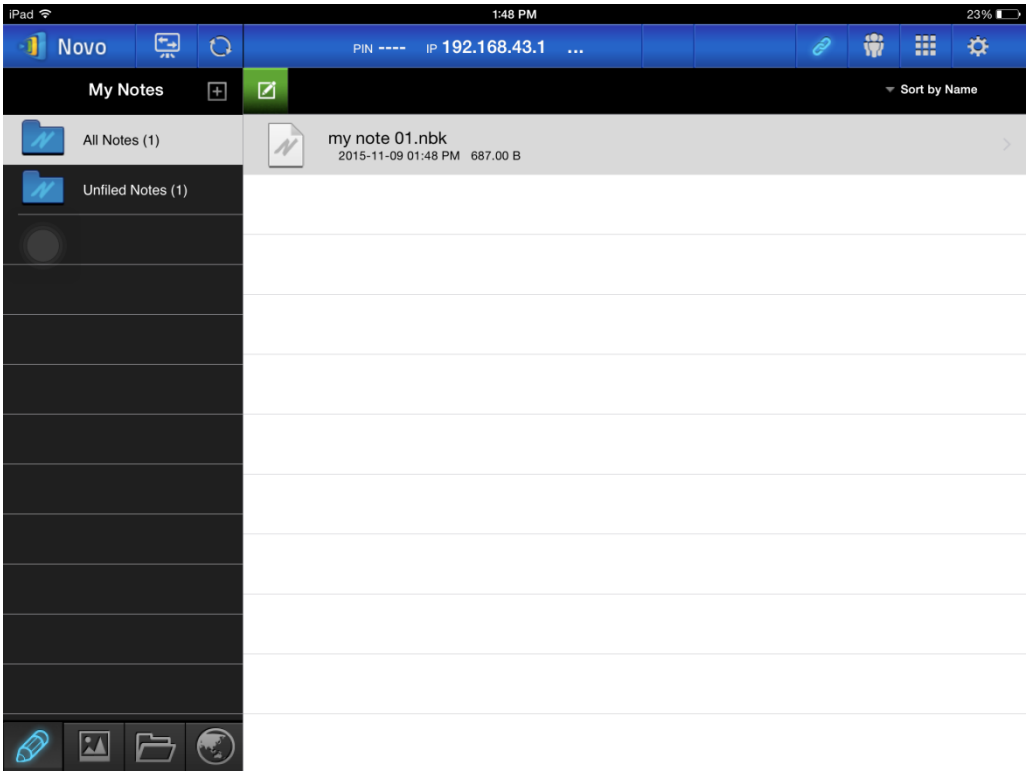
: MyNotes – create and share screen notes

: Gallery – browse and show images/videos stored on your iPad

: Documents – browse and show documents stored on your iPad

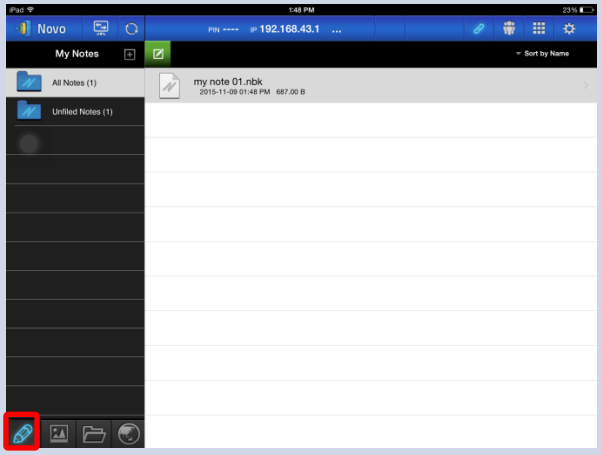
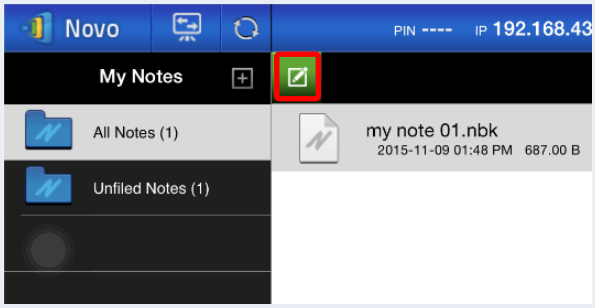
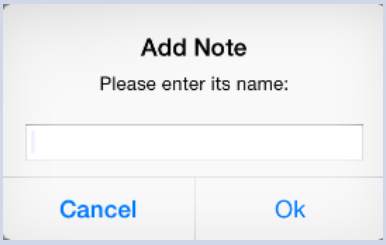
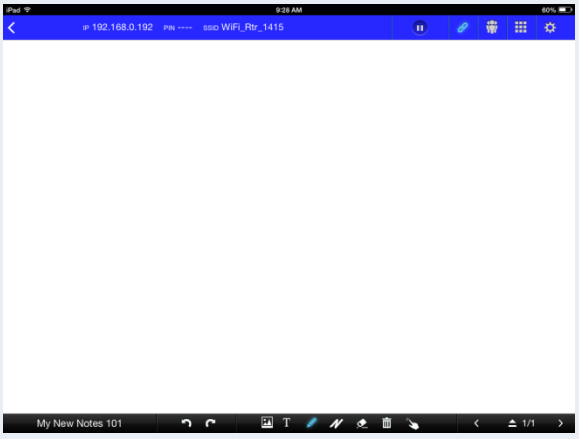
: Web – browse the Internet

3.2.2.1 My Notes



Create and share custom screen notes

This is a virtual whiteboard that allows tablet users to create, edit and display.

Function	Description
	**Launch My Notes:** Tap at the bottom left corner of the screen
	**Create a new note:** Tap at the top of the screen.
	**Enter a note name:** Type a name for your note in the “Add Note” dialog box and tap **Yes**.
	**Start making a note:** A blank note is ready.

Use the note tools:

The note tools are located at the bottom of the screen.

Picture insertion

Text insertion (You can reposition your text by dragging it across your screen with your finger.)

Pen

Highlighter

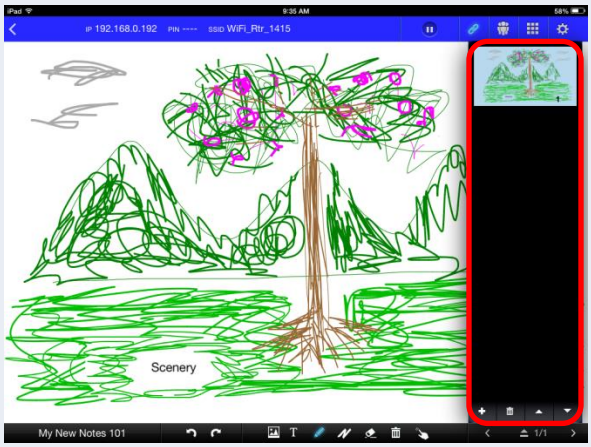
Eraser

Clear All

Move an image

Undo

Redo



Add new pages:

The “Page Control” locates at the right side of the screen.

Open the “Page Control” pane.

Close the “Page Control” pane.

Add a new page.

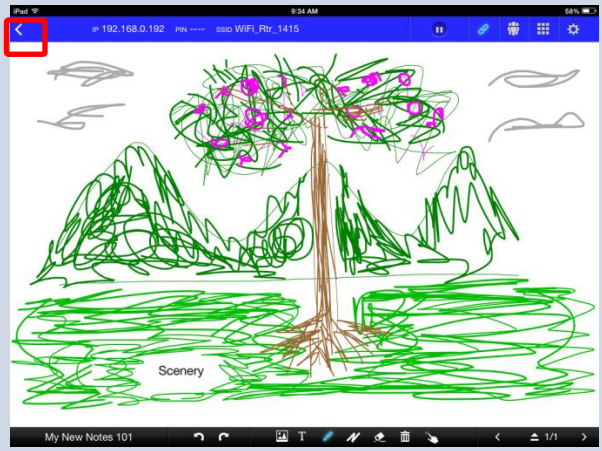
Select a page by tapping its thumbnail.

Delete the selected page.

Move the selected page up.

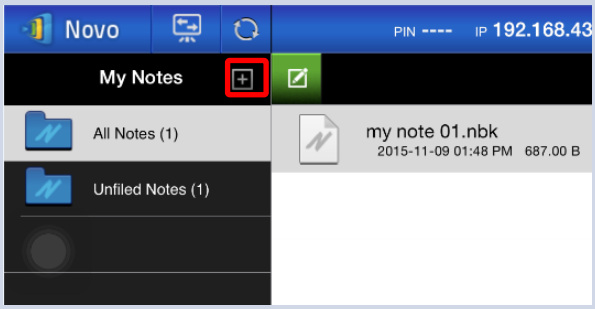
Move the selected page down

.



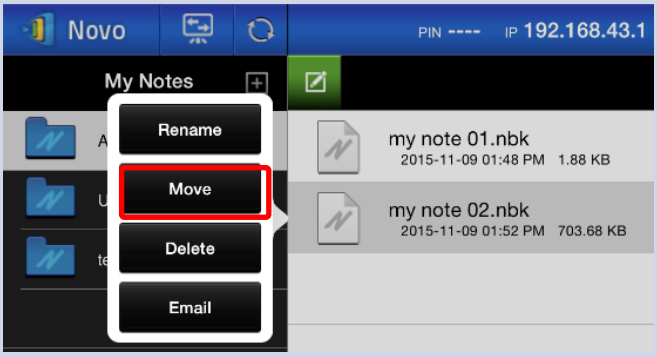
Close and save changes:

Tap to exit editing. The changes will be saved automatically.



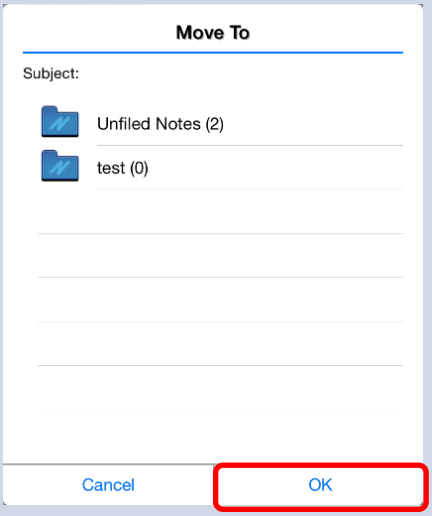
Organize your notes with Subject folders

Tap this icon to add a subject (folder). When the "Add Subject" dialog box appears, enter the name for the new subject.

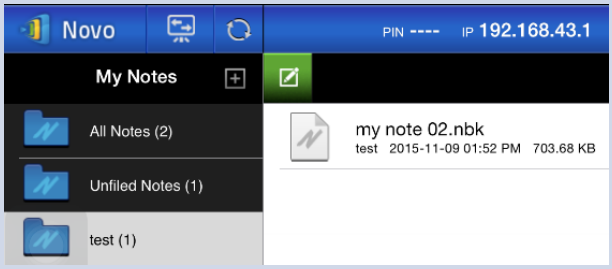


To move a note under a subject, long press the note until a popup menu appears. Then tap

button.

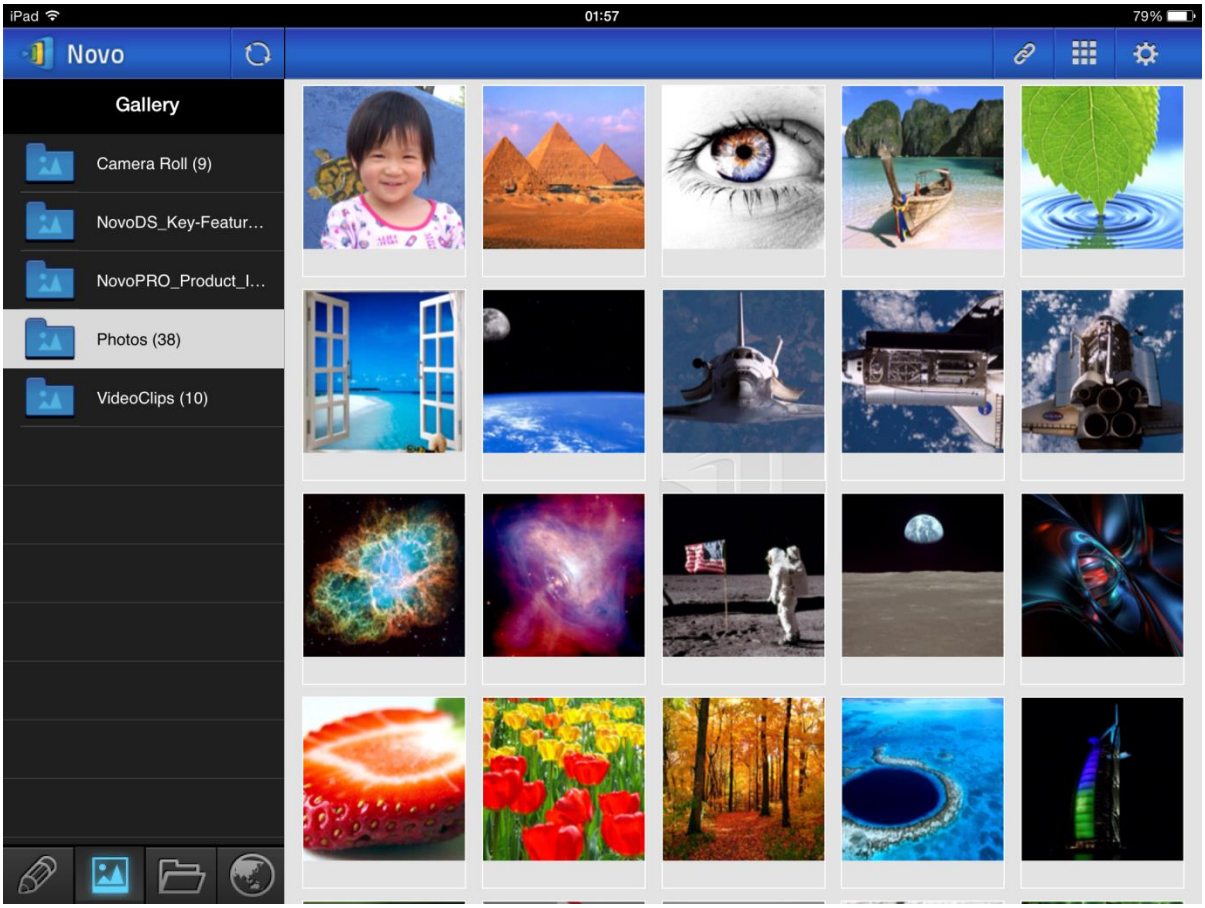


When the "Move to" window pops up, select a subject (folder) and then tap "Ok".



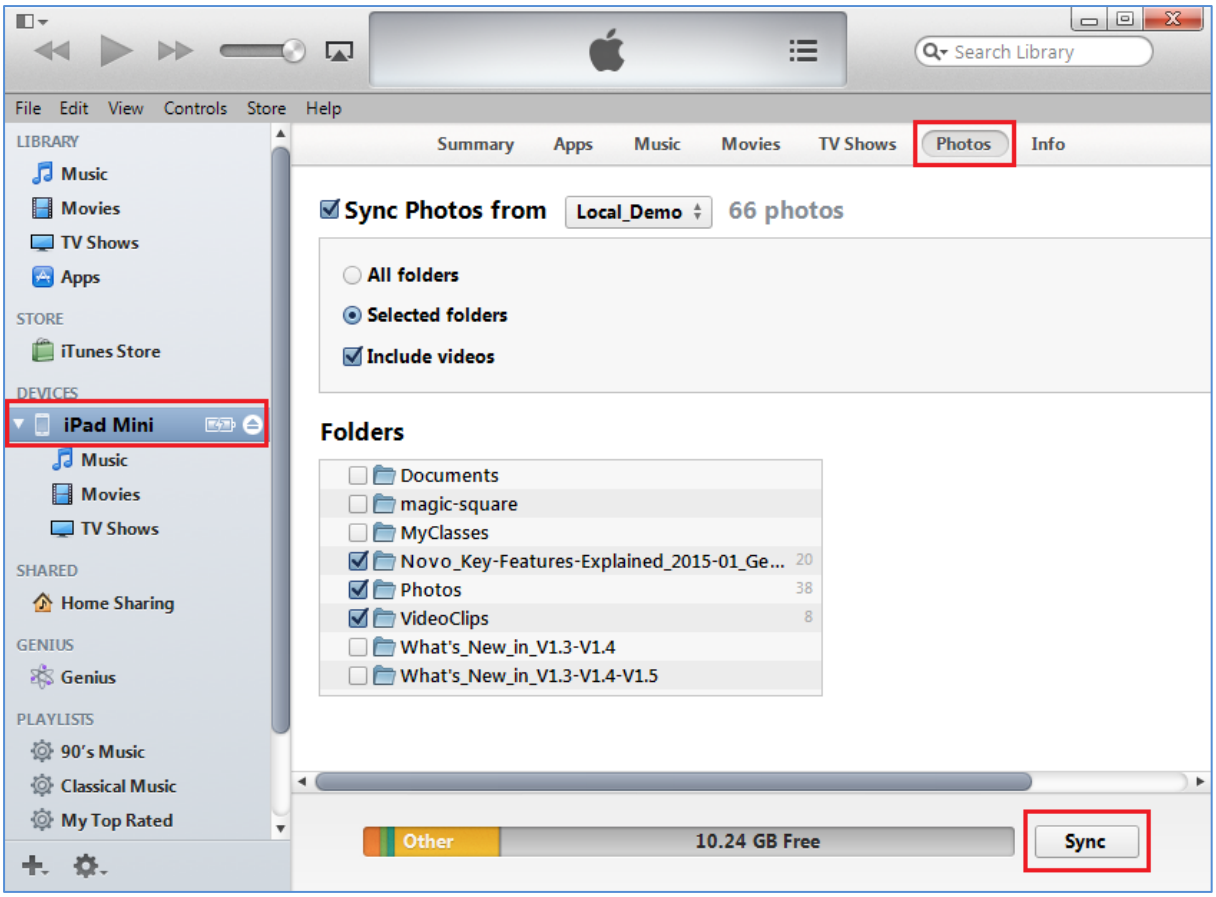
The chosen file has been moved to the selected subject (folder).

3.2.2.2 Gallery

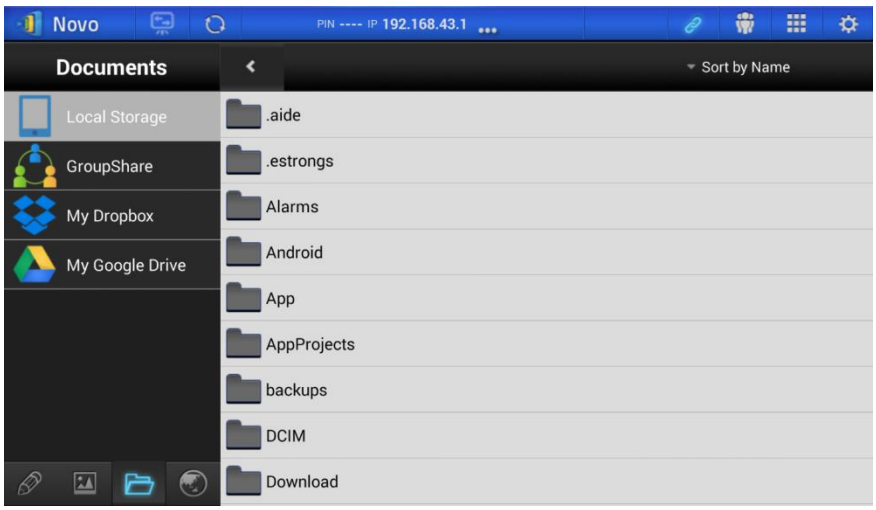


To import images/videos to an iPad, you can follow the steps described below.

(1) Connect your iPad to your computer.
(2) In iTunes, select your device ("**iPad Mini**" in this case), and tap the **Photos** button at the center-top area.
(3) Select the folders we want to sync' the photos/videos from.
    - Please check "Include videos" if you want to sync' videos to your iPad
(4) Tap "**Sync**" to start synchronization process.



3.2.2.3 Documents (Local Storage)

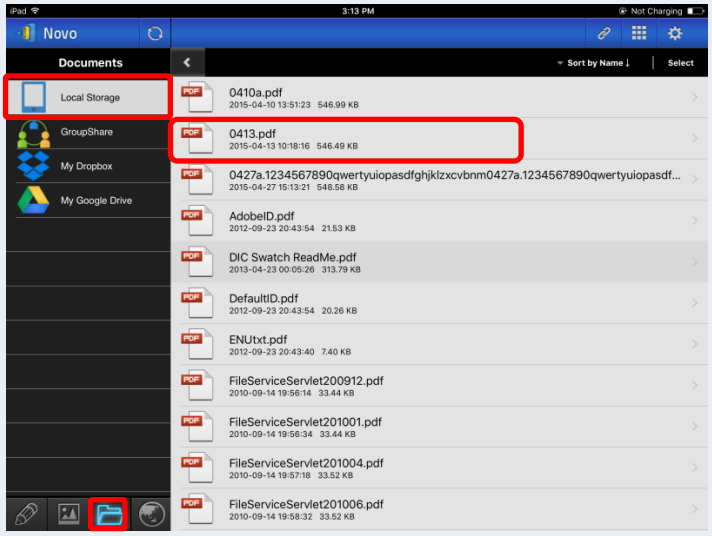
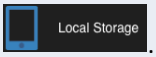


To import images/videos to an iPad, you can follow the steps described below.

(1) Connect your iPad to your computer.
(2) In iTunes, select your device ("**iPad Mini**" in this case), and tap the **Apps** button at the center-top area.
(3) Below File Sharing, select **NovoPresenter** from the Apps list.
- Then you can specify the files for transfer by either tapping button "**Add File…**" or dragging files into the Document list.

- If you want to delete existing files, highlight them and press “Delete” button on the keyboard.

(4) Tap “**Sync**” to start transferring the selected files.

Function	Description
	**Navigate document list:** Tap tab to access Documents. The folder icon will become lit up. For local storage, tap  . Documents will be listed on the right pane. Tap the desired one to open for viewing. You can change sorting method by tapping button **Sort by…**. The following sort-by methods are supported: - Sort by Name (default) - Sort by Date - Sort by Extension *Note: You can tap the* *tab to refresh the document list.*

Scroll Bar

View documents:
The selected document will be opened in full screen.

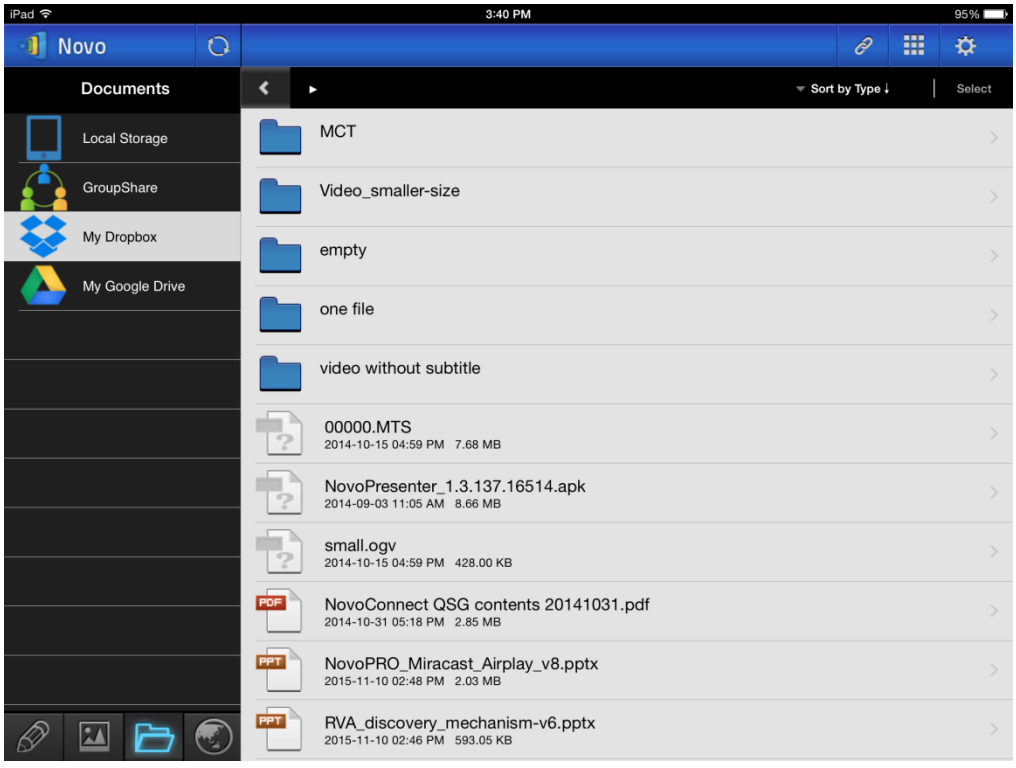
You can zoom in and out by pinching your fingers.

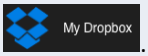
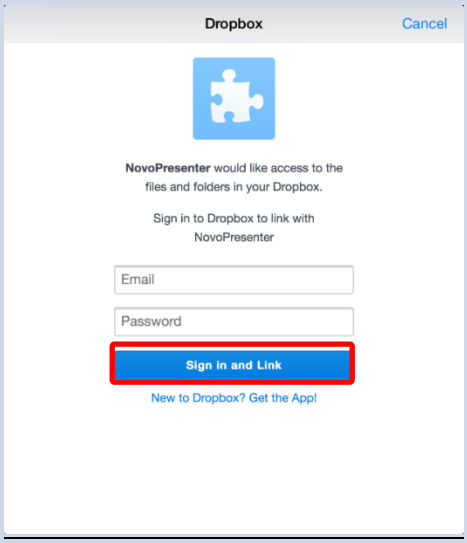
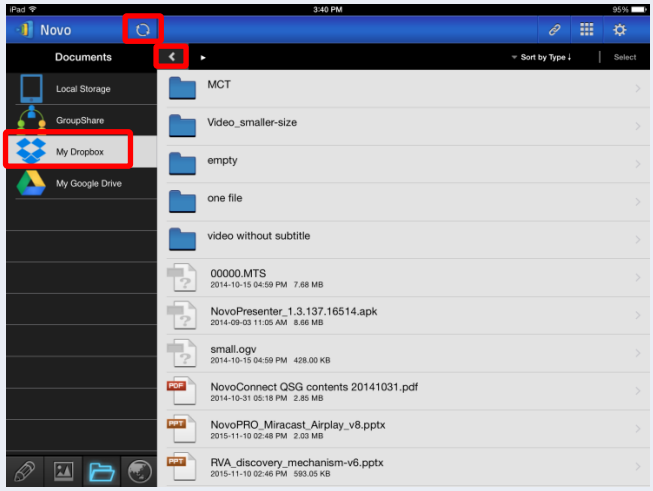
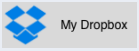
To scroll down or move to the next page, slide your finger up or drag the scroll bar down. To scroll up or move to the previous page, slide your finger down or drag the scroll bar up.

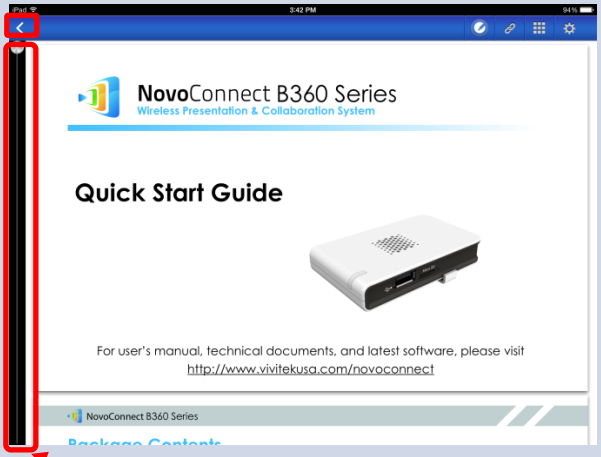
To return to the *Document List* page, tap .

To use the on-screen annotation tools, tap .

3.2.2.4 Documents (Dropbox)



Function	Description
	Select Dropbox as the document source: Tap tab to access Documents. The folder icon will become lit up. For Dropbox, tap  .
	**First time using Dropbox in *NovoPresenter*:** When using this feature for the very first time, an authentication dialog will be popped up. Enter your e-mail address and password associated with your Dropbox account*, and then tap* the **Sign In** button.
 	**Navigate document list:** By default, your Dropbox's home directory is shown. Navigate to a folder by tapping the desired folder. You can change sorting method by tapping button **Sort by…**. *Note:* • *Tap the* *tab to return to the parent folder.* • *You can tap the*  *tab to go back to Dropbox's home directory.* • *You can tap the* *tab refresh the document list.*



Scroll Bar

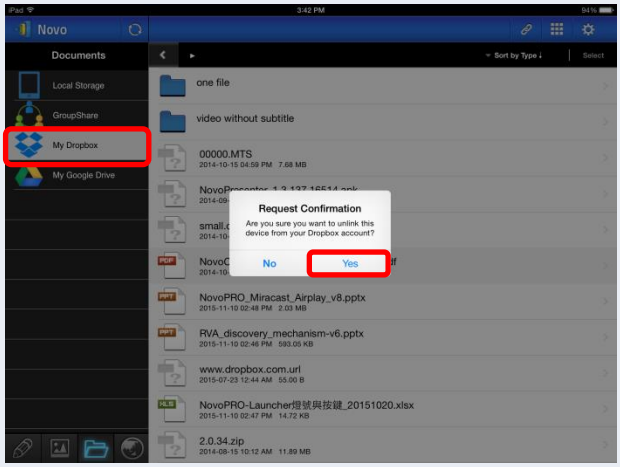
View document:
The selected document will be opened in full screen.

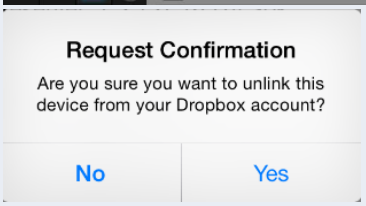
You can zoom in and out by pinching your fingers

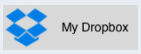
To scroll down or move to the next page, slide your finger up or drag the scroll bar down. To scroll up or move to the previous page, slide your finger down or drag the scroll bar up.

To return to the *Document List* page, tap .

To use the on-screen annotation tools, tap .



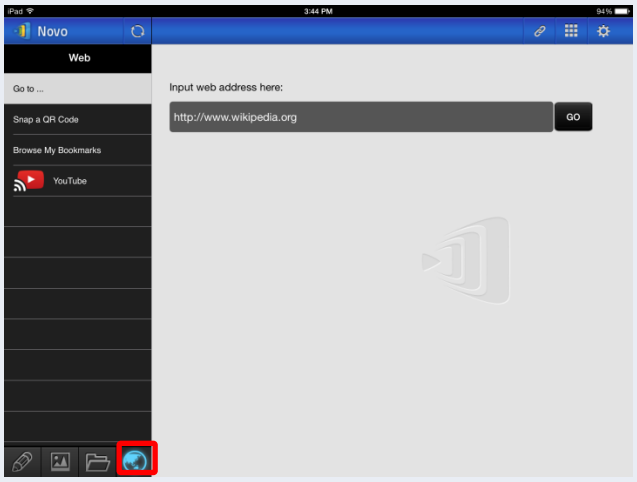


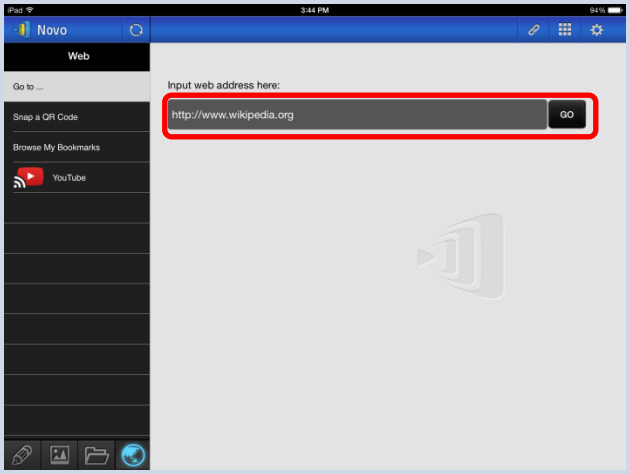
Unlink the Dropbox account:
If you need to unlink the Dropbox account, tap and hold the 

tab for a few seconds. When the *Request Confirmation* appears, tap **Yes** to proceed.

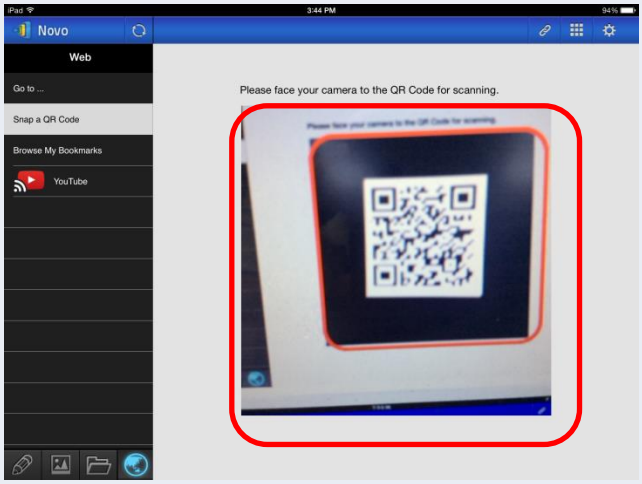
3.2.2.5 Web

You can open any website for sharing with *NovoPresenter*. An example screen is shown below.

Function	Description
	**Browse a webpage:** Tap the internet tab . It will light up blue. Select one of the three options to access a Web page: - Go to… (enter webpage address[default]) - Snap a QR Code - Browse My Bookmarks (Web site bookmarks)

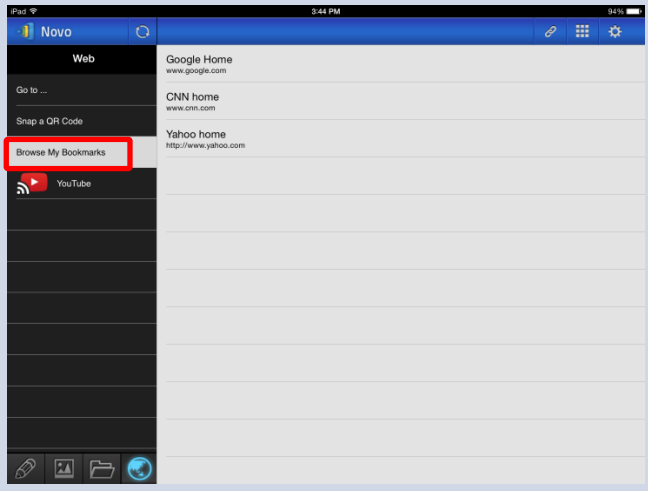


Go to…:
Tap the **Go to…** tab.
Enter the webpage address and tap **Go**.
Example: Enter the URL www.wikipedia.org and tap on the **Go** button**.**



Snap QR code:

- Tap button **Snap QR Code**.
- Aim your iPad's camera at the desired QR code.



Browse my Bookmarks:
Tap the **Browse my Bookmarks** tab.
From the bookmark list at the right, tap the desired one to open the corresponding webpage.

Tap and hold a bookmark for two seconds to edit or delete the bookmark.

Note: The bookmark list may initially be empty. You can add a webpage to the bookmark list while browsing.

Web page presentation:
The selected Web page will be shown in full screen.

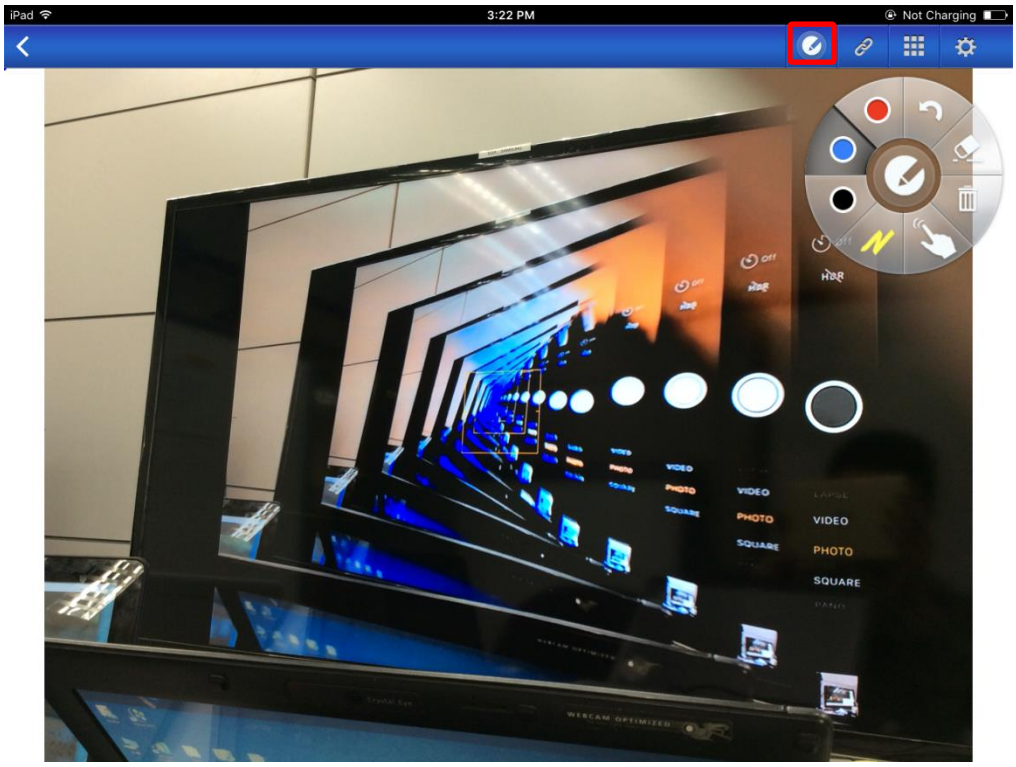
To add this webpage to the bookmark list, tap .

To return to the *Web menu page*, tap .

To use the on-screen annotation tools, tap .

3.2.2.6 Annotation

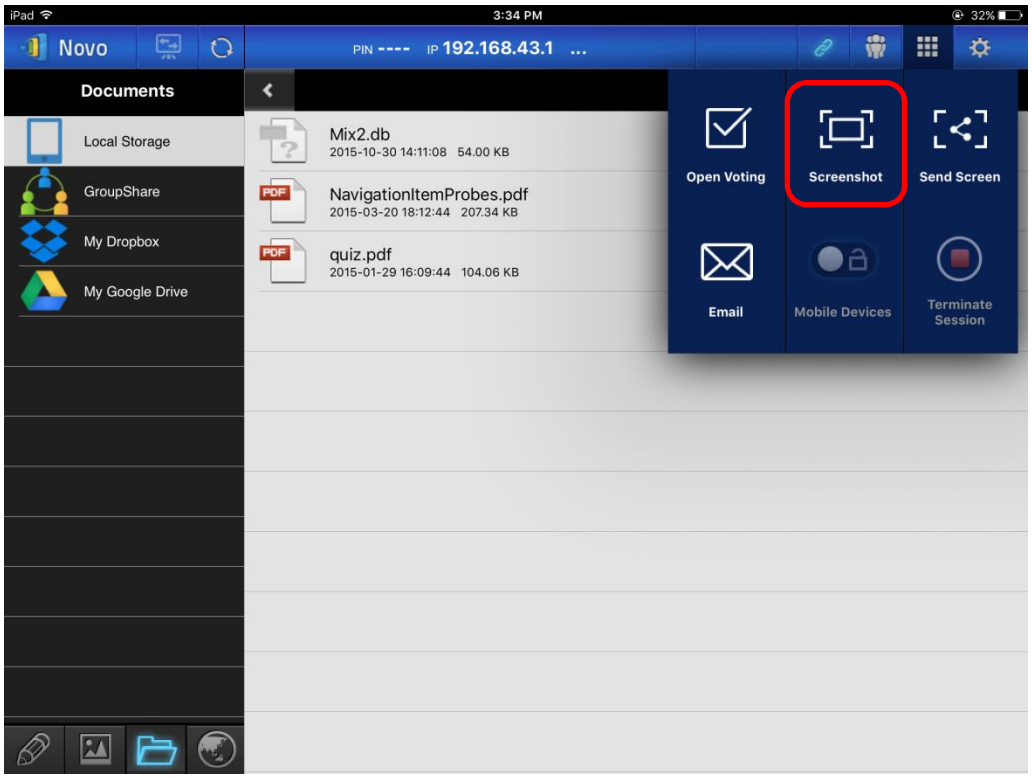
NovoPresenter has a built-in drawing tool for on-screen annotation, such as handwriting and highlighting. You can bring up this tool by tapping , as shown below.

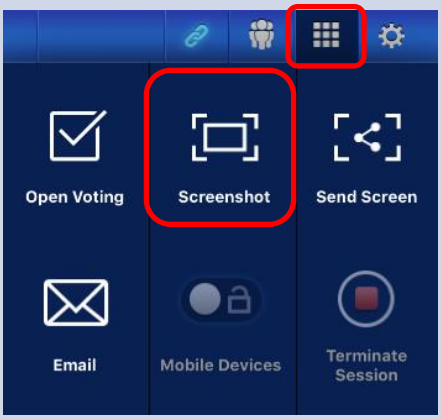


Function	Description
	Tap the tab to enable the annotation tool. Pen: red Pen: blue Pen: black Highlighter Toggle between annotation mode and touch mode Clear All Eraser Undo

3.2.2.7 Screenshot

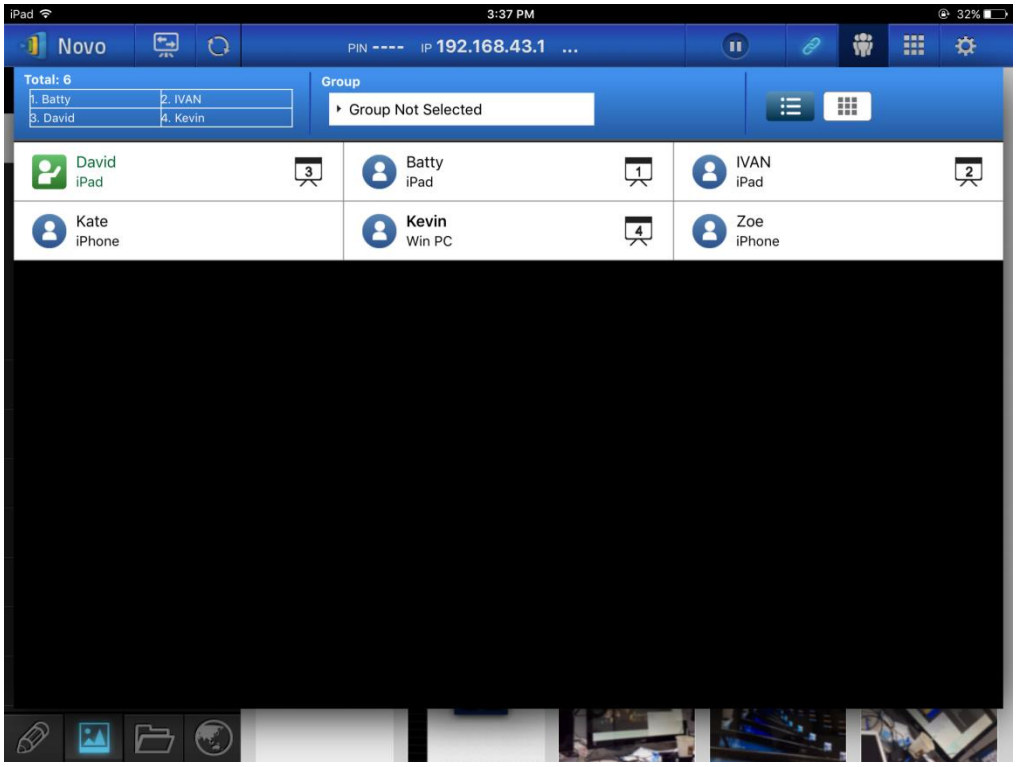
This feature allows users to take tablet screenshots.



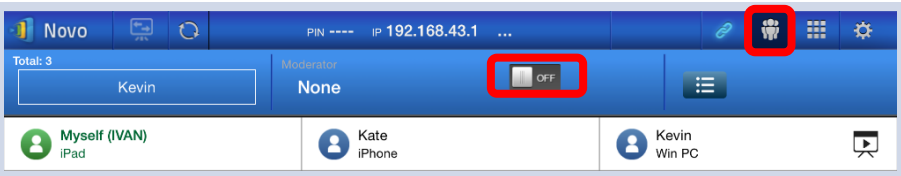
Function	Description
	**Take a screenshot:** Tap the **Screenshot** button and the current screenshot will be saved in local storage.

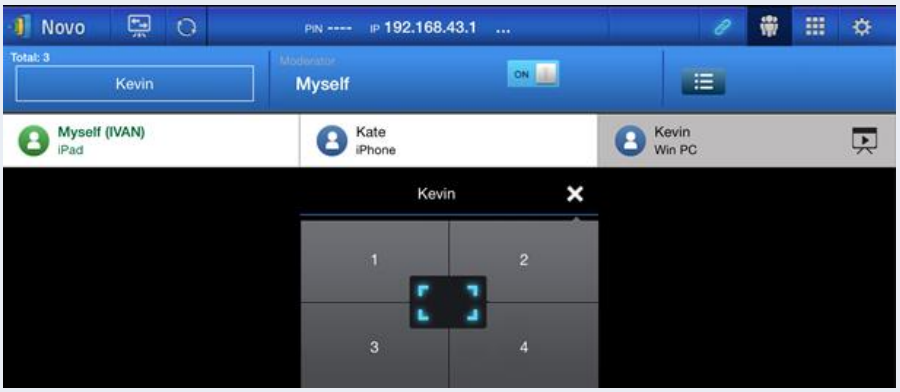
3.2.3 Step 3: Manage the presentation

You can manage the presentation through the *participants* panel, as shown in the figure below.



3.2.3.1 Moderator

Function	Description
	**Set the moderator mode:** Tap the tab and tap the **Moderator On/Off** switch to set the moderator mode. OFF The moderator mode is off. ON The moderator mode is on. *Note: This feature is available to Corporate Edition only.*



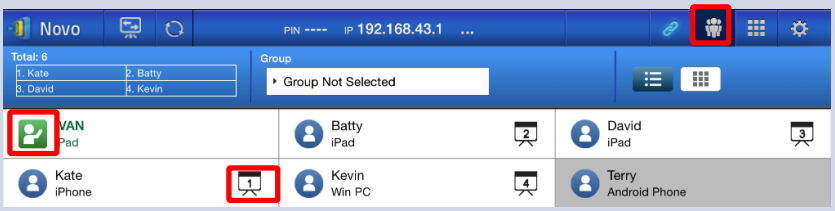
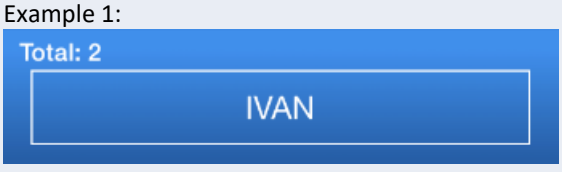
Manage presentation:
The *moderator* has the capability to select *participant*(s) for projection.

3.2.3.2 Role assignment

There are three roles in a presentation session, the *moderator*, the *presenter*, and the *participant*. The first *participant* to start the presentation session is assigned as the *moderator*. Individuals that join subsequently are *participants*.

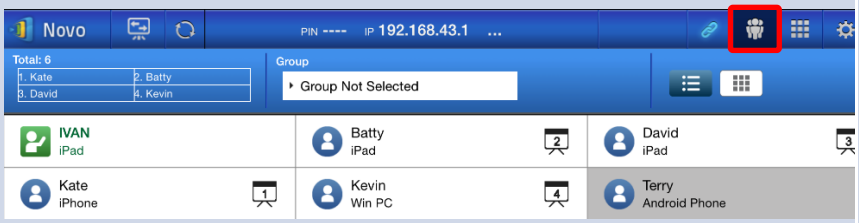
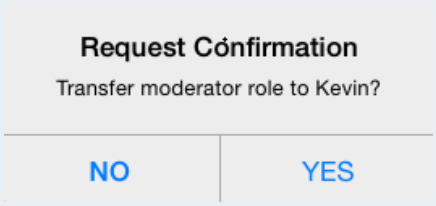
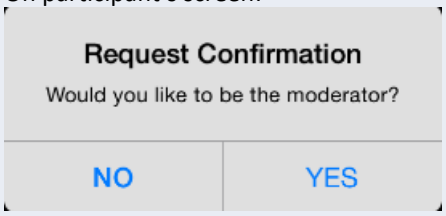
By default, the *moderator* assumes the *presenter* role until he hands it over to another *participant*.

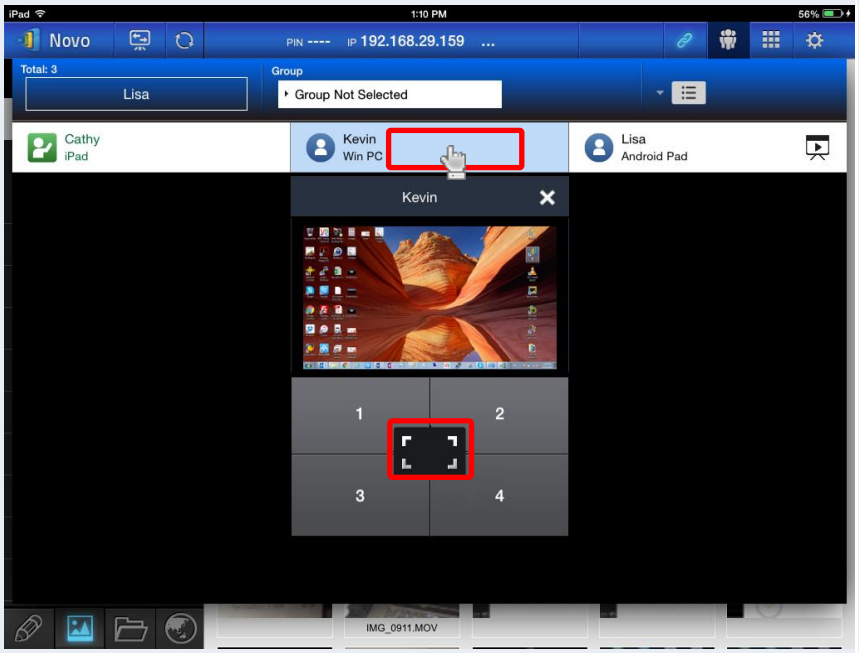
To show all current *participants* who have joined the presentation session, tap the tab.

Function	Description
	Select the tab to show the *participant* list. : the *moderator* : current *presenter* : current *presenter* that is being projected in one of the screen quadrants (4-to-1 projection). (The icon shown here is for a *presenter* that is presenting in quadrant #1). Example: There are six *participants* in the presentation session (3 iPads, 1 Windows PC, 1 Android phone, and 1 iPhone.) Kate, Batty, David, and Kevin are *presenters* in 4-to-1 projection.
Example 1:  Example 2:	Total *participants* and current presenter(s). Example 1: Currently there are 2 *participants* and Ivan is the only *presenter* in full-screen projection. Example 2: Currently there are 6 *participants*. Kevin, Kate, Batty, and

	David are 4 *presenters* in 4-to-1 projection.

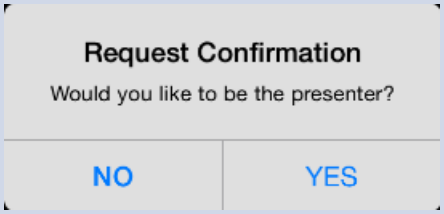
3.2.3.3 Role change, screen preview, four-way split screen, withdraw projection, and remove a user

Function	Description
	**Role change: transfer the moderator role** Tap tab to show the *participant* list. Then tap icon of the *participant* you want to transfer *moderator* role to. *Note: only the moderator can performs this operation.*
On moderator's screen: 	A confirmation dialog pops up. You have 20 seconds to respond.
On participant's screen: 	After the moderator confirms the role transfer, a dialog box will appear on the *participant*'s screen to ask his/her confirmation. The *participant* has 20 seconds to respond.



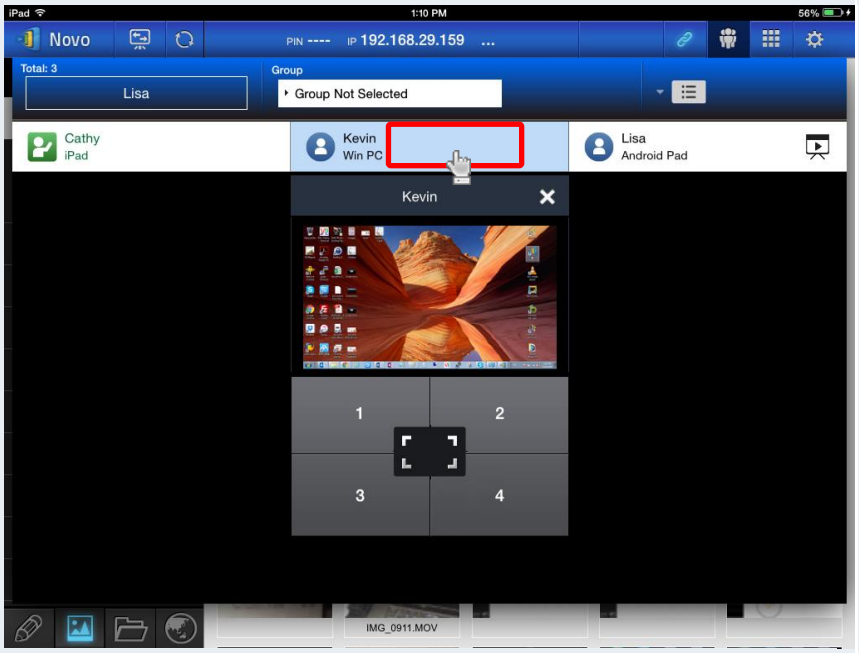
Full-Screen Projection

1) Tap the *participant* (e.g. Kevin) to bring up the control panel
2) Tap to set Kevin as the full-screen presenter.



For Corporation Edition, when a *participant* is asked to be a *presenter*, a dialog box will appear on the *participant*'s screen.
The *participant* has 20 seconds to respond.

For Education Edition, this dialog box will not appear.

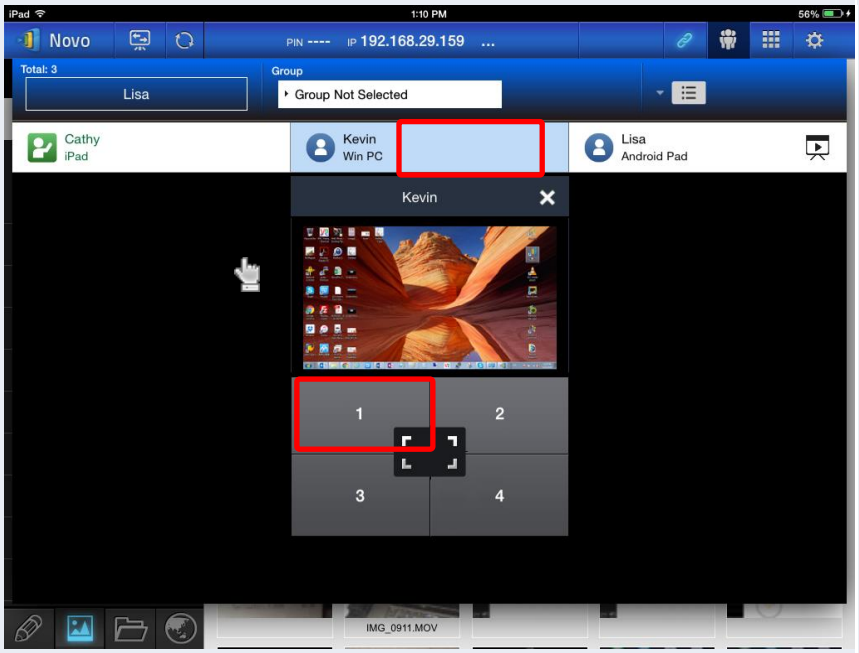


Screen preview (*Education Edition* only):

For the *Education Edition*, the moderator can preview desktop screens of all *participants*.

To preview a *participant*'s screen, tap the corresponding entry. Wait for a few seconds for the screen to appear.

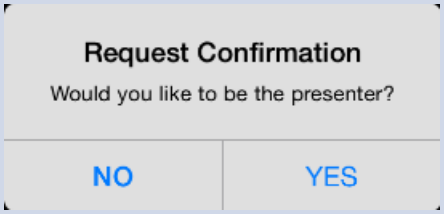
In this example, Kevin's Windows PC is selected to be previewed.



4-to-1 Projection

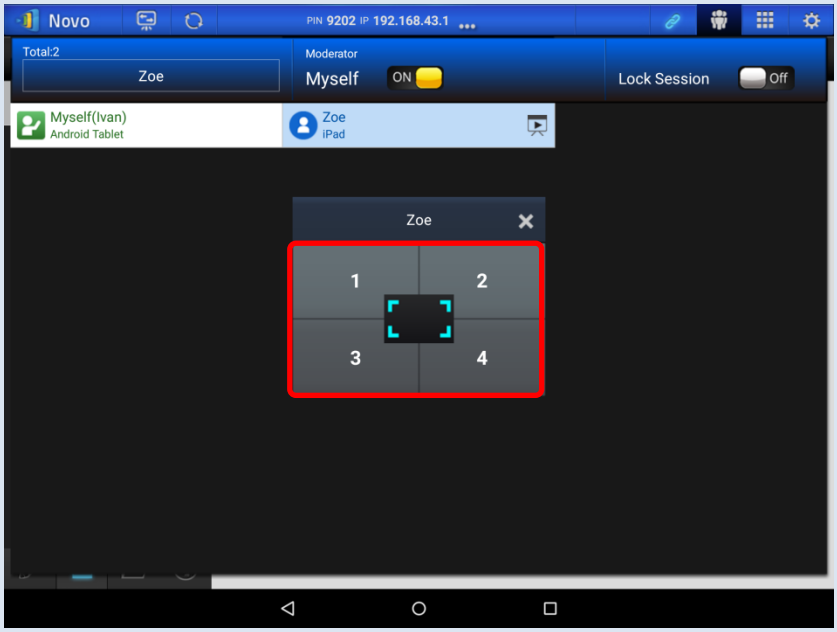
1) Tap the *participant* (e.g. Kevin) to bring up the control panel
2) Tap button "1", "2", "3", or "4" to put the participant in the corresponding quadrant. The user name will be shown in the quadrant his or her device has been assigned to on the display.

In this example, Kevin is assigned to make a presentation in Box #1.



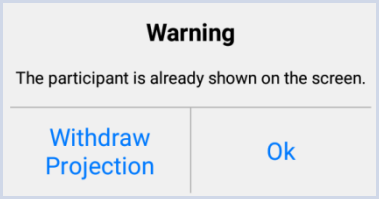
For Corporation Edition, when a *participant* is asked to be a *presenter*, a dialog box will appear on the *participant*'s screen.
The *participant* has 20 seconds to respond.

For Education Edition, this dialog box will not appear.

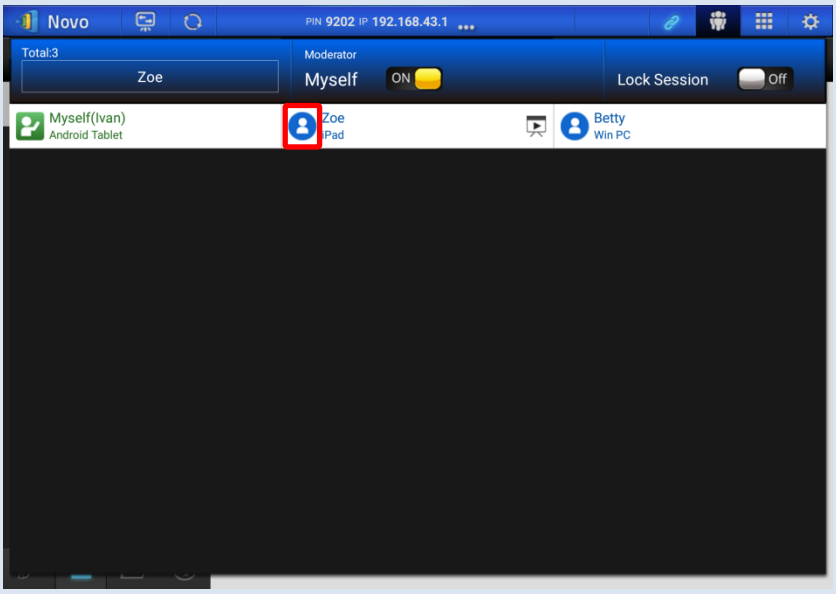


Withdrawing projections:
When a participant's screen is currently projected on the display and the participant wants to withdraw the projection of their screen from the display (while staying in the presentation session), tap the numbered box assigned to the presenter.

Note: In presentations with a moderator, this function is only available to the moderator.

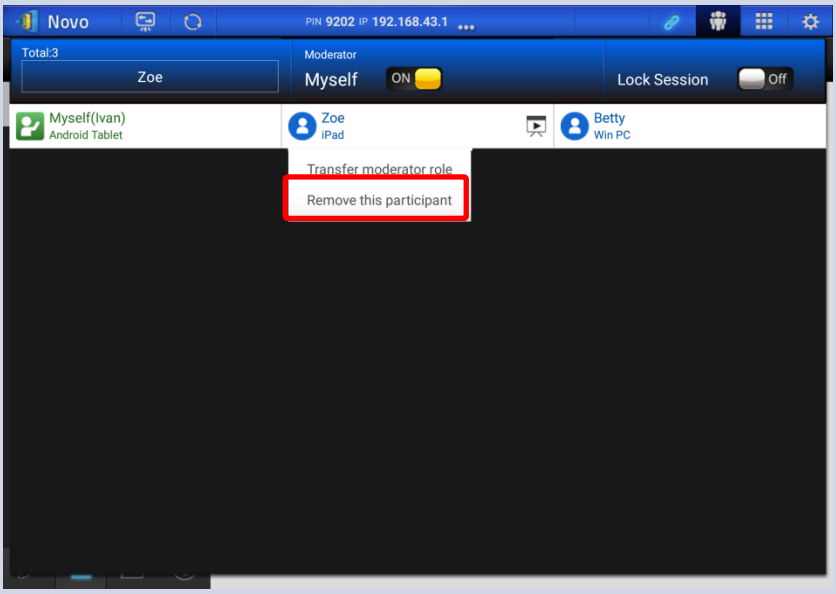


In the dialog box, tap **Withdraw Projection** and the participant's screen will be withdrawn from the presentation display.

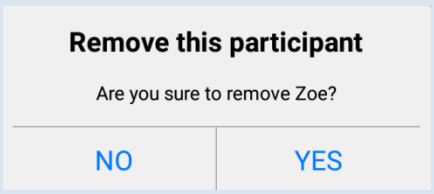


Removing a participant:
To remove a participant from the presentation session, tap the icon next to the participant's name.

Note: In presentations with a moderator, this function is only available to the moderator.

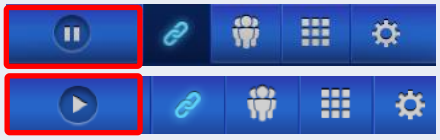
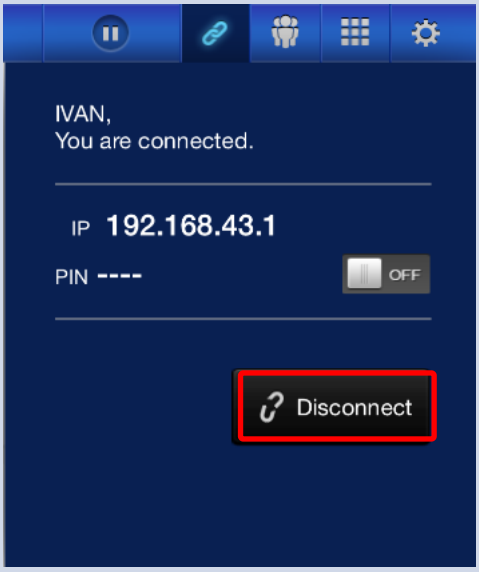
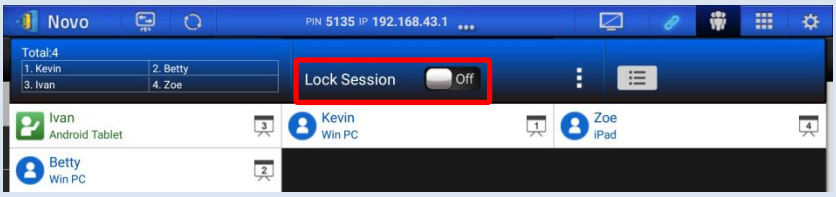


Tap **Remove this participant** to remove the participant from the presentation session.



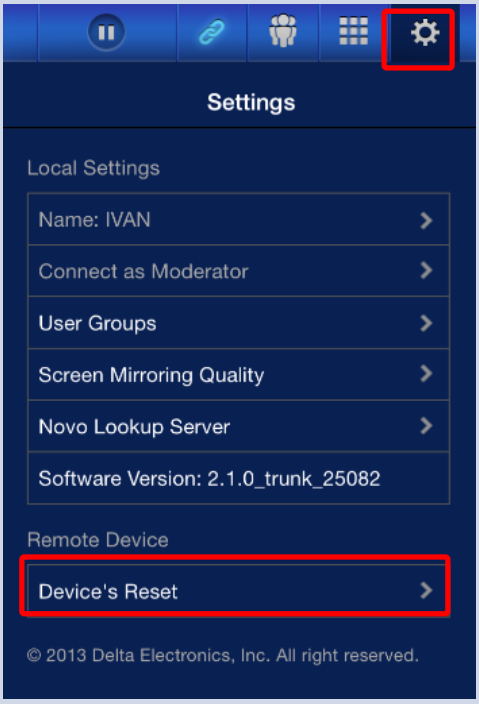
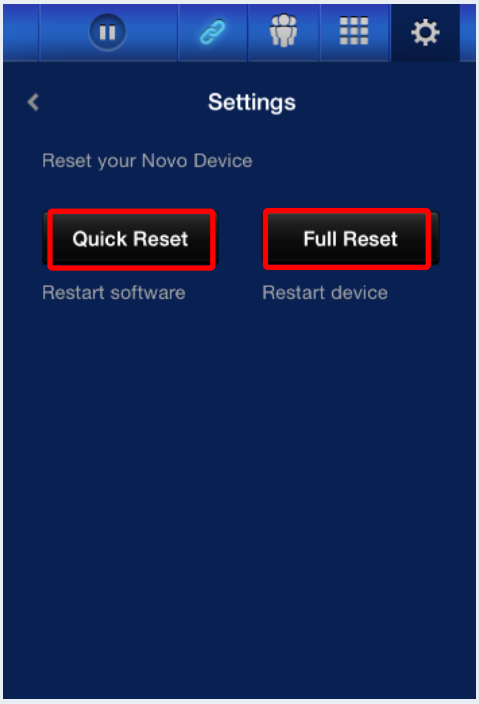
In the dialog box, confirm that you want to remove the participant. The participant will be logged off from the presentation session.

3.2.3.4 Pause, resume, disconnect and lock session

Function	Description
	**Pause and resume a presentation:** While presenting, the *presenter* can toggle between and to pause and resume the presentation respectively.
	**Disconnect from a presentation session:** Tap **Disconnect** button to exit the presentation session. If the *moderator* exits the presentation session without handing over the *moderator* role, all *participants* will receive a message prompting them to take over moderator role. The first to respond to the prompt will assume the role of *moderator*.
	**To lock the session (Education Edition only)** Tap the **Lock Session** switch in the participant list screen to prevent any other users from logging in and joining the current presentation session. *Note: Only the moderator can lock a session.*

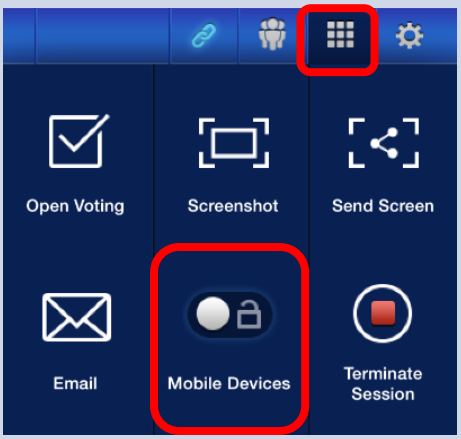
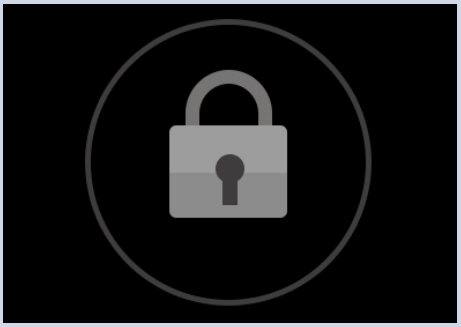
3.2.3.5 Reset

In case you run into cases where NovoTouch Remote Viewer may have weird behavior or lock up, you could reset NovoTouch Remote Viewer from your iPad.

Function	Description
	**Reset NovoTouch Remote Viewer:** First tap tab and tap arrow of the **Device's Reset** window.
	**Quick Reset and Full Reset:** • Tap **Quick Reset** to do a soft reset (restarting the software on NovoTouch). • Tap **Full Reset** to do a hard reset (restarting NovoTouch Remote Viewer) Conflicts may occur when multiple *participants* simultaneously attempt to reset NovoTouch Remote Viewer. The reset priorities are as follows: 1. *Moderator*: The *moderator* has the sole privilege to **Quick Reset** and **Full Reset** when the *moderator* stays connected to the NovoTouch. 2. *Presenter*: If the *moderator* loses connection to the NovoTouch, the current *presenter* inherits the privilege to **Quick Reset** and **Full Reset**. 3. *Participant*: If the *moderator* and all *presenters* lose connection to the NovoTouch, any *participant* can perform **Quick Reset** and **Full Rest**.

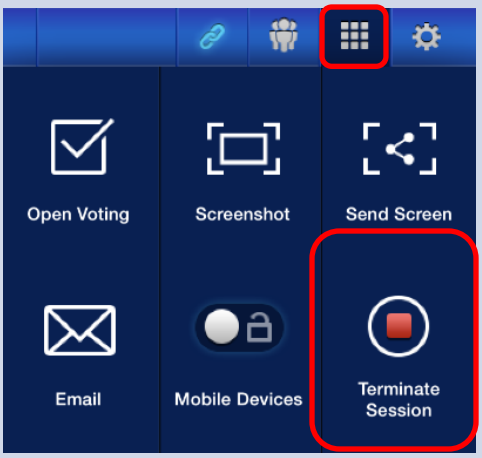
3.2.3.6 Lock/Unlock students' tablets (*Education Edition* only)

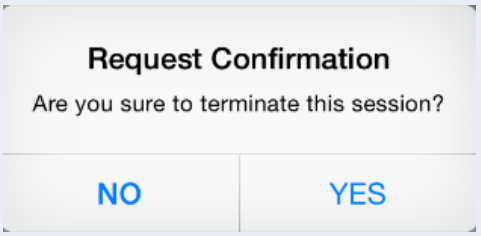
This feature allows the moderator to lock down student tablets/phones. This feature is only available in the *Education Edition.*

Function	Description
	**To lock/unlock students' tablets:** Tap the tab to bring up the toolbar page, then tap **Mobile Devices** to lock or unlock the students' tablets. Student tablets/phones are unlocked. Student tablets/phones are locked.
	**Student tablets locked:** A lock icon will appear on the students' tablets/phones.

3.2.3.7 Terminate session (*Education Edition* only)

The moderator can disconnect all devices with one touch. This feature is only available in the *Education Edition.*

Function	Description
	**To terminate a session:** Tap the tab and tap **Terminate Session**.



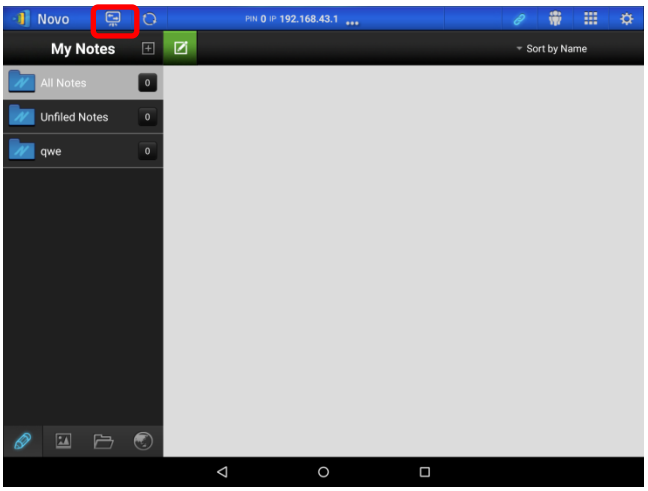
Confirmation:
Tap **Yes** to terminate the session. All devices will be disconnected.

3.3 iOS/Android Full Mirroring

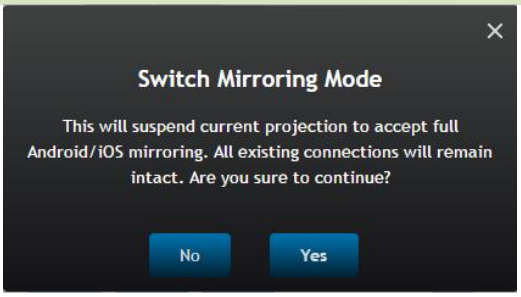
When NovoTouch Remote Viewer is at its home screen, it can receive requests from either a collaboration connection described in section 3.1 and 3.2, or iOS/Android full mirroring request. This is true even when collaboration connections are already set up using *Desktop Streamer* or *NovoPresenter* app. To do so the moderator should follow the steps below:

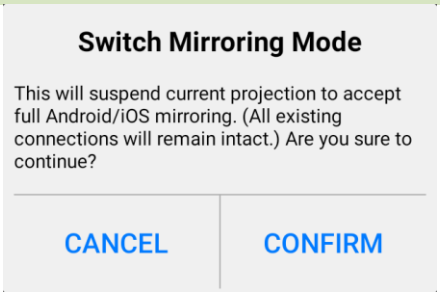
1. [For Dekstop Streamer Only] Click the left options menu button on the connections page.

2. Click the “Switch to mirroring mode” button.



3. Then a pop up window asks you to confirm you’d like to switch to mirroring mode. Once you confirm your choice, NovoTouch Remote Viewer will return back to its home screen to allow you to start iOS/Android full mirroring by following the steps described in 3.3.1 and 3.3.2.



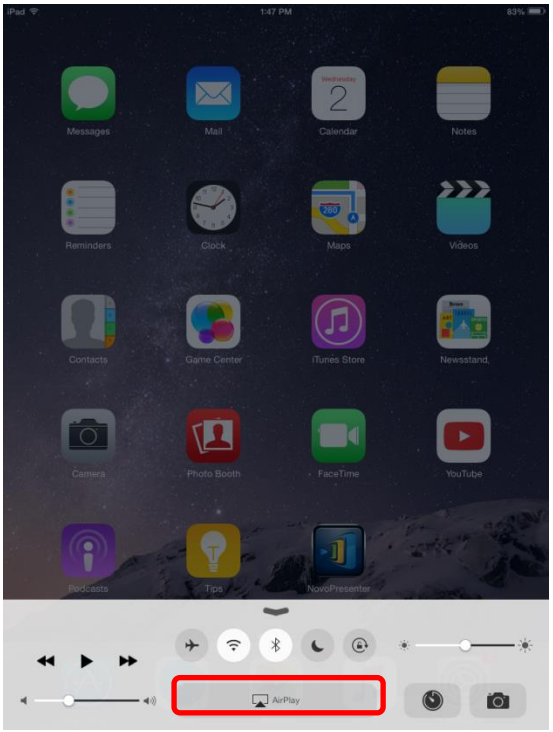


Note: After the iOS/Android device has finished mirroring its device, the moderator can return to the original presentation session by pressing any of the buttons on the projection button pad.

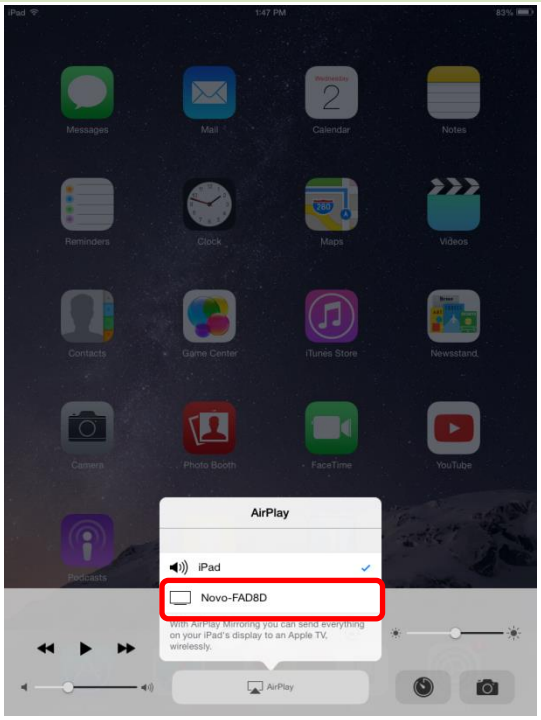
3.3.1 iOS Full Mirroring

All participants using iPads/iPhones can mirror their screens to NovoTouch by using iPad/iPhone's built-in Airplay service. No software installation is required in this case. To do so,

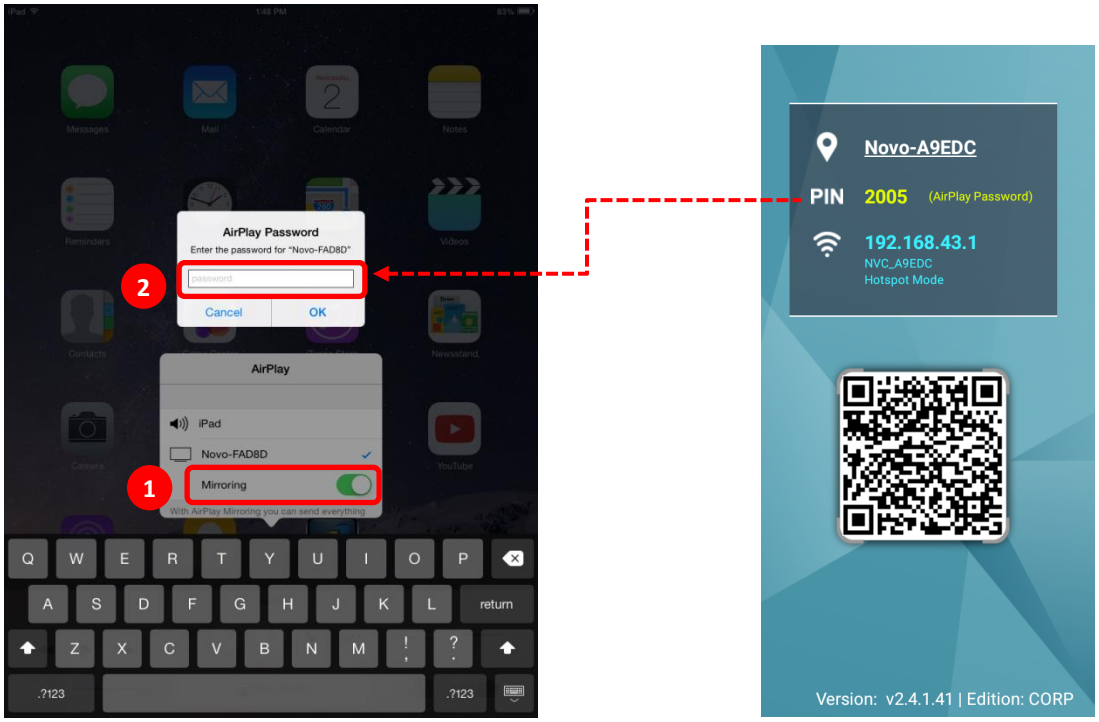
1. Connect your iPad/iPhone to the same network where your NovoTouch stays.
2. Swipe up from the bottom of the iPad or iPhone to show the Control Center.



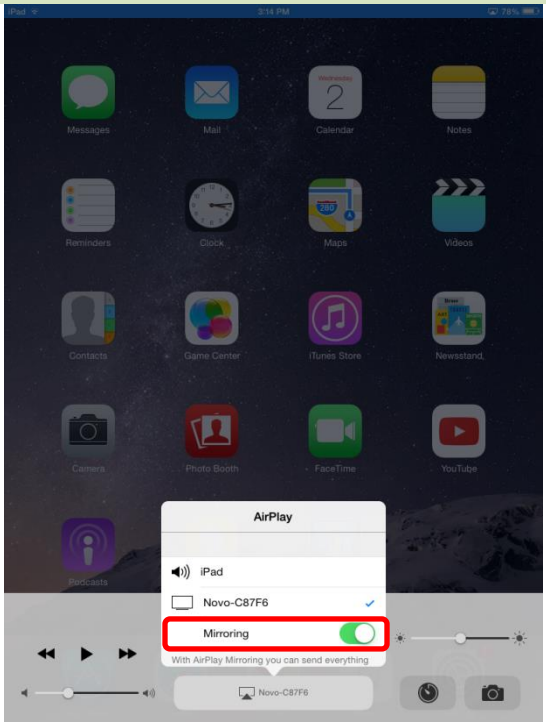
3. Tap AirPlay and select NovoTouch's AirPlay device name. By default NovoTouch's AirPlay device is named as "Novo-XXXXX", where XXXXX is a device-generated name.



4. Switch on “Mirroring” option. Then an “Airplay Password” prompt pops up. Enter the 4-digit “AirPlay password” shown on NovoTouch Remote Viewer’s home screen (illustrated below). Once the correct pasword is entered, your iPad/iPhone will be mirrored to the NovoTouch’s screen.



5. To stop mirroring your iPad/iPhone, you should swipe up from the bottom of the iPad/iPhone to access the “AirPlay” menu. Tap “Novo-XXXXX” name, and then switch off mirroring function.

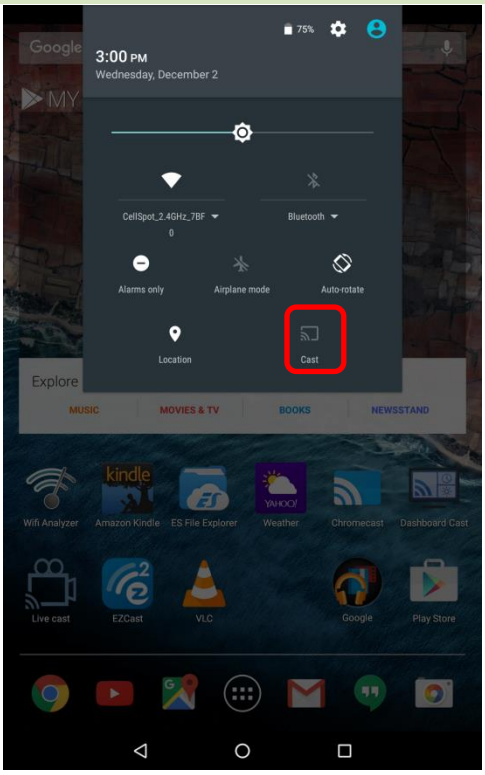


3.3.2 Android Full Mirroring

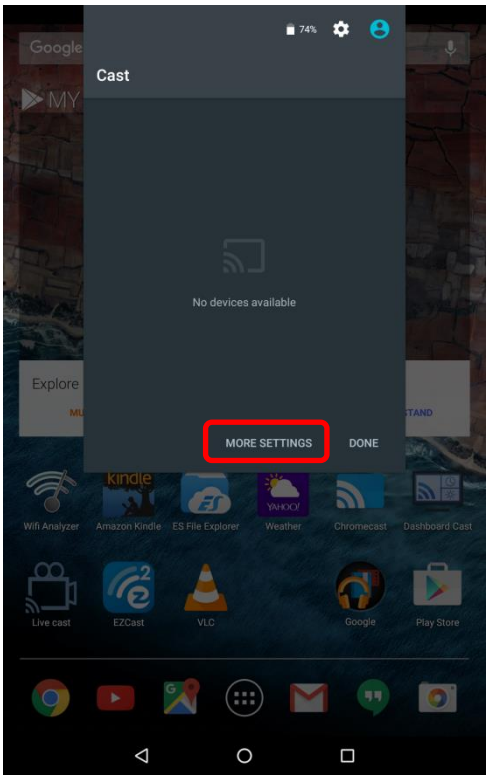
All participants using Android tablets or phones can mirror their screens to NovoTouch by using tablets/phones' Miracast service. No software installation is required in this case.

Please note: the actual operation steps might vary due to different Android OS releases and/or manufacturers' Android customization. The following steps are illustrated using Google's Nexus 7 Android tablet.

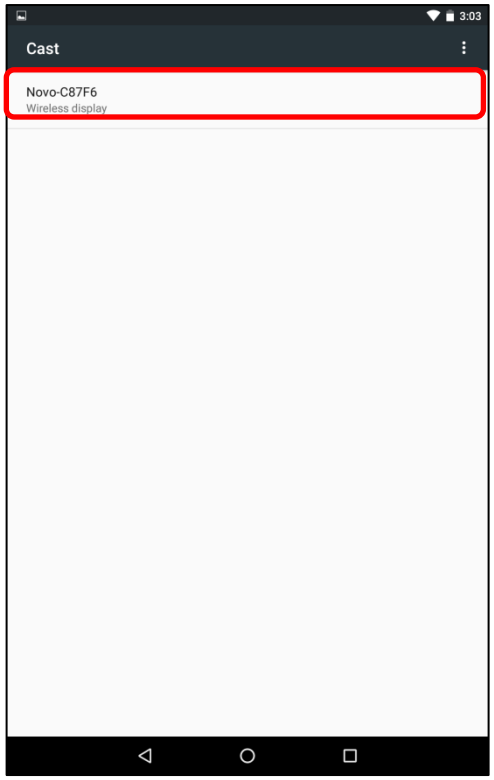
1. Connect your Nexus 7 the same network as your NovoTouch.
2. Swipe down from the top of Nexus 7 to show the Control Center, and then tap **Cast** button.



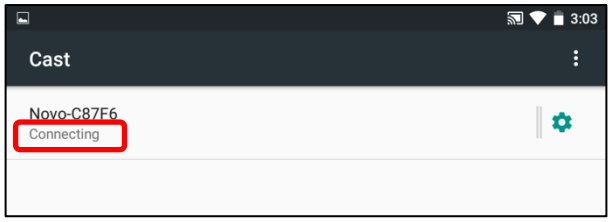
3. You will see a list of devices you can cast your Nexus 7 to. If this is the first time you set up such a connection, the list may be empty. If you don't see the desired NovoTouch in the list, tap "MORE SETTINGS".



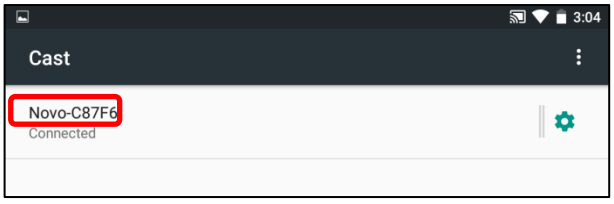
4. A new list will pop up with all available Miracast-capable devices you can cast to. In this case, "Novo-C87F6" is the desired NovoTouch unit. Tap on it and continue.



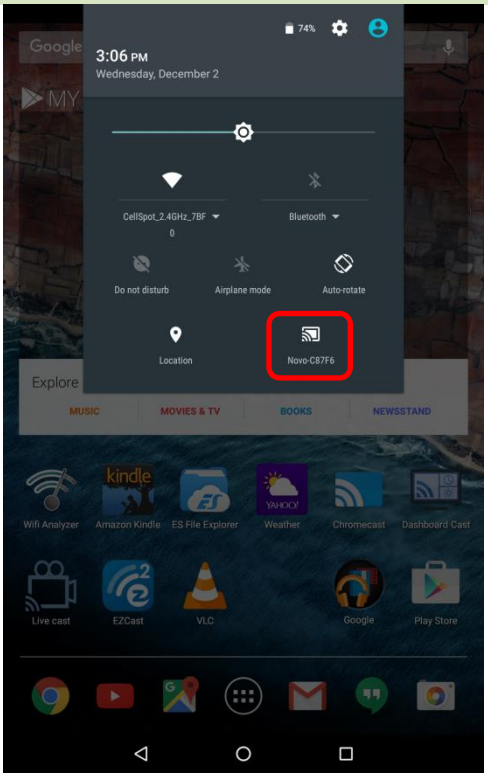
5. Establishing such a connection could take up to 15 seconds. The following "**Connecting…**" message may appear.



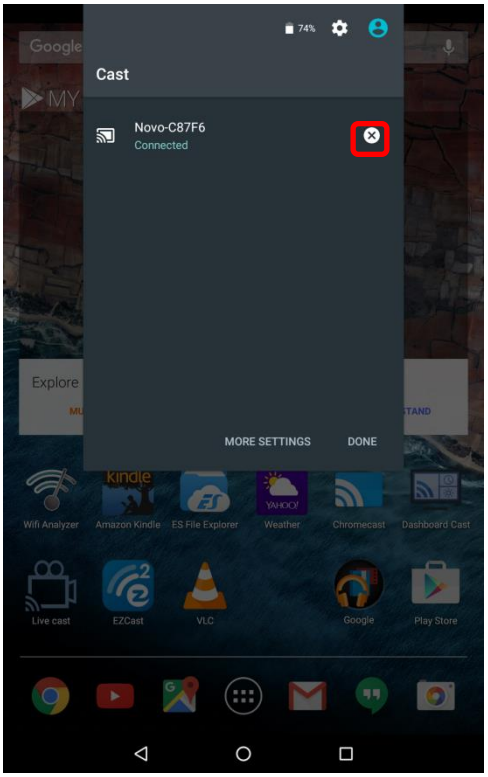
6. If the connection is successful (i.e. a Miracast session is started successfully), the status message will change to "**Connected**". At this moment, your Nexus 7 should be mirrored to the NovoTouch's screen.



7. To stop mirroring, please swipe down from the top of the Android device to show the Control Center, and then tap **Cast** Icon. Please note that "Cast" is changed to NovoTouch's name ("Novo-xxxxx").

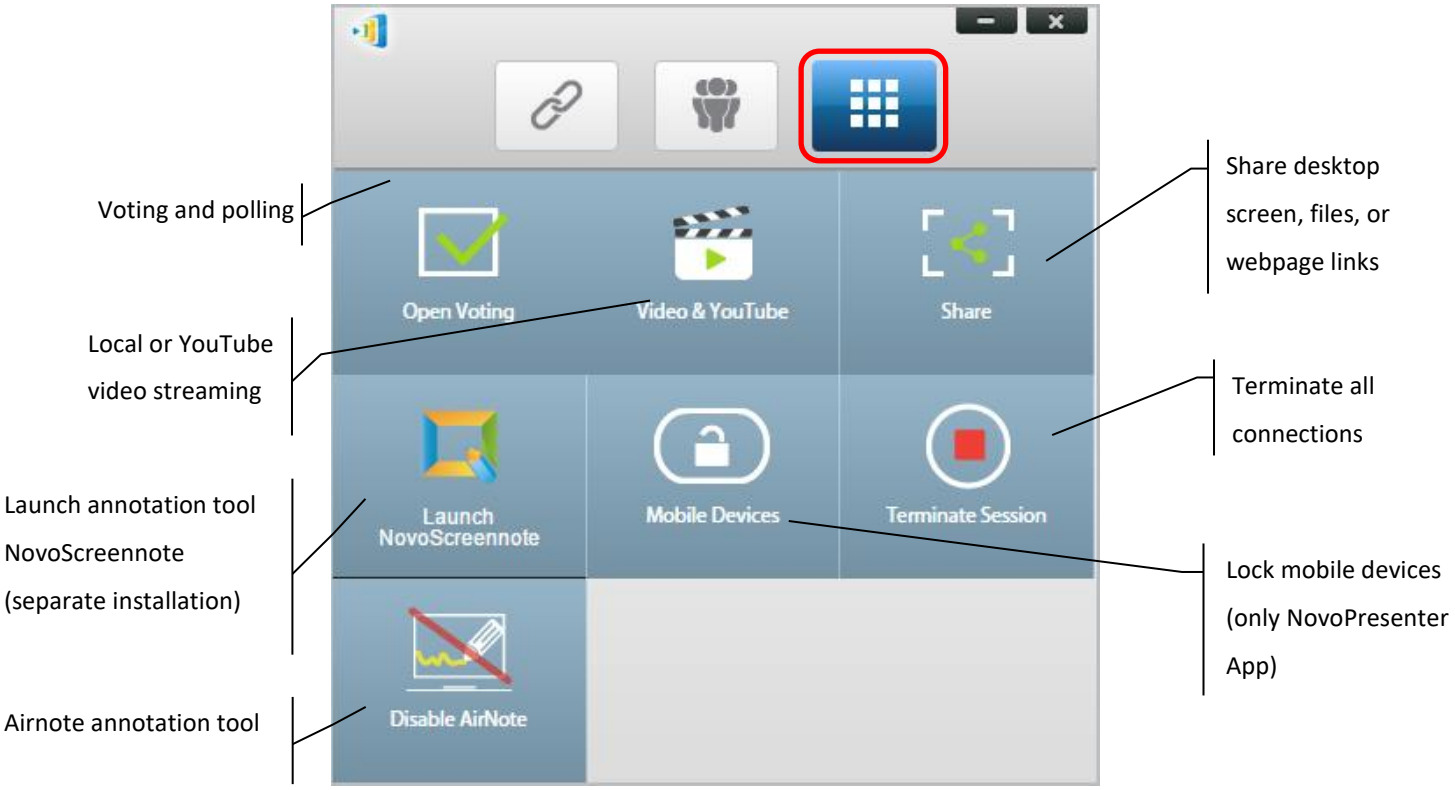


8. Tap icon to stop the Miracast session.



4. Collaboration Tools

NovoTouch is not only a wired/wireless presentation device, but also a collaboration system with a set of built-in tools. You can access these tools by clicking the “Tools” button.



The middle 3 tools are straightforward and self-explanatory, and this chapter will focus on the 3 tools shown on the top row and the AirNote tool. In addition, a new concept, User Group, is described in details as well.

4.1 Voting/Polling

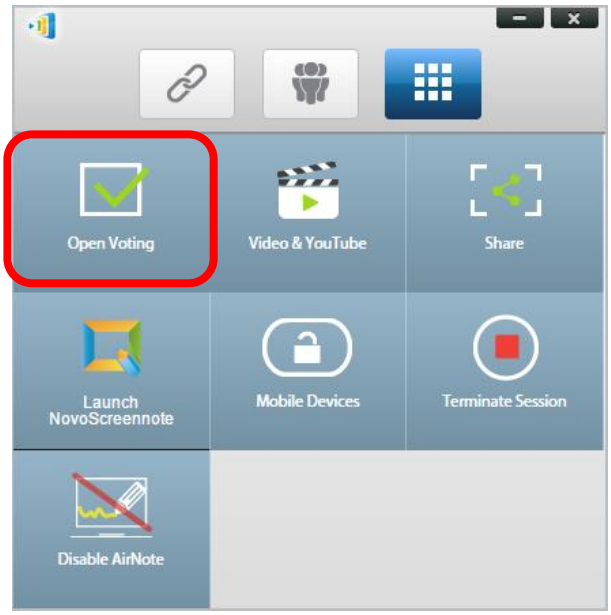
Voting/Polling allows the *moderator* to create sets of questions or quizzes to post/administer to all *participants*.

- Voting allows the *moderator* to administer a polling question set to all *participants* in a presentation session.
- Voting allows *participants* to respond to questions from their devices.
- The *moderator* can monitor the voting results in real time.

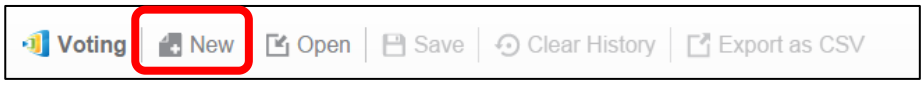
4.1.1 Edit voting/polling

Creating a question set

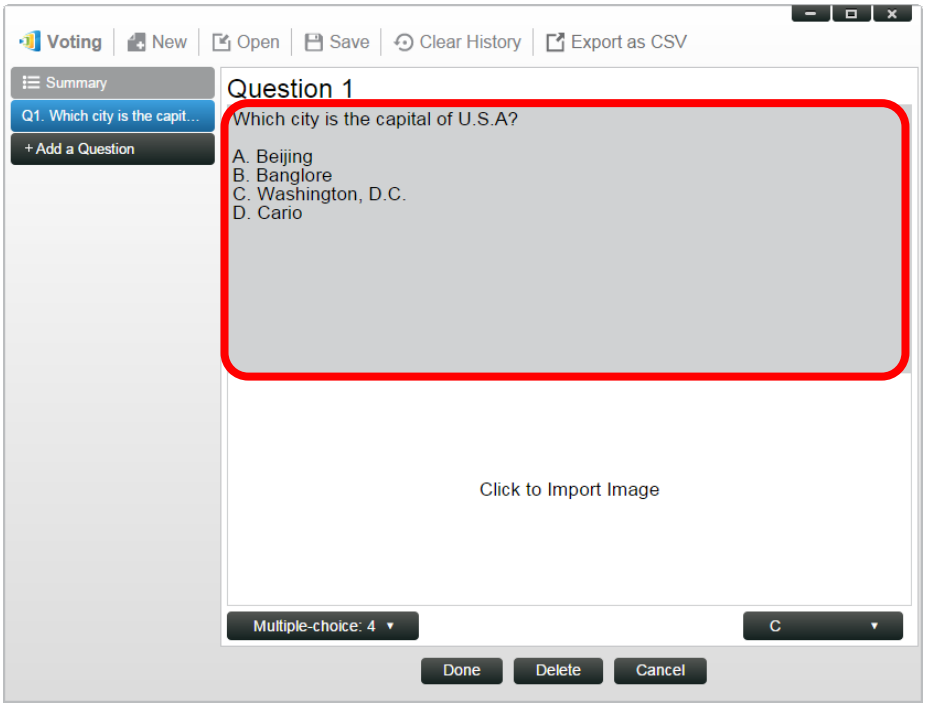
1. Click on the "Tools" tab and select "Edit Voting." This will open the Voting window.



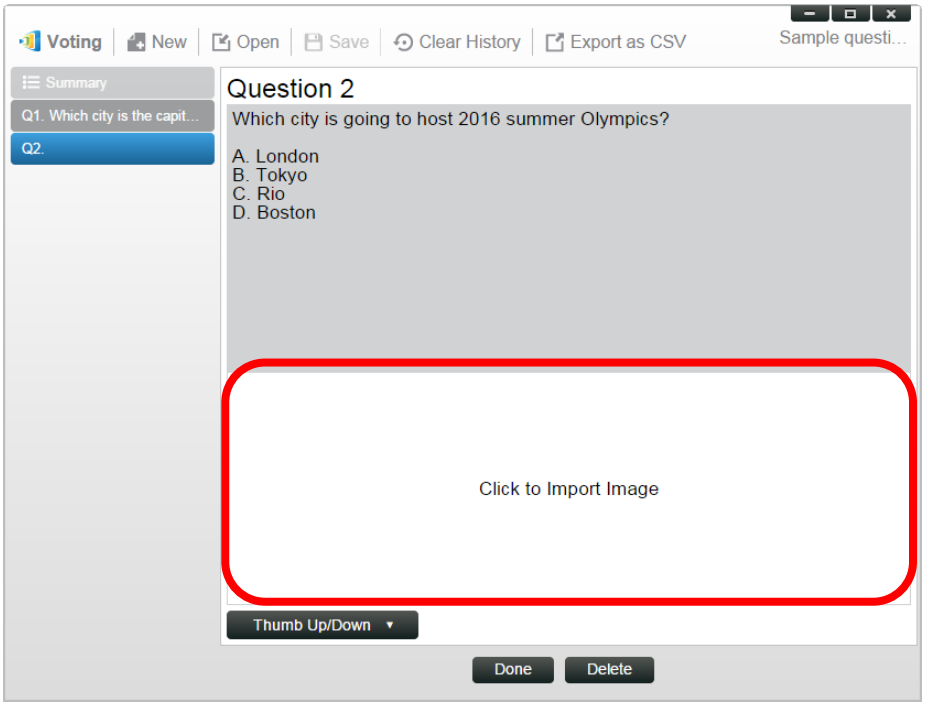
2. To create a new question set, select "New." This will open the "Question" Editor.



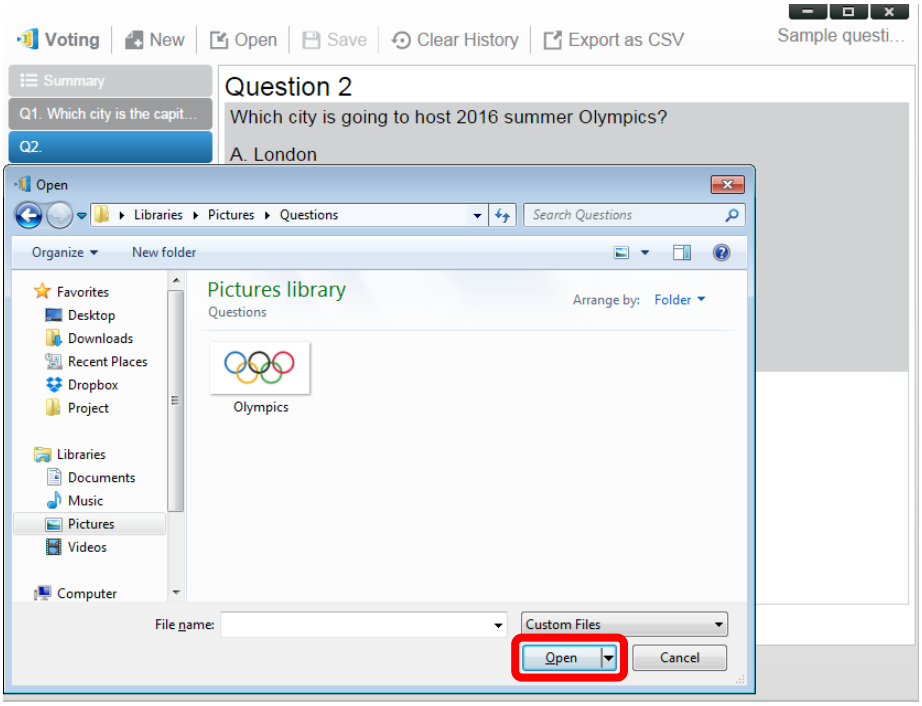
3. Enter the text of your question by clicking on the text field at the top. If the question is a multiple-choice question, please label the choices as "A.", "B. ", "C.," etc.



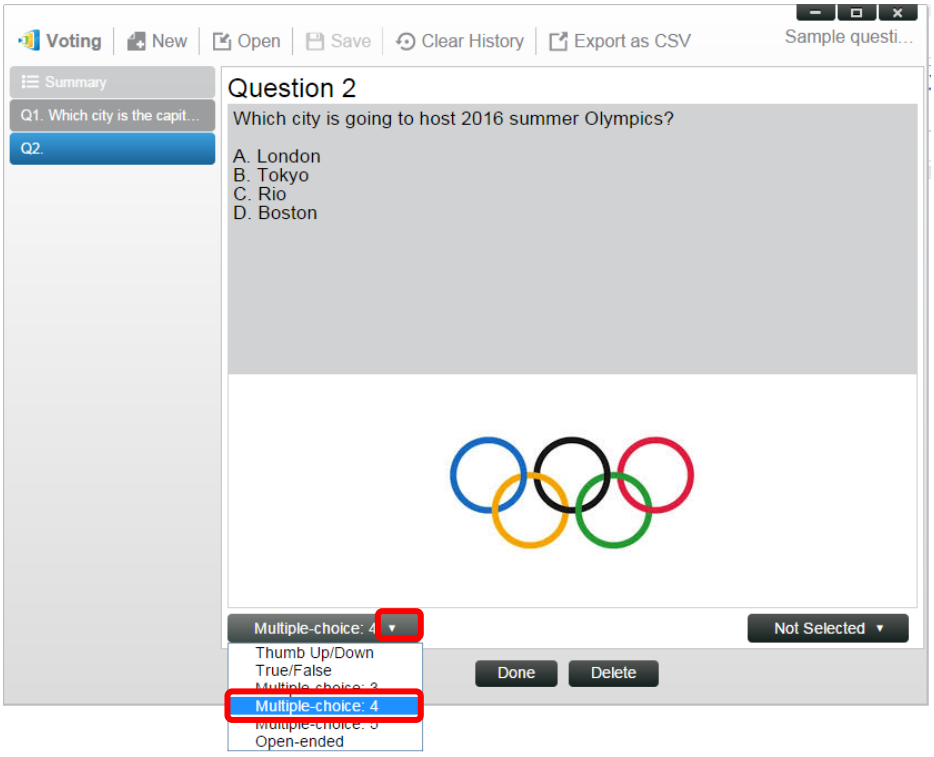
4. If you wish to include an image, click on area “Click to Import Image”. This will allow you to import an image from your computer.



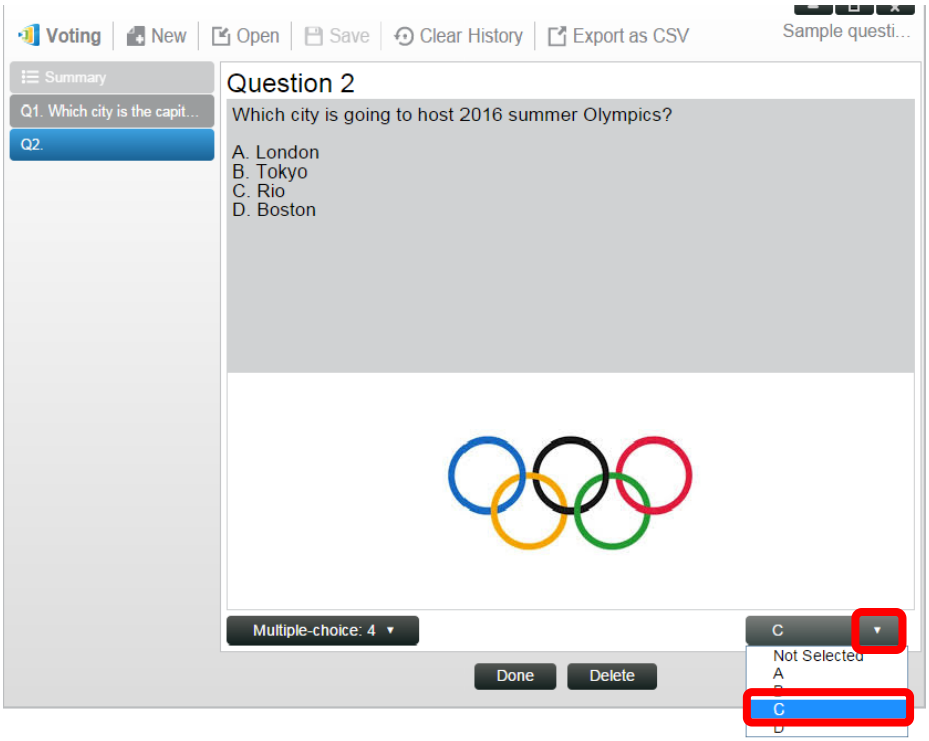
Select the image (.png, .jpeg, .jpg) and click “Open.” The image should now appear below the text area.



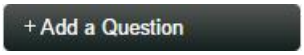
5. Choose Question Type from the “Type” drop-down list.



6. Select the correct answer from the “Answer” drop-down list. If the question does not have a correct answer (such as an opinion poll), you can choose “Not Selected”.
   Note: Open-ended questions do not have this option.



7. To add another question, click on the "+ Question" button at the bottom left corner.



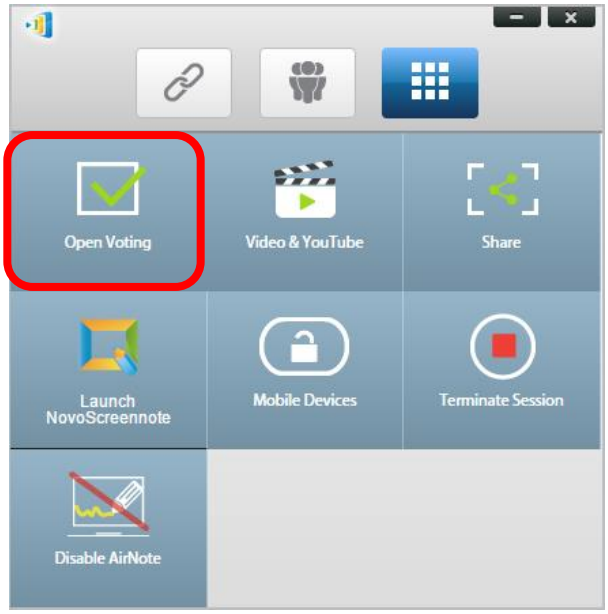
8. When a question set is completed, save it by clicking the "Save" tab.

9. Name you quiz and select a location on your computer. This will create a database (.db) file that can be re-opened, edited or administered later.

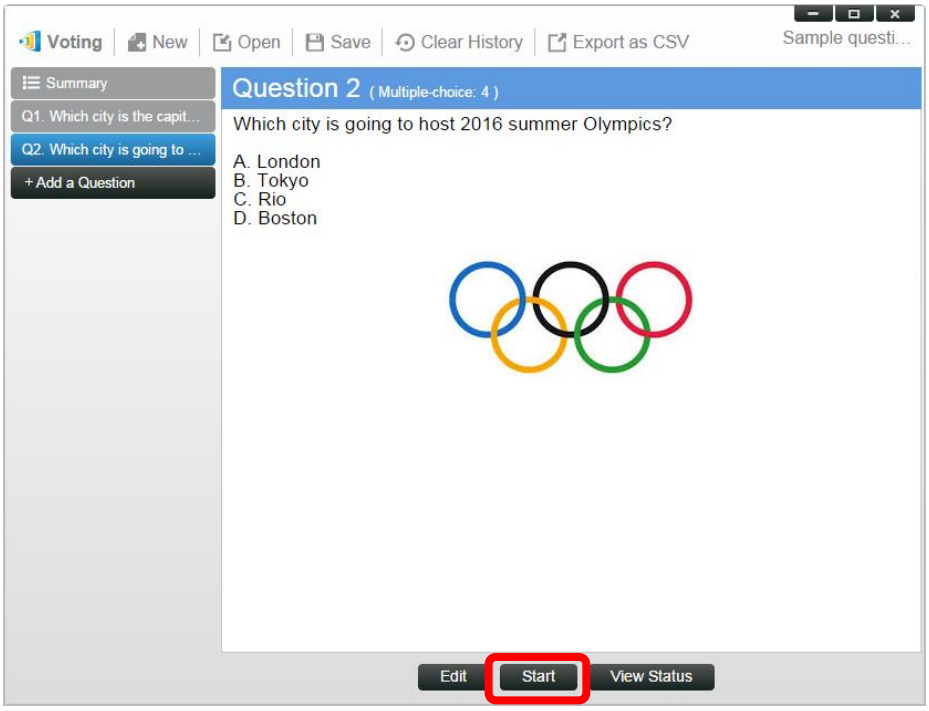
4.1.2 Administer voting/polling

Start voting

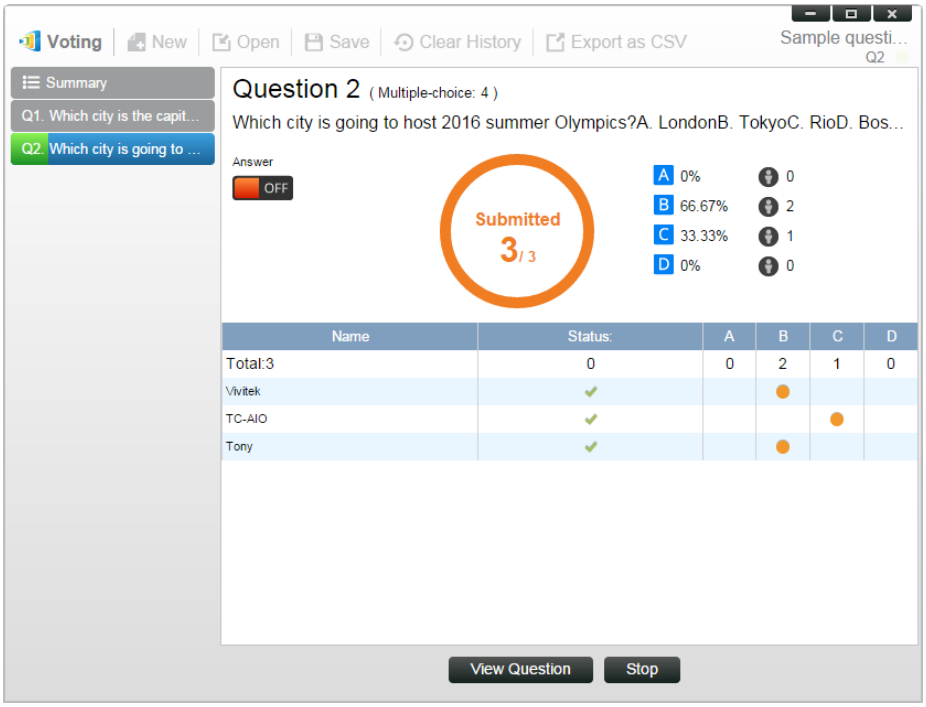
1. Click on the "Tools" tab and select "Edit Voting." This will open the Voting window.



2. Open an existing question set or create a new one (as described in the previous section.)
3. Select a question and click “Start” to send it to all *participants*. The question will appear on *participants’* screens.



4. As *participants* answer the question, the *moderator* can monitor the results by clicking the “View Status” button. With the status window opened, the *moderator* can view participants’ reaction in real time.



5. To return to the question, click “View Question.”
6. The *moderator* needs to stop the current voting before starting another voting question,.
7. At the end of the voting/polling session, you can export the result as a CSV file by clicking “Export as CSV.”

4.1.3 Respond to voting/polling

Once a *participant* receives a voting/polling question, the question will pop up automatically on the participant’s screen.

- For a multiple-choice question, the *participant* can select the answer and then submit.
- For an open-ended question, the *participant* can select an image file from your device for submission.

NovoPresenter screenshot

Desktop Streamer screenshot

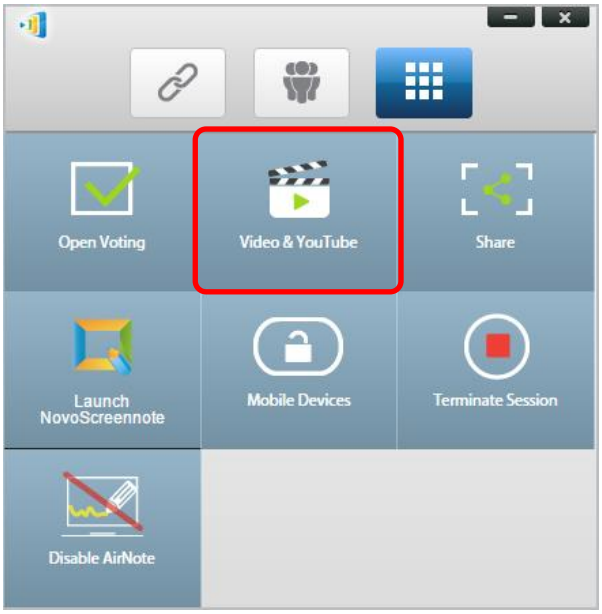
4.2 Video Clips and YouTube Streaming

This feature allows you to smoothly stream your local video clips or YouTube to NovoTouch.

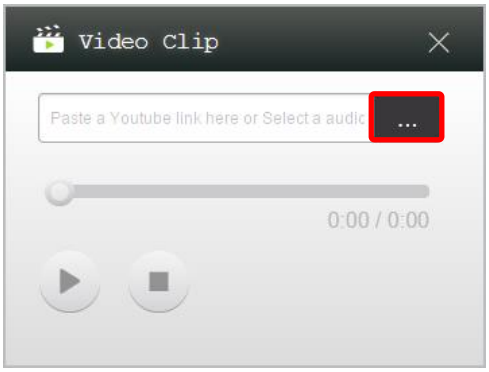
Please note that only the presenter in full-screen projection is able to use this feature. (Presenters in 4-to-1 projection are not able to do so.)

4.2.1 Streaming local video files

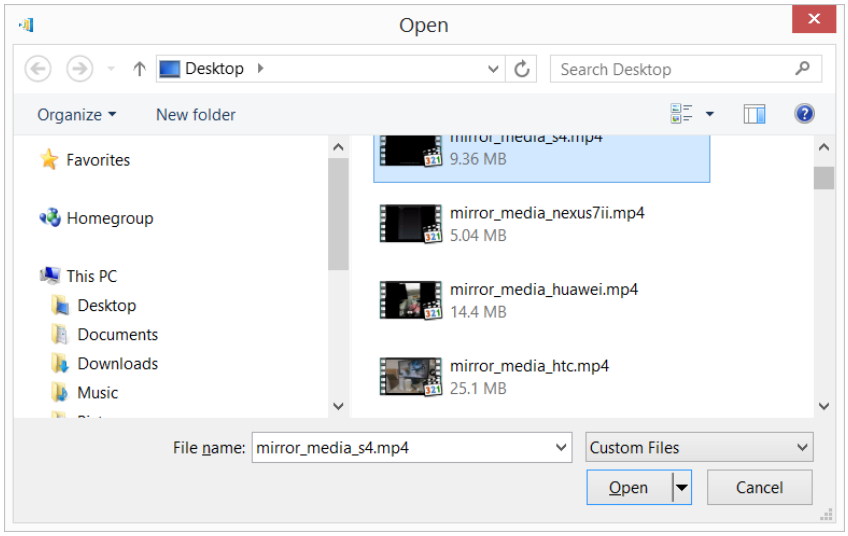
1. From the “Tools” menu, click on button “Video & YouTube”.



2. When the “Video Clip” panel shows up, click the Browse button to locate the video clip on your computer.

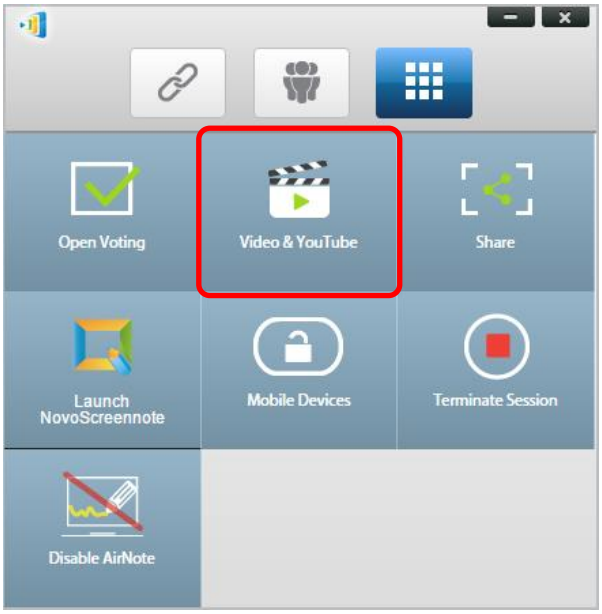


3. Select the video clip and click on the PLAY button to start the playback.

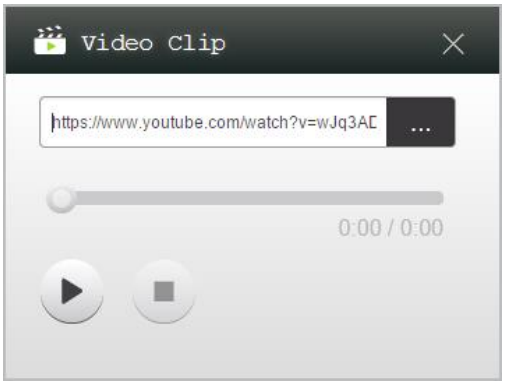


4.2.2 Streaming YouTube video

1. From the “Tools” menu, click on and launch the “Video & YouTube” tool.



2. When the video player bar open, paste or type the URL for the YouTube video you wish to play in the window.



5. Click on the PLAY button to start the playback.

4.2.3 Video controls

: Start/Pause/Resume playback

: Stop playback

: Progress bar. You can skip forward/backward by moving its control knob.

4.3 File Sharing

This feature allows the *moderator* and *participants* to shares resources (like files, screenshots, and webpage links) between their devices. The *moderator* can send resources to all *participants* while a *participant* can only send resources to the *moderator*.

4.3.1 File Sharing in Desktop Streamer

1. To open the File Sharing feature, click the tools tab. The File Sharing tool is labeled as "Share".

   Note: The file sharing button will only be activated when there is at least one other participant connected to the session besides the moderator.

2. Clicking on this button will bring up five options

   a. Share a File: Select a file for sharing

   b. Send Desktop Screenshot: Send the current deskstop screenshot for sharing.

   c. Share a Webpage: Send a webpage link for sharing.

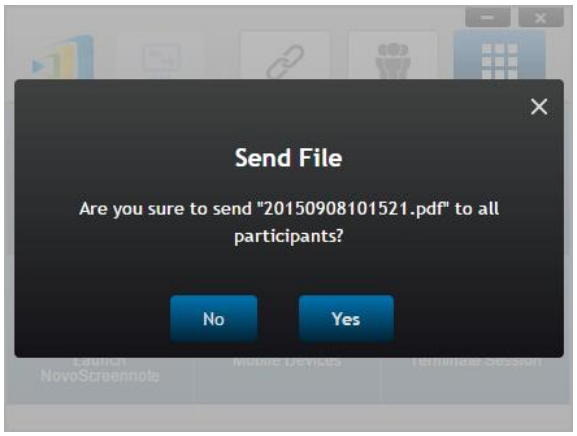
   d. Browse "GroupShare" Folder: Open the default folder at "C:\Users\<user name>\GroupShare"

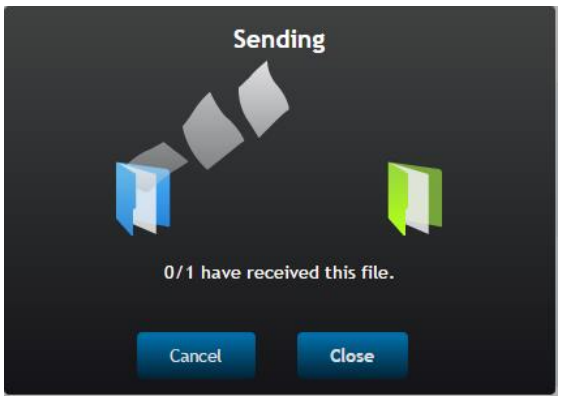
   e. Browse Webpages Received: View the webpage links received from others.

4.3.1.1 Sending

Share a File

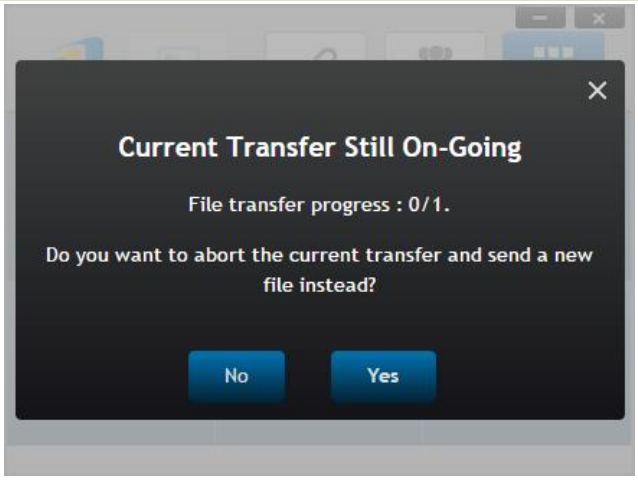
1. To share a file, click on “Share File” to bring up a file explorer. Select the desired one to continue. You will be prompted with the following dialog on the left. If you click on “Yes”, a status dialog (on the right) will appear. You have the option to click on “Cancel” to abort the transfer.





2. When a transfer is active, the will appear next to the “Share” tool button. Clicking on it will bring up the transfer status dialog, as shown in previous item.

3. If you start sending a new file while the previous one is still in progress, you will be prompted with the following warning.



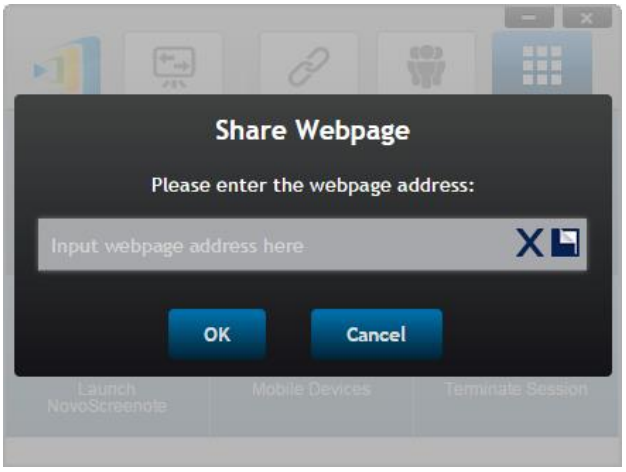
Share Desktop Screenshot

1. To send the current desktop screenshot, click on “Share Desktop Screenshot” to start the process. A dialog box will appear after a few seconds, as shown below.

2. Click on “Yes” to start the transfer.

Share a Webpage

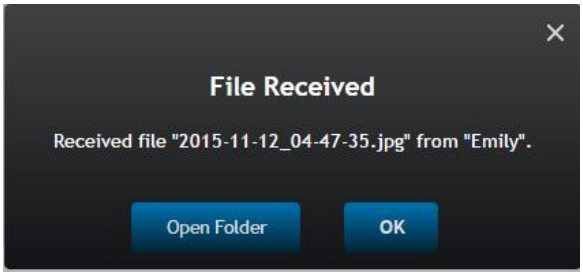
1. To send a webpage link, click on “Share a Webpage…” to start the process. A dialog box will be prompted for the user to enter the webpage link, as shown below.



2. Click on “Yes” to start the transfer.

4.3.1.2 Receiving

Once your computer receives a file, a desktop screenshot, or a webpage link, you will be prompted with a notification dialog, as shown below. (“File Received” is used as an example here.)

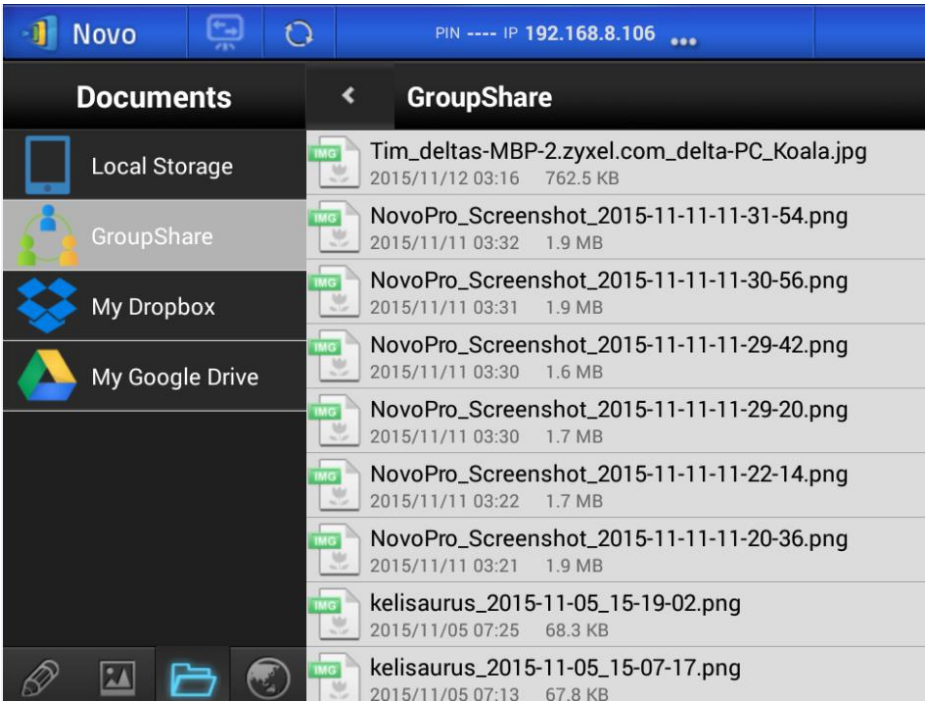


You have the options of opening the storage folder or opening the webpage link with your default browser.

Note: The file is named after “sender-name_original-filename”.

4.3.2 File Sharing in NovoPresenter App

Folder “GroupShare” is dedicated to this feature, which is used to store received files. You can locate it in “Documents” tab.



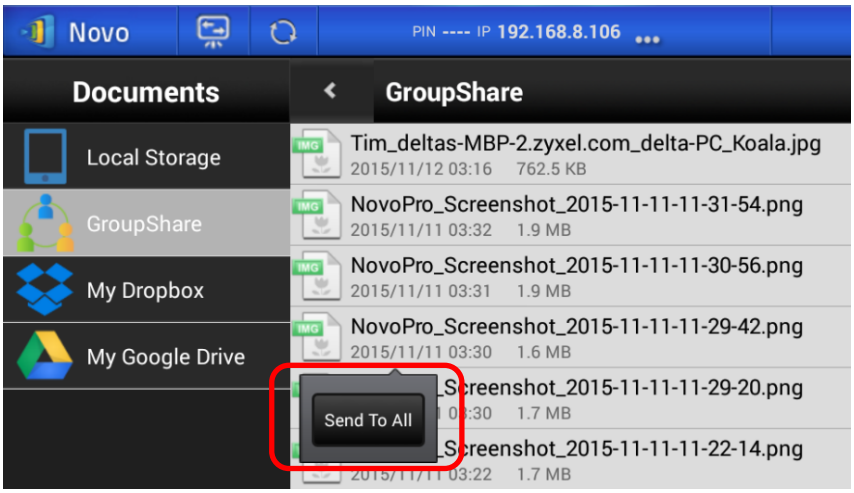
4.3.2.1 Sending

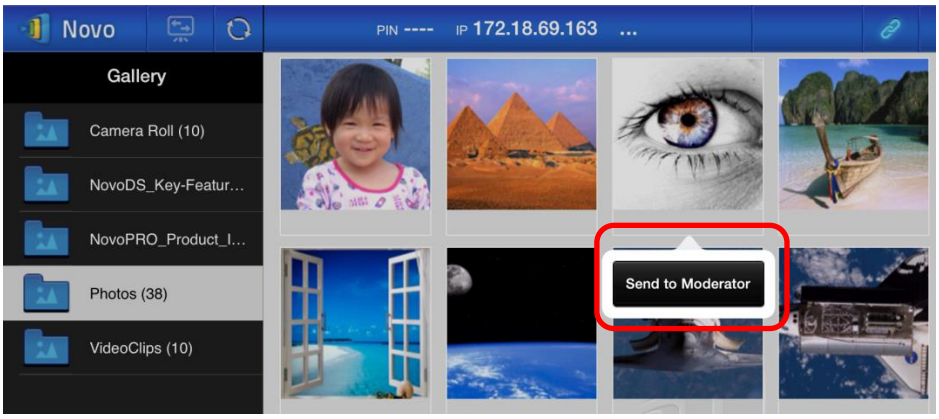
Share a File/Image

To send a file or an image, long-press on the item until a popup menu shows up.

- As the *moderator*, you can send it to all *participants*
- As a regular *participant*, you can send it to the *moderator* only.

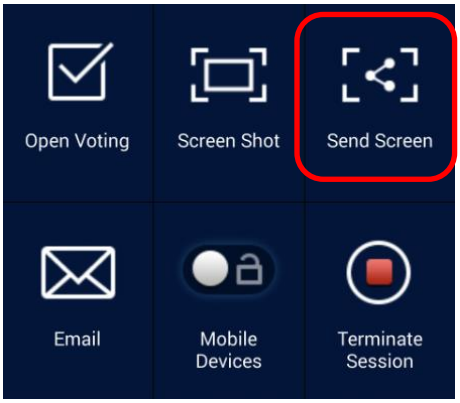
Then follow the on-screen instructions to start the transfer process.





Share a Screenshot

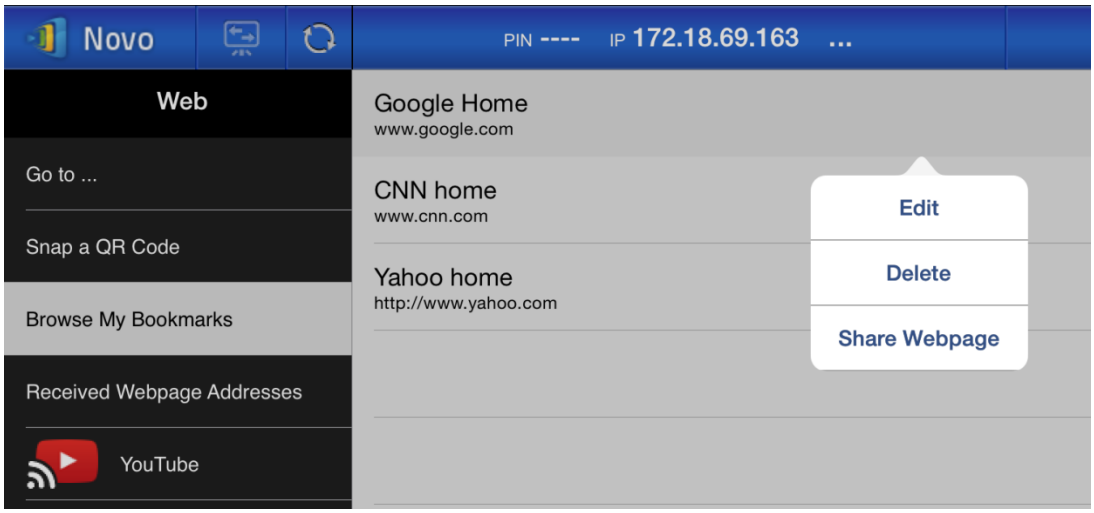
Click on button “Send Screen” to start the transfer process.



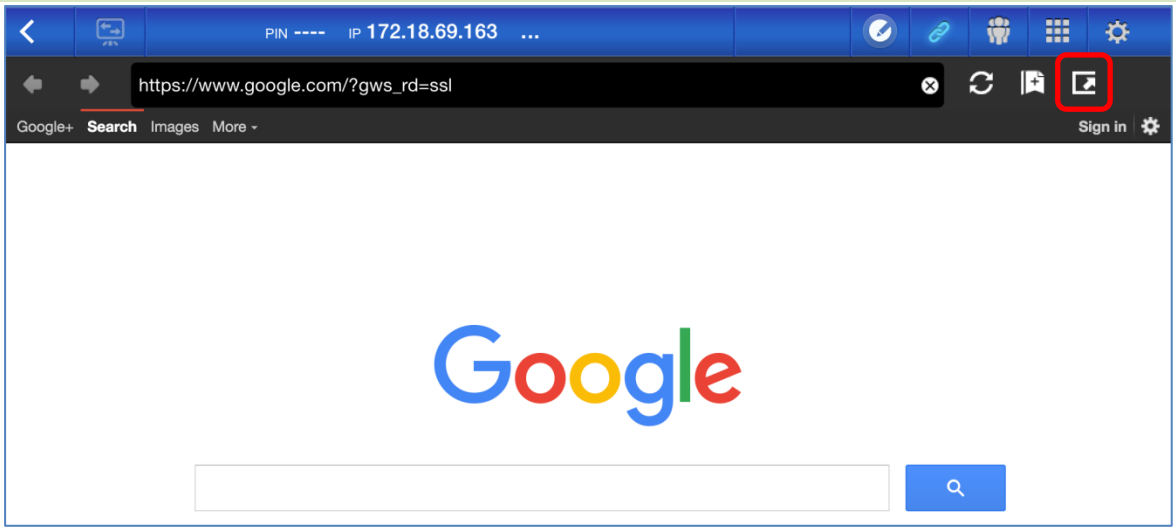
Share a Webpage

There are two ways to initiate sharing a webpage link.

- Long-press on a webpage bookmark in “My Bookmarks”



- In the browser screen, click on “Share” button, as highlighted in the following figure.



Notes: When sending a file, the system will check to make sure any prior file transfer is completed. If not, an error message will pop up. You will have to resend the file when the current transfer is completed.

4.3.2.2 Receiving

Upon receiving a file, a screenshot, or a webpage link, you will be prompted with a notification dialog, such as the following.

4.3.3 Troubleshooting and rules about File Sharing

1. If you attempt to share a file while nobody else is in the session, you will be prompted with message: “No recipient. Nobody else is online.”
2. If you attempt to start a file transfer when a prior transfer is still in progress you will be prompted with message: “System is busy. Please try again later.”
3. File transfer is limited to 10 MB. If the transfer size exceeds this limit, you will be prompted with message: “Failed to Send; file exceeds size limit (10 MB).”

4.4 User groups

This feature allows the *moderator* to organize and monitor *participants*.

4.4.1 Organizing a Group

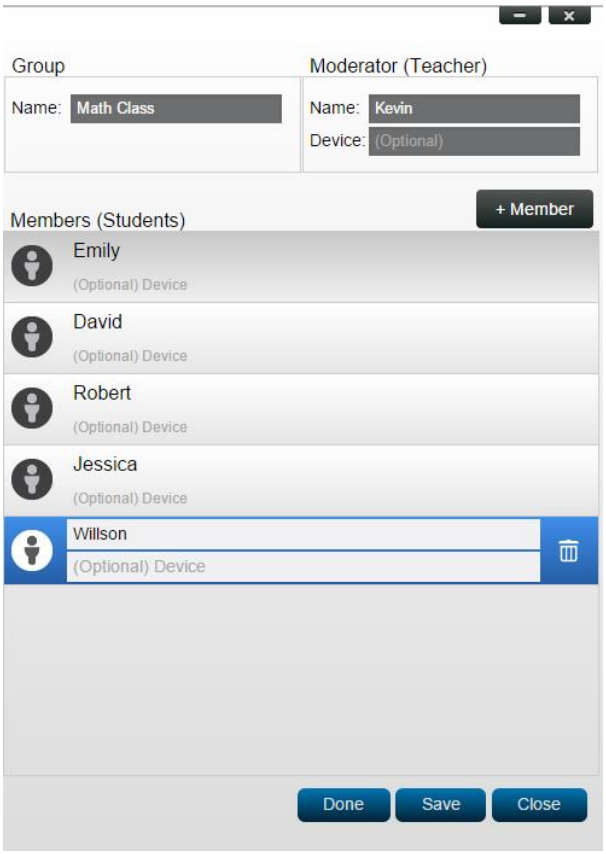
A Group consists of a group name, the *moderator*, and some members.

- Group name and moderator are self-explanatory.
- A member's entry has two fields, Name and Device
    - Field "Name": member's name
    - Field "Device": device's name or some sort of number (like student ID)

There are two ways to organize a group.

1. **Use Member Name**

   In the following figure, "Device" fields are left empty. *Participants* will use their name to connect to a presentation session. In this case, only participants with a matching name can connect successfully.

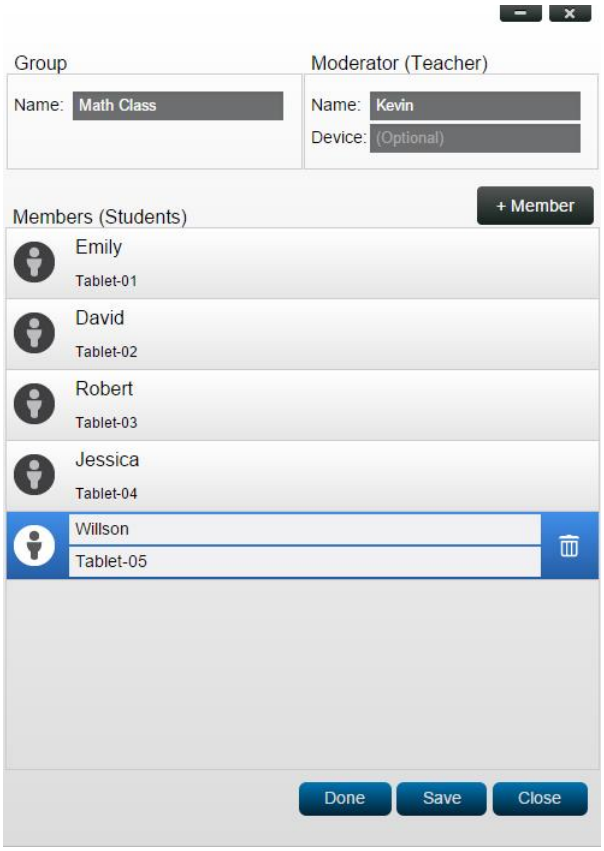


2. **Use Device name**

   In the following figure, "Device" field is filled. For a classroom teacher, the "Device" field could be student ID or a series of numbers, such as Tablet-01, Tablet-02, etc.

   In this case, *participants* will use these IDs to connect to a presentation session. The *moderator* will use this group feature to turn them into "human-readable" names (Emily, Jerry, etc.) instead of Tablet-01 & Tablet-02 in the *participant* list.

Only devices with matching name can connect successfully.

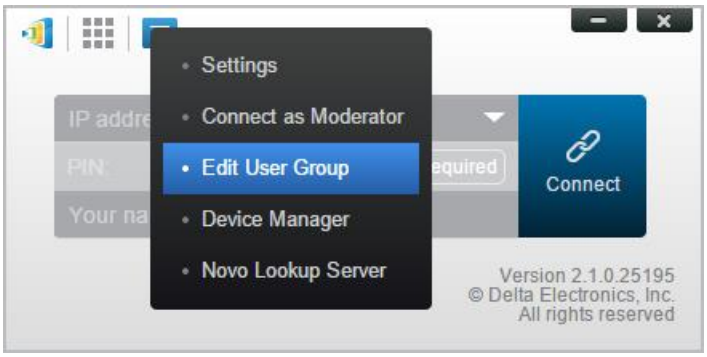


4.4.2 Creating User Group

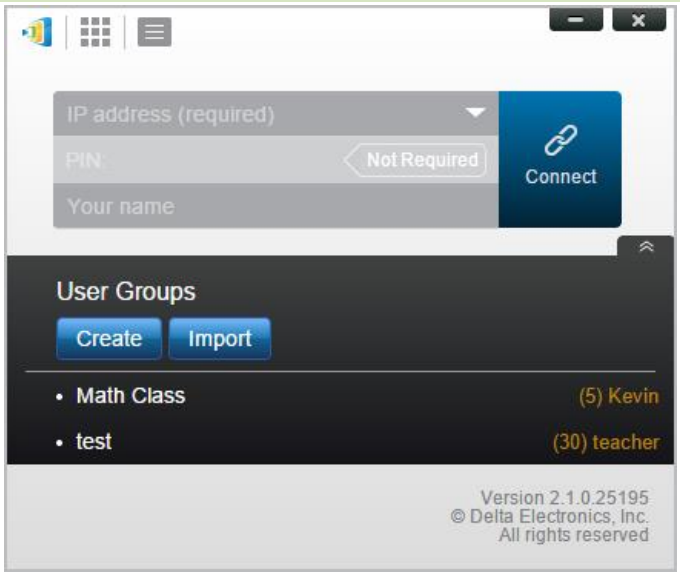
Creating User Groups Manually

Notes: This feature is available to Desktop Streamer for PC/Mac but not to Chromebook/tablet/phone Apps.

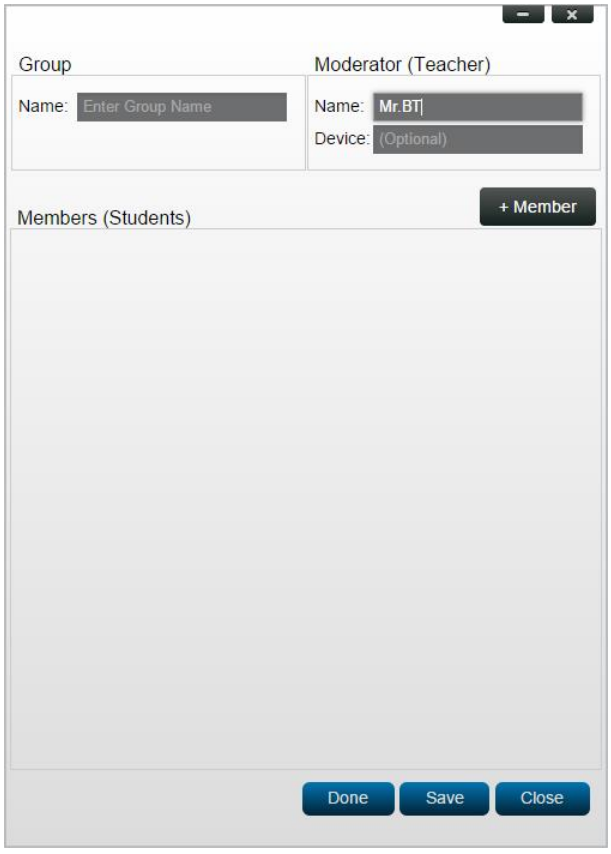
1. Open the *Deskstop Streamer* application and expand “Settings” tab. Click on button “Edit” to add, change, and delete user groups.



2. Click on button “Create” to add a new user group.



3. A new window, “Edit User Group”, will pop up. In this window, you will be able to edit group name, moderator information, and member information.

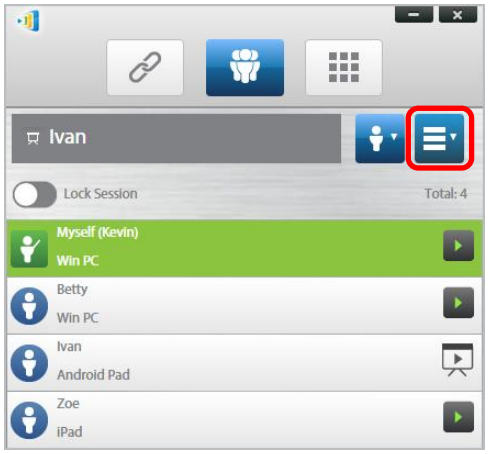


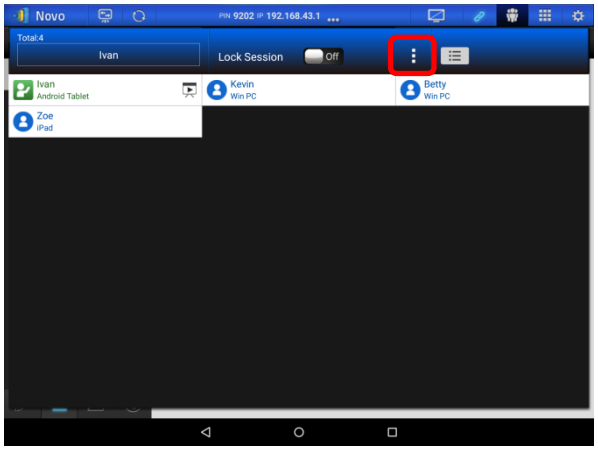
4. Once you have finished adding members to a group, click “Save” and “Done” to return to the “User Groups” list. This new group should appear in the list of user groups.

Saving a Presentation Session as a User Group

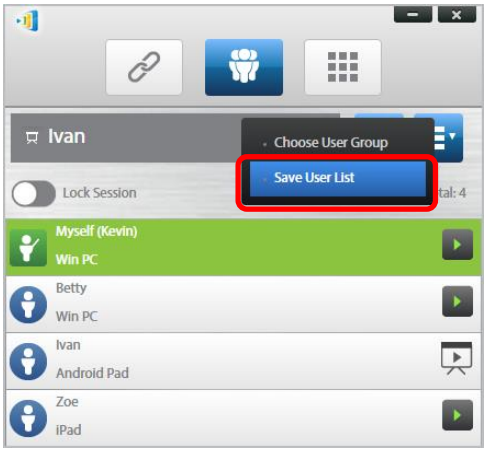
A moderator for a presentation session can also quickly save the participants in a current presentation session as a user group via the Desktop Streamer and NovoPresenter application.

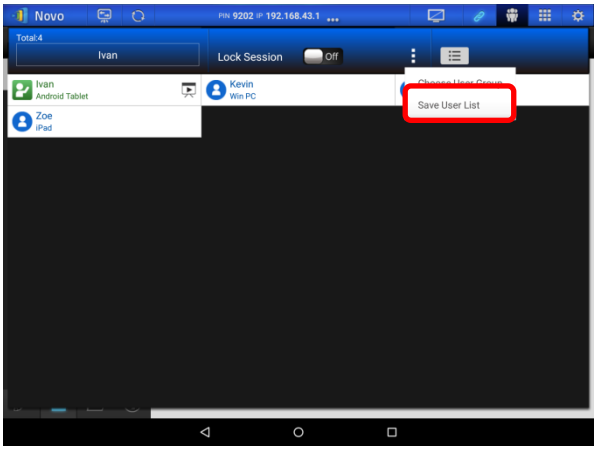
1. Have all the users you want in the user group login to a presentation session, and then click the user group button.



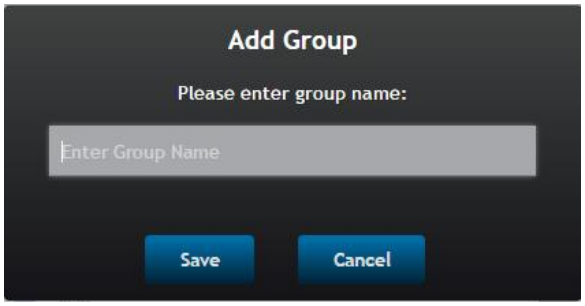


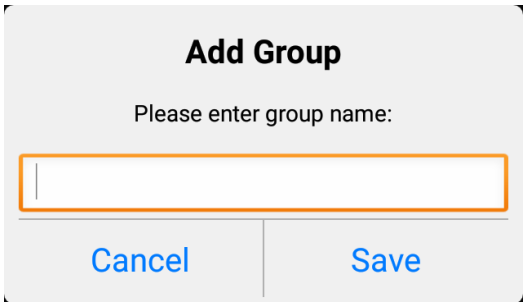
2. Select “Save User List” in the User Group menu.





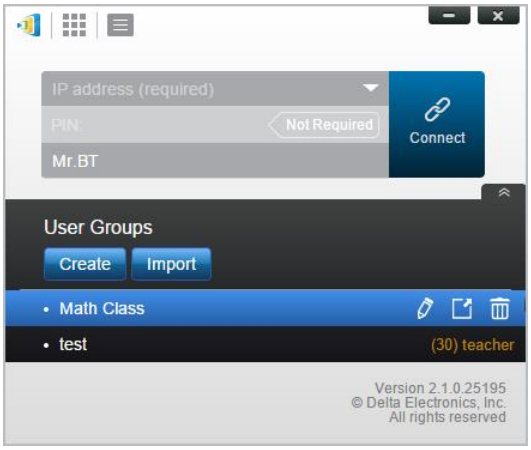
3. Enter a name for the user group in the pop-up window and click “Save”.





4.4.3 Managing Existing User Group

Click on one of the user groups and three action buttons will become visible on the right.

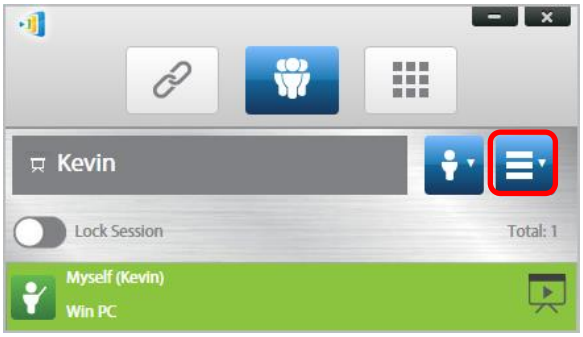


(Edit)	**Open “Edit User Group” window, allowing users to make changes.**
(Export)	Export a User Group as an XML file, which can be loaded to any mobile devices and other PC/Mac.
(Delete)	Delete a User Group

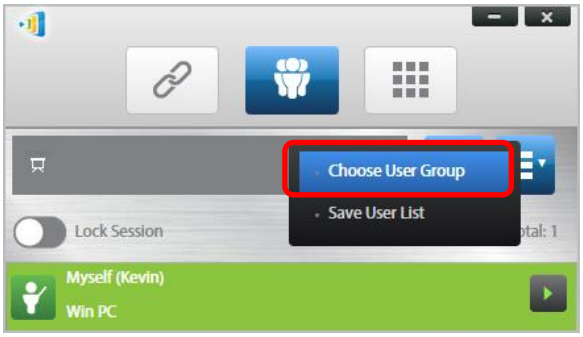
4.4.4 Applying User Group

Windows/Mac

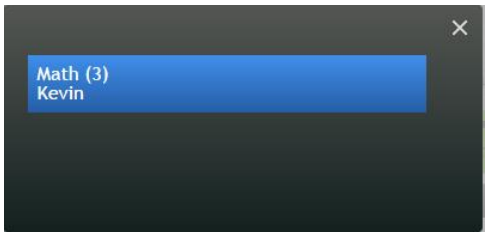
1. When you connect to a NovoTouch, click the user group button.



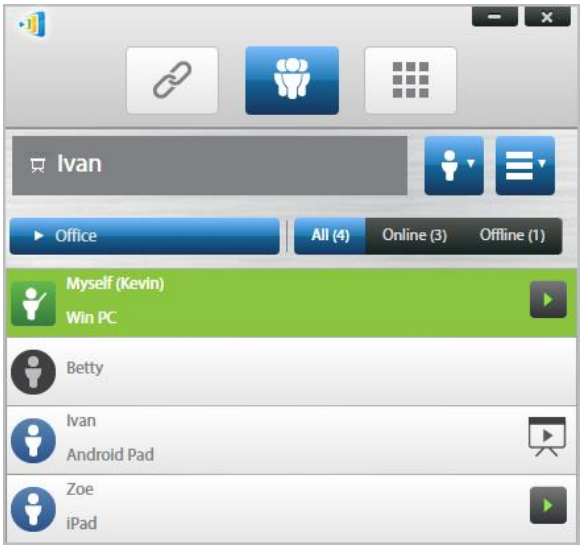
2. Select “Choose User Group" in the user group menu.



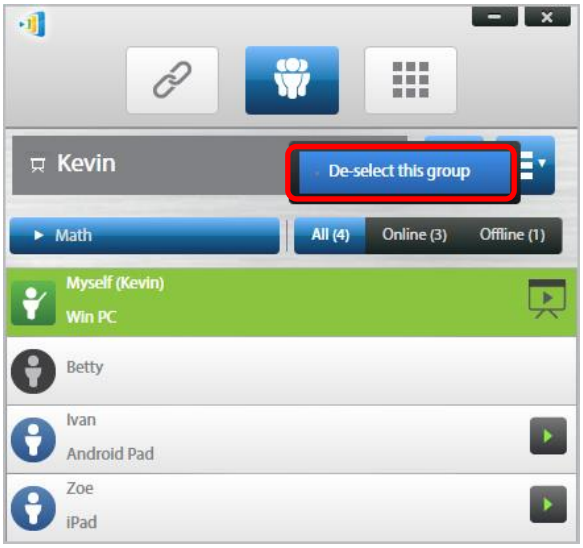
3. Select the desired group.



4. A user list will be displayed for the group you selected. Tabs “All”, “Online”, and “Offline” are a quick sorting based on participants’ status.



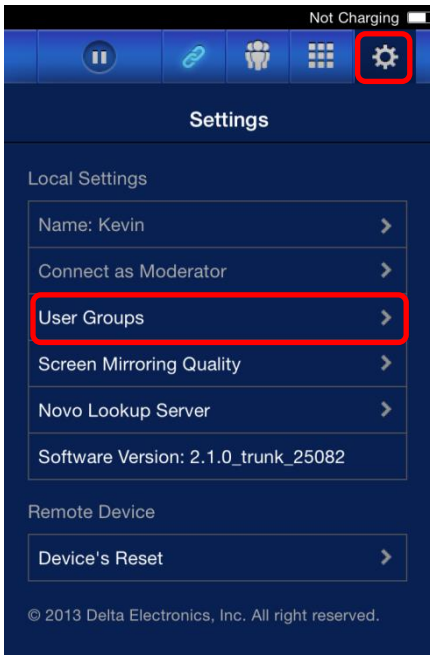
5. To de-select this group, click on the user group button and then click “De-Select this Group”.

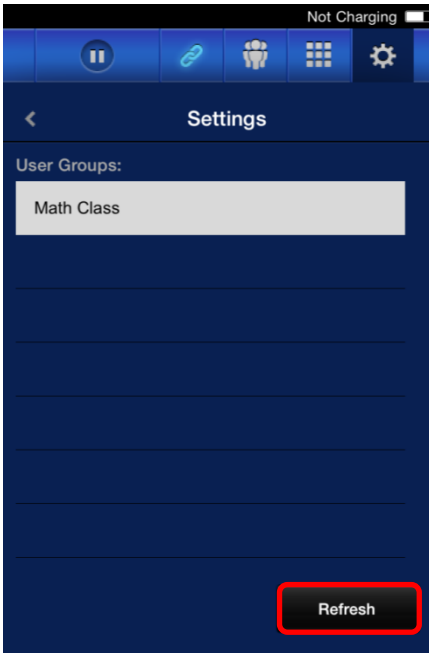


iPads

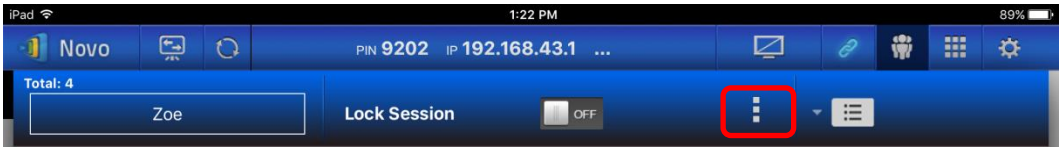
1. Copy the user group files (*.xml) to NovoPresenter App.
   - These User Group files are generated by using the Export function on the PC/Mac software.
   - Refer to Section 3.2.2.3 on how to copy files to iPad

2. Launch NovoPresenter. Go to “Settings” → “User Groups” → “Refresh” to import the User Group files you just copy.

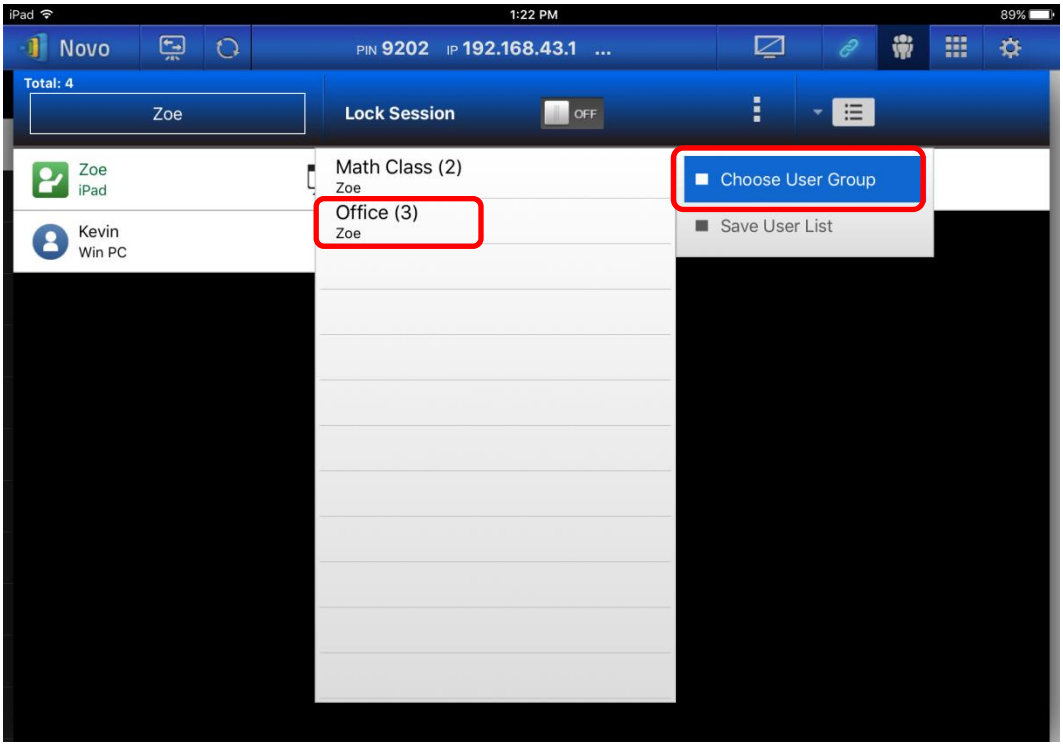




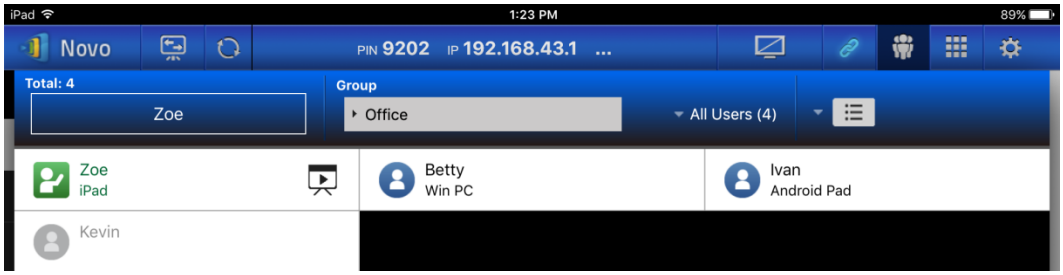
3. After connecting to the NovoTouch, tap the user groups button.



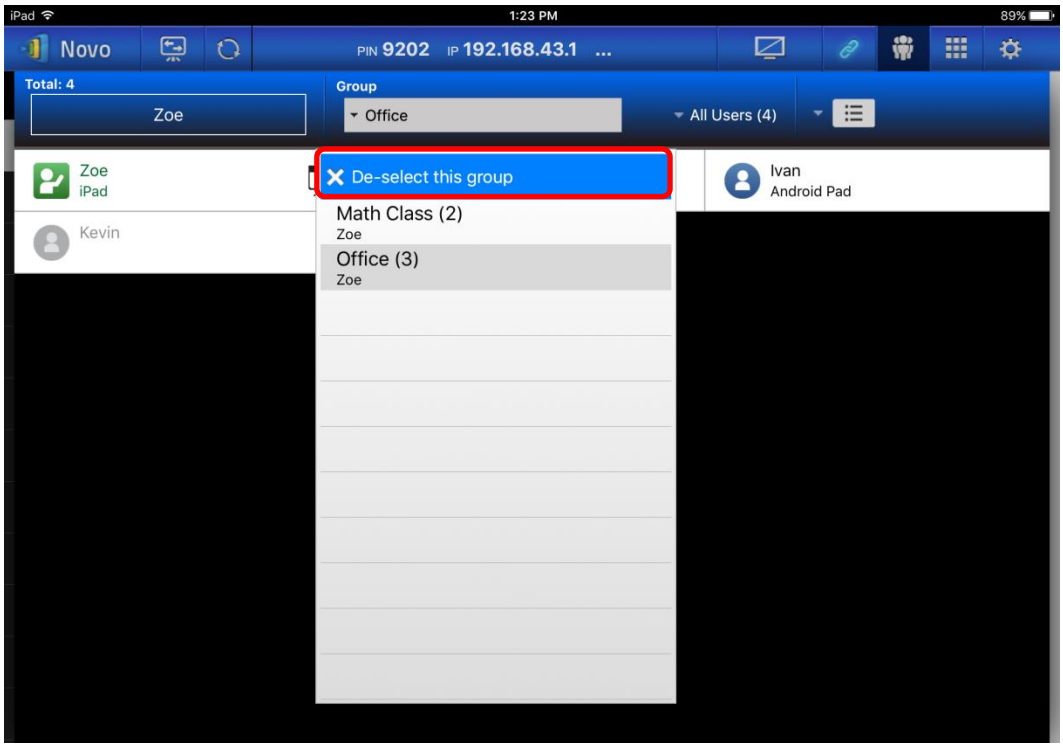
4. Tap on “Choose User Group” to display list of available groups, and then select the desired group.



5. A user list will be displayed for the group you selected. Using tabs “All”, “Online”, and “Offline” is a quick way to sort users based on their status.



6. To de-select this group, tap the user group button, and then tap “De-select this group”.



Android Tablets

1. Connect your Android tablet to your computer.
2. Copy User Group files (*.xml) to tablet’s folder “<home>/NovoPresenter/UserGroups”.

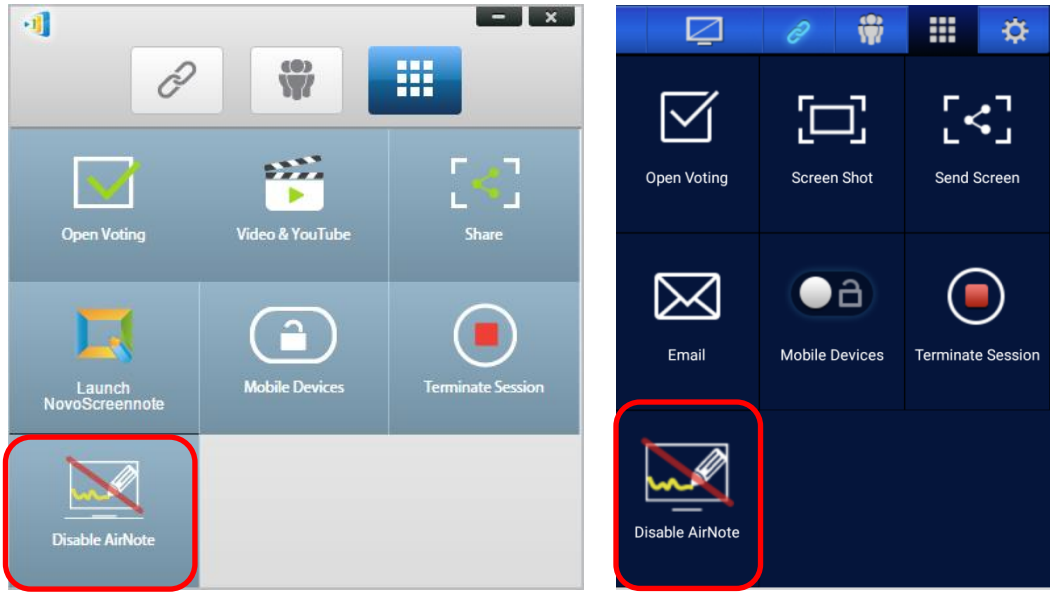
The rest of the operation is the same as the iPad’s.

4.5 AirNote Annotation Tool

The AirNote annotation tool allows participants to annotate on the presentation display directly from their device during a full screen presentation.

4.5.1 Enabling AirNote

When a participant's screen is projected as a full screen presentation on a device they may enable other participants to directly annotate on the screen from their device via the AirNote button in the collaboration tools menu.

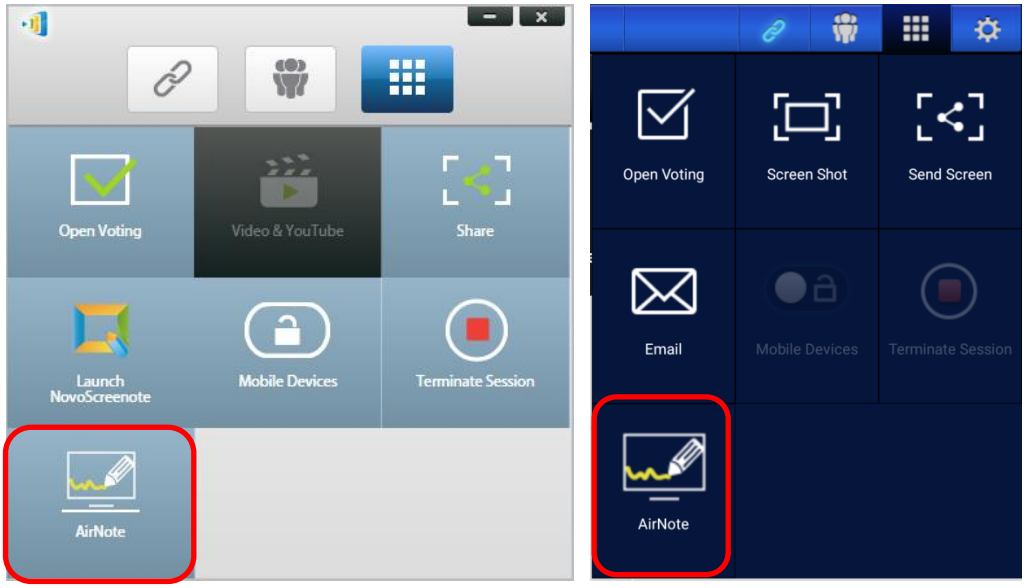


The Collaboration Tools Menu on the presenter's screen (Desktop Streamer / NovoPresenter)

Note: When AirNote is enabled the button in the collaboration tools menu will show "Disable AirNote". When AirNote is enabled the button in the menu will show "Enable AirNote".

4.5.2 Using AirNote

1. Once the presenter has enabled AirNote, participants in the presentation session can click the AirNote button to begin directly annotating from their device.

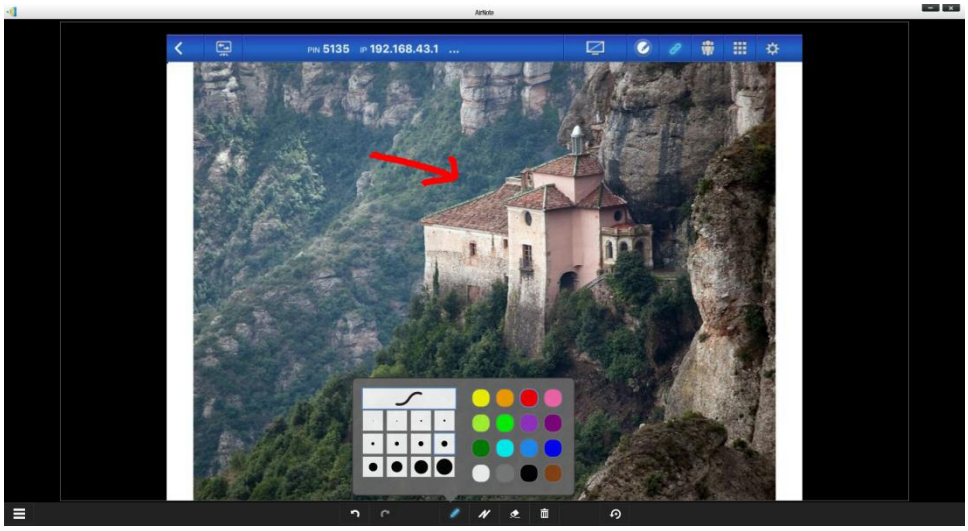


The Collaboration Tools Menu on a participant's screen (Desktop Streamer / NovoPresenter)

2. A shot of the presentation display will be copied onto the participant's device where they can begin drawing annotations either by mouse (for Desktop Streamer users) or by touch

(for NovoPresenter users), with the annotations made from their device showing up on the presentation display.

Note: The drawing tools used in AirNote are the same as the note tools used in the Note function for Desktop Streamer. See 3.2.2.1 My Notes for more information on the note tools.

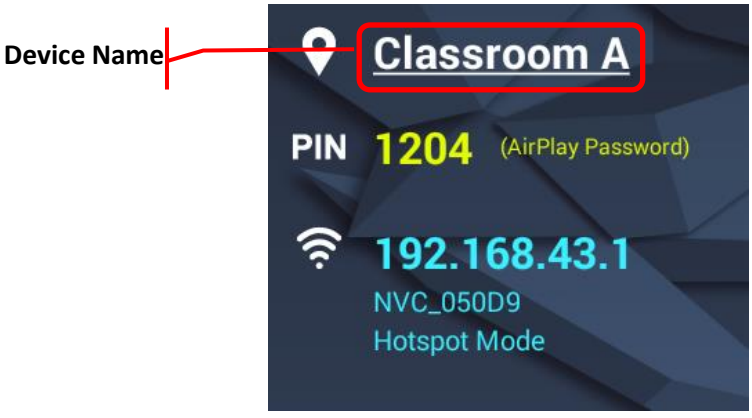


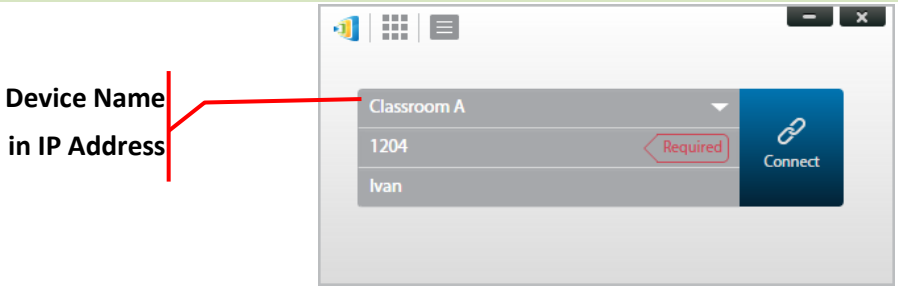
IMPORTANT: Only NovoPresenter participants using a tablet are able to draw annotations on their device. Smartphones users are unable to draw annotations due to screen size, and are only able to allow other participants to annotate on their projected screen.

5. DNS Mapping

DNS mapping is a capability that allows network technicians to bind the device name and the IP address of a NovoTouch so that both items can be used interchangeably in the IP address field when a user is logging into a presentation session.

This provides convenience to users who want to join a presentation session using just the device name as the login, instead of using the IP address' numeric string.





DNS mapping is allowed on the NovoTouch but must be done via third-party software by a network technician. For more information on the DNS mapping procedure, check the network guide document provided on the Delta website.

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