Implementing ENZO for Education

enzo

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Unit Configuration

ENZO can be placed on a Network with a DHCP or Static address. If set up via DHCP a keyboard or mouse is not needed to use MirrorOp. If the ENZO is to be set up with a Static IP address a Keyboard and Mouse are required for system setup.

Static IP Setup

Step 1. Connect ENZO to a display with an HDMI Input. If the display has VGA or DVI, adapters can be used to allow connection to the display. See possible accessories.

Step 2. Connect ENZO to PoE network port or use a PoE injector to provide power.

Step 3. Wait for ENZO to power, boot then start a new session.

Step 4. On the connected Keyboard press the F12 key . Enter password 1988. Note: Password can be changed or disabled at a later date.

Step 5. Click on System Settings to access advanced settings of the ENZO.
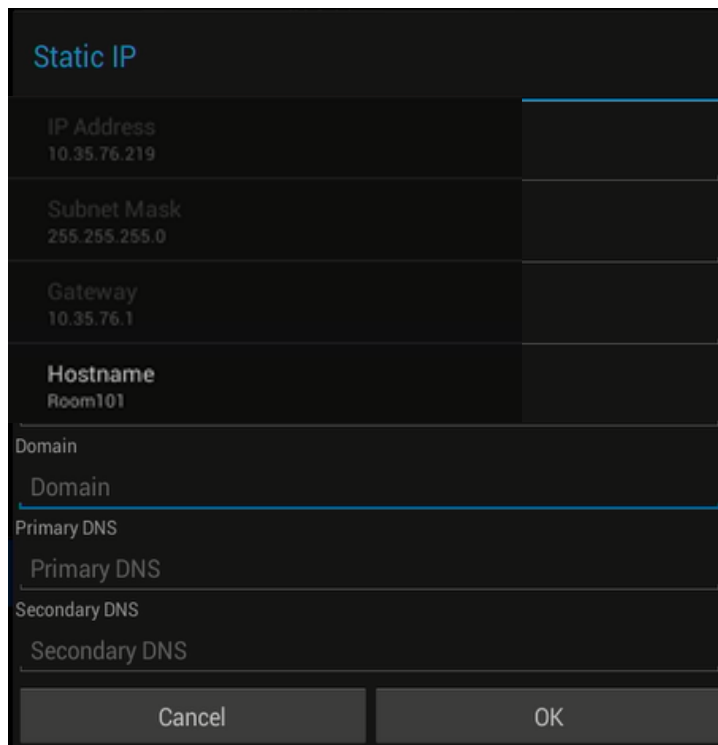
Step 6. Click on Ethernet , then click on DHCP/Static.

Step 7. Click on the Static radio button.

Step 8. Enter Network settings. See Image below as an example. Enter your network domain, primary DNS and Secondary DNS.

Step 9. Click OK, then Esc, then Esc to return to the ENZO navigation menu.

Note: If your network has an internal DNS, provide a unique Host Name.

Setting DNS with DHCP

Step 1. Connect ENZO to a display with an HDMI Input. If the display has VGA or DVI, adapters can be used to allow connection to the display. See possible accessories.

Step 2. Connect ENZO to PoE network port or use a PoE injector to provide power.

Step 3. Wait for ENZO to power, boot then start a new session.

Step 4. On the connected Keyboard press the F12 key . Enter password 1988. Note: Password can be changed or disabled at a later date.

Step 5. Click on System Settings to access advanced settings of the ENZO.

Step 6. Click on Ethernet , then click on DHCP/Static.

Step 7. Click on the DHCP radio button.

Step 8. Click on the Hostname Field and enter a unique name such as room number, then click OK.

Step 9. Click OK, then Esc, then Esc to return to the ENZO navigation menu.
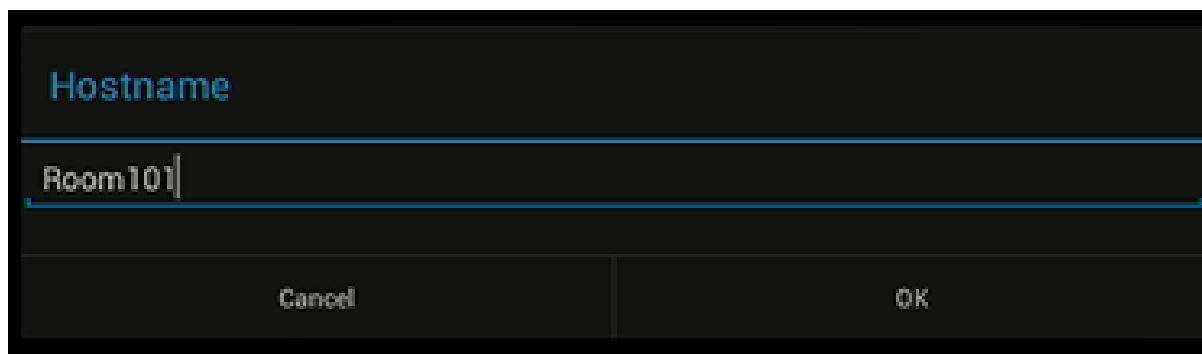
Setting Up Moderator Mode

This setup is done through the ENZO built-in web interface. Follow the steps below to access the web interface.

Step 1. From the ENZO navigation menu , click on the Screen Mirror Button with a connected Keyboard/Mouse.

Step 2. Take note of the displayed IP address.

Step 3. Open your favorite web browser on your PC or Mac. The PC or Mac must be on the same network.

Step 4. Enter the IP address of the ENZO into the URL address field of your web browser then press enter.
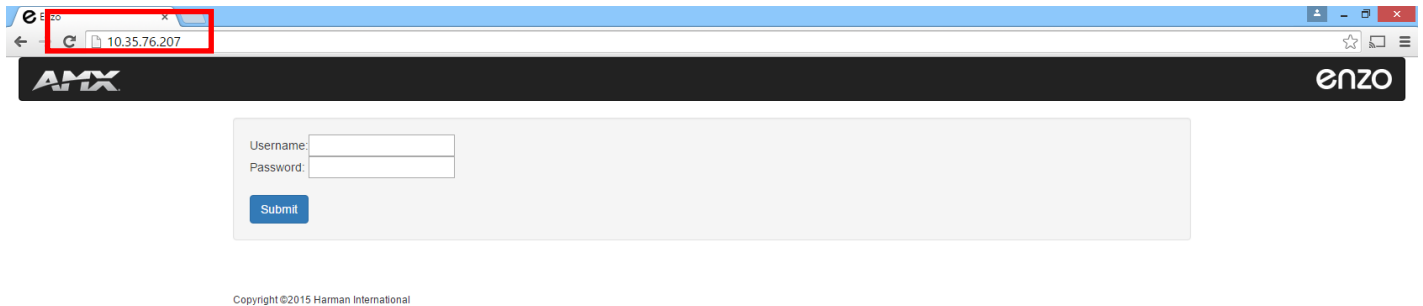
Step 5. Enter admin as your Username. Enter 1988 as your password. Click Submit.

Step 6. Set Conference Control to "ON". Set Max Moderators to 1-3. Setting to 2 works well for 2 instructors in the same room. Leave Allow Moderator Changes set to "OFF".

Step 7. Set Moderator Password. Enter the Password in both required fields and click set. Make sure your passwords match.

You should see a brief message in red text stating passwords match. submitting.

Under "Credentials" this is where you can change the password to this set up page. It is currently set to 1988. You may change this to any Password you like. A suggestion is to make all ENZOs on your campus use the same Moderator password.

You have now set up Moderator Mode. Click Logout in the upper right hand corner.

Naming your Device and Using MirrorOp Application

It is possible to change the Text of the Receiver Name on the Mirroring Screen. This can be used to simplify recognizing the ENZO located in your room. When logging into MirrorOp the ENZO will show up with the text used in Receiver Name field.


If you have multiple ENZOs on your network and you do not change the Receiver Name, you will simply see a long list of devices all with ENZO as it's name. By changing the Receiver name, each ENZO will now be distinguishable within MirrorOp.
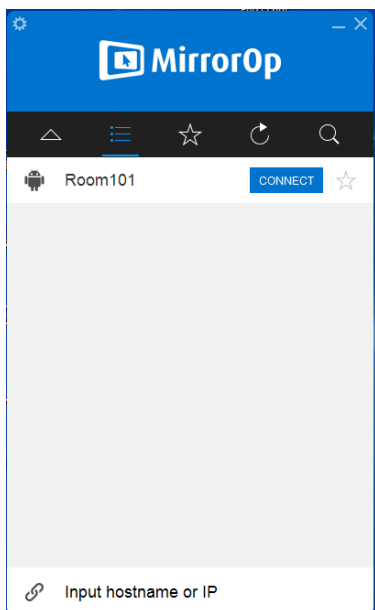
Roll your mouse over the Room101 label to reveal the "Connect" button.

Click "Connect".

When prompted, enter the 4 digit passcode displayed on the MirrorOp screen of the ENZO.
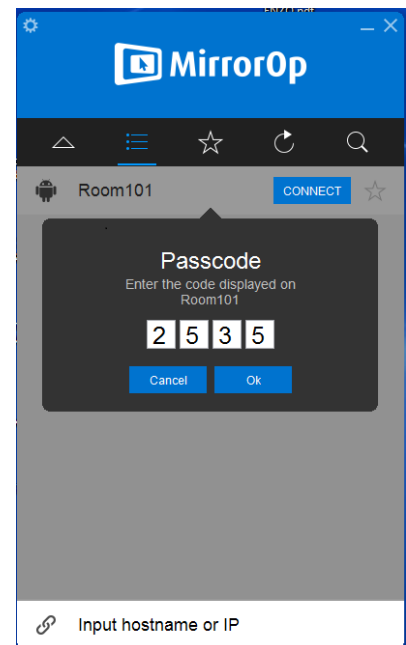
Using IP Address and MirrorOp Application

If the ENZO name does not appear in the MirrorOp list, try clicking the refresh button. This may allow the app to find the ENZOs on your network. Once you find the ENZO that is labeled for your room, proceed with the steps from the previous page.
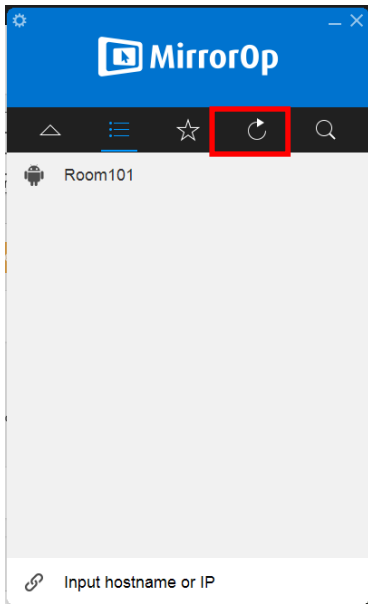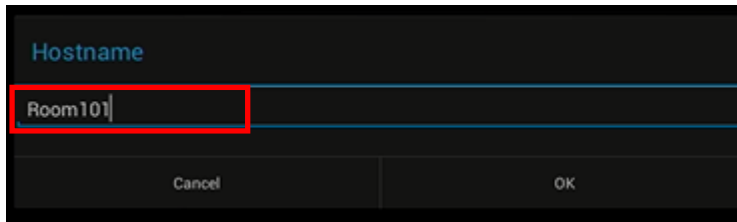

If your ENZO does not appear in the list or no ENZOs appear in the list, you will need to enter the IP address directly into the MirrorOp app. Click Connect and enter your Passcode when prompted.
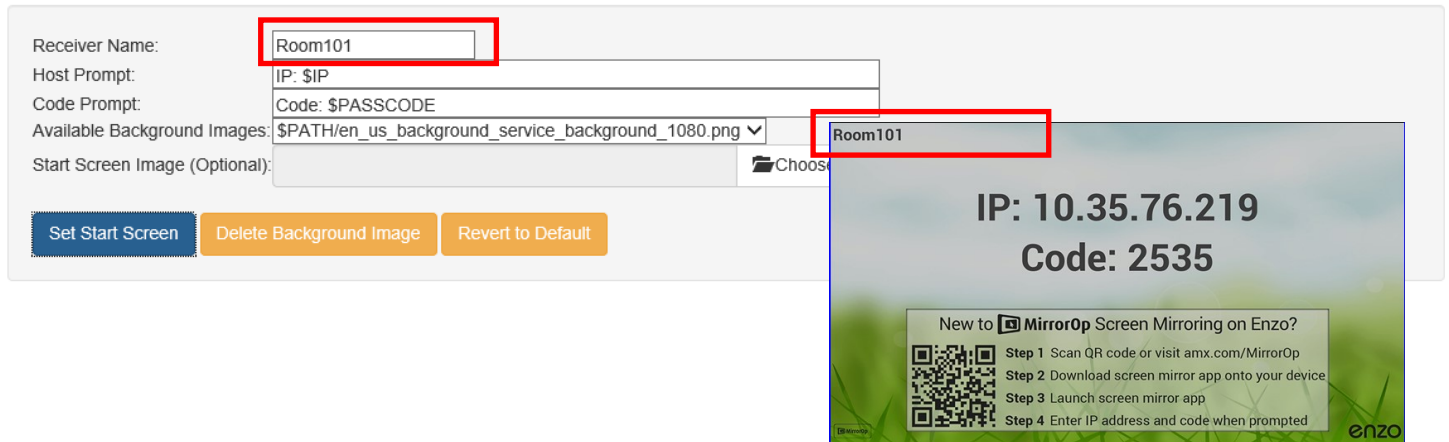
Simplify Mirroring by using a real name and not an IP Address

On page 3, we covered how to provide a Hostname for use on a DNS network. This allows teachers and students to NOT have to enter an IP address when using MirrorOP. **You must have a DNS server and service in place for this to function.**
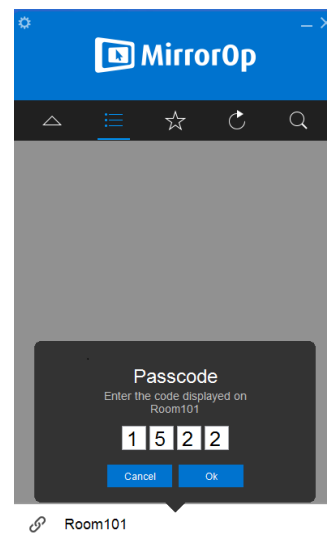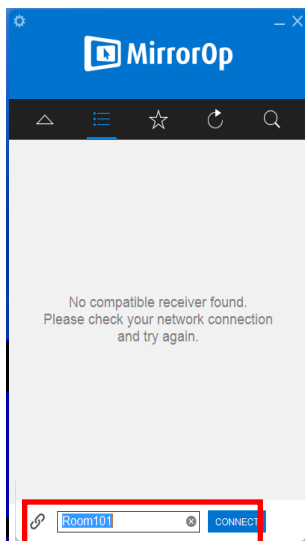

Step 1. Make sure that the Hostname you use for the ENZO is the same as the Receiver name as shown in the images above.

Step 2. If DNS has been set up correctly on your network, you should be able to enter the Receiver or Host Name into your MirrorOp application of your PC, Mac or iOS device.

Step 3. Enter your Passcode when Prompted.

Moderating Connected Devices

Once students have connected to ENZO with their MirrorOp application, the Instructor should open up their favorite web browser and enter the IP address of the ENZO within the same room.

You will be prompted with User Name and Password. To allow connected devices to be sent to your display, enter your "moderator" as your user name with out the quotes. Enter the password you set as described earlier in the document. The system default passcode would have been 1988 unless you changed it to something else.

The following Pop Up is a single page tutorial for selecting a device and sending to the display.

Click "Dismiss" to advance.

Check the "Do not show again?" box to never show the Pop Up again.

The following page should show a list of connected devices on the left hand side. Simply click one and touch either one of the 4 quadrants or click on Full Screen to send to the display in full screen mode.
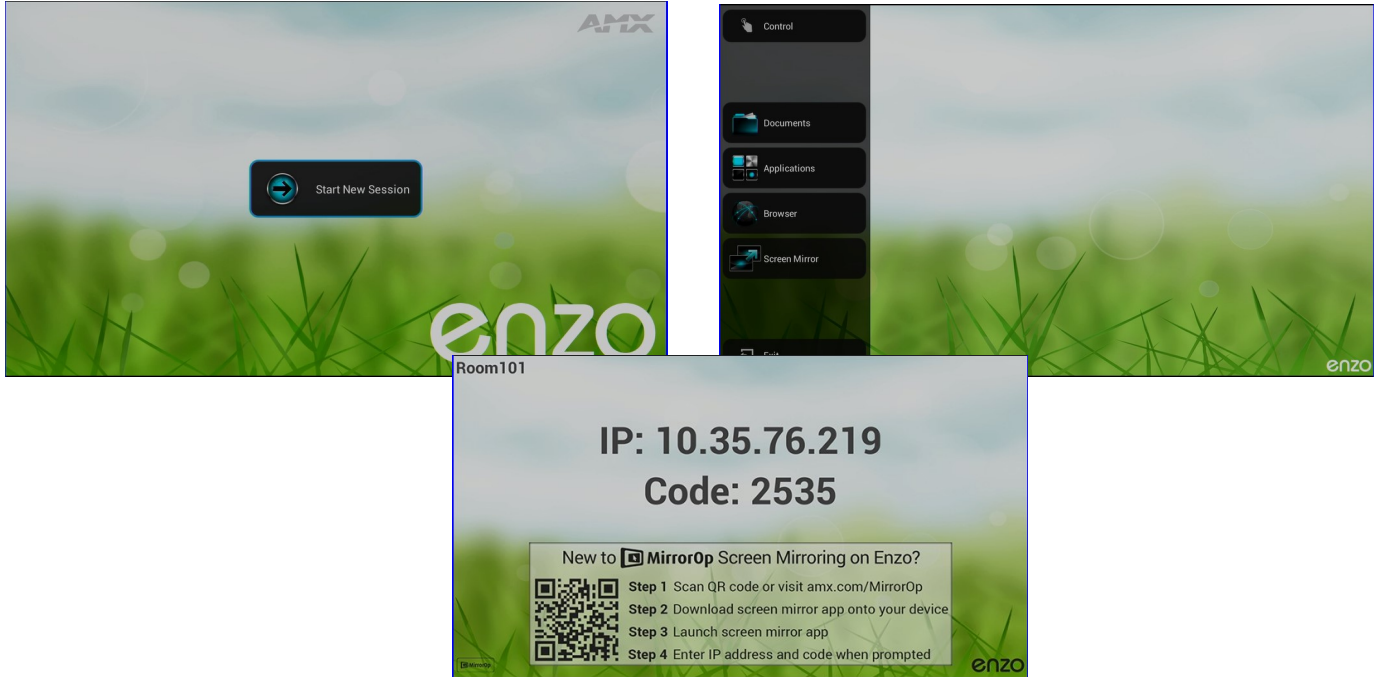
Using MirrorOp in the Classroom

With no Keyboard or Mouse

This guide is meant to instruct how to the Screen Mirror function on Enzo in the classroom.

Step 1. Turn on Projector and switch to HDMI Input assigned to your Ezno. You may see any of the images below.

Your IP address and Code will differ.

Step 2. On your PC, open your favorite web browser and enter the IP address that has been given to you. You should see the webpage below. Enter the following:

Username: moderator

Password: 1246

Click the "Submit" button.

*Note: If this password does not work, contact your tech department for assistance.

Step 3. On your PC and in the web browser, you should see the following message. Click the "Dismiss" button.

*Note: To bypass this Tutorial check the box labeled, "Do not show again?".
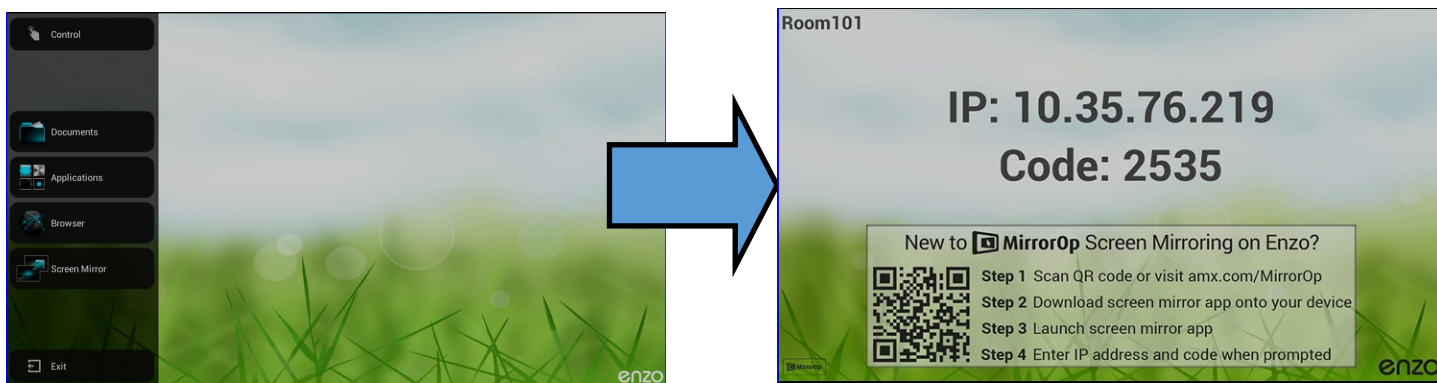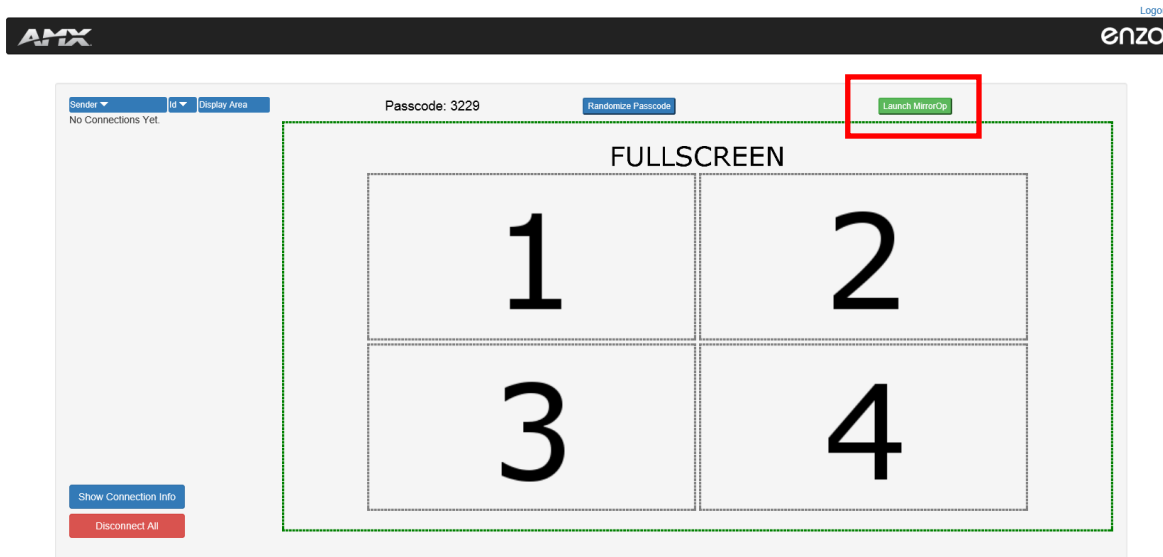

You should now see the following image within your PC web browser.

The ENZO page should go from "Start New Session" to the ENZO "Main Menu"

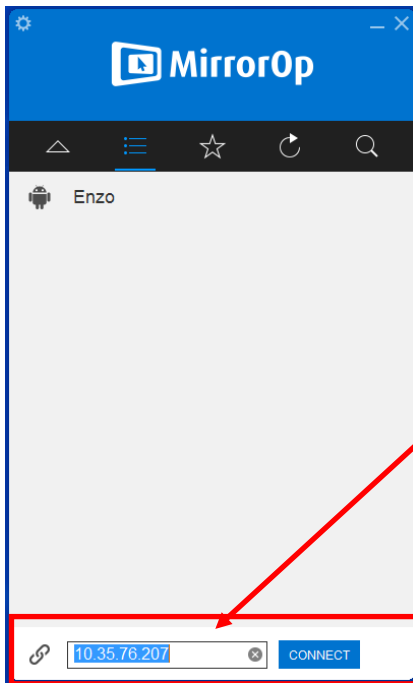Step 4. Click the green "Launch MirrorOp" button.

The ENZO page should go from the ENZO "Main Menu" to "Screen Mirror" page..

Your system is now ready to start accepting mirror connections.

Step 5. Launch MirrorOP apps on students and teacher devices.

Image interface of MirrorOp on PC or MAC

Enter the IP address of the ENZO you wish to send your content, then click "Connect". You will be prompted to enter a code. Use the code shown on the projector image. *Note: The IP address and code in this guide are examples. They will not work on your campus.

If you set your ENZO to work on with your Domain Name Server (DNS), you can enter the real name you assigned to the ENZO. This will only work on MirrorOp senders for iOS, PC and Mac Computers. It will not work with MirrorOp on Galaxy Tablets. On a Galaxy Tablet you MUST use the IP address.

Example: Room101

Touch the "Wireless Router" image on the top right corner of your iPhone or ipad.

Enter the IP address of the ENZO you wish to send your content. You will be prompted to enter a code. Use the code shown on the projector image. *Note: The IP address and code in this guide are examples. They will not work on your campus.
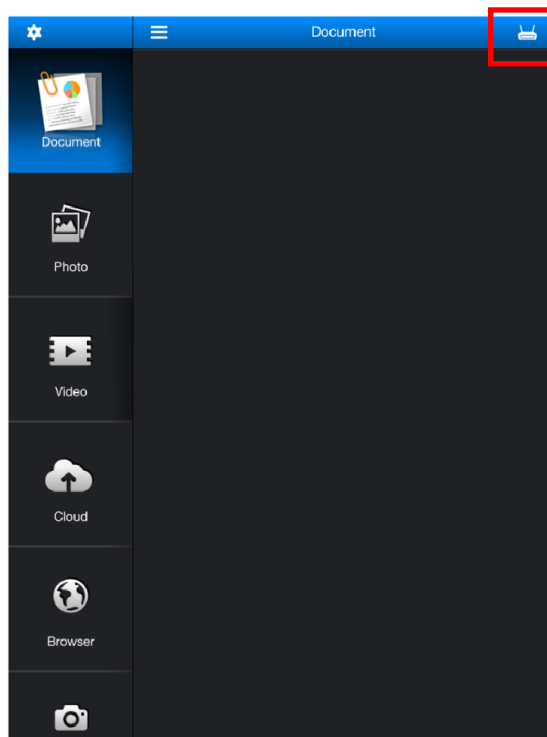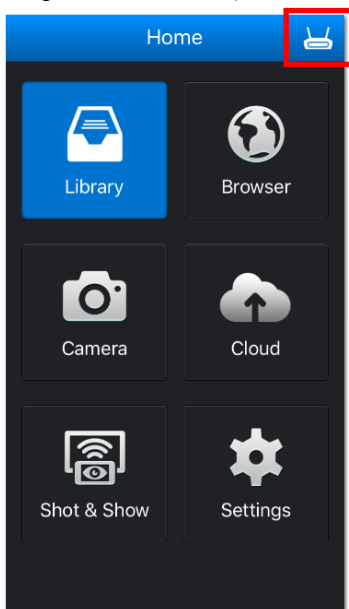
Image interface of MirrorOp on iPhone.

Image interface of MirrorOp on Galaxy Tablet.

Once the app has been launched, press and hold the "Menu" button on the tablet to review the Menu which will allow you to connect manually.

Enter the IP address of the ENZO you wish to send your content. You will be prompted to enter a code. Use the code shown on the projector image. *Note: The IP address and code in this guide are examples. They will not work on your campus.

Step 6. As students and teachers join by using MirrorOp, you will see the list of connected devices.
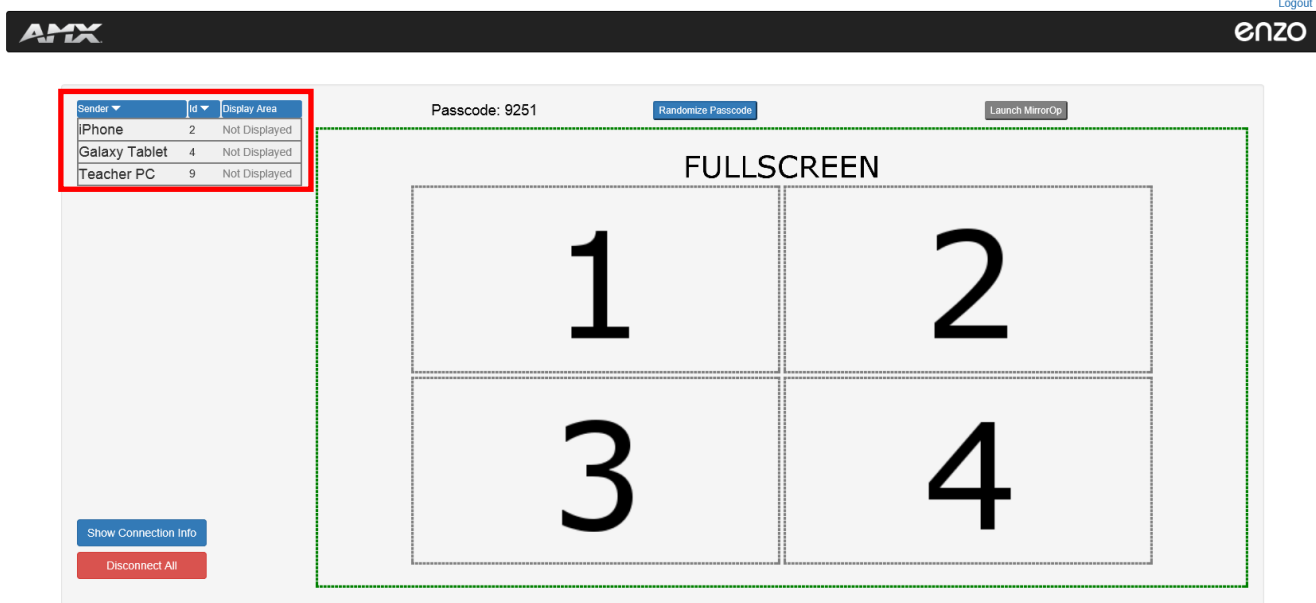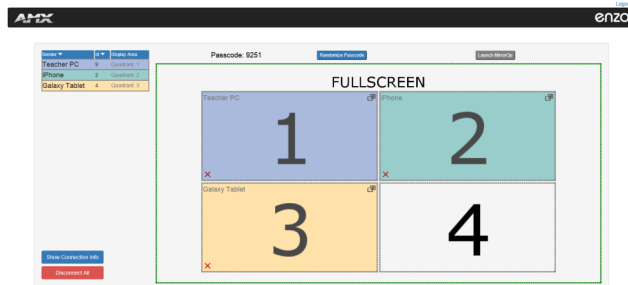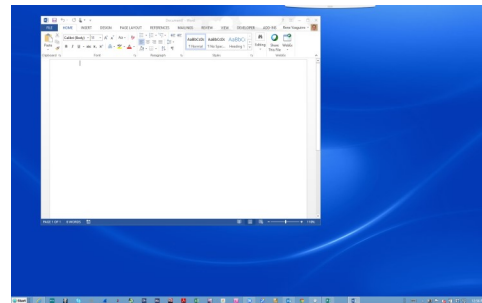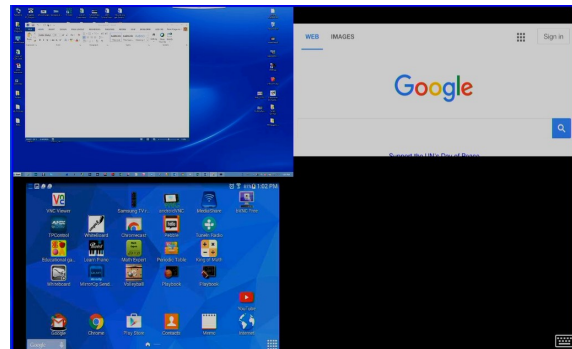

Step 6. Click on a device in the list then click on either "Full Screen" or one of the quadrants to display the device to that area of the projector.
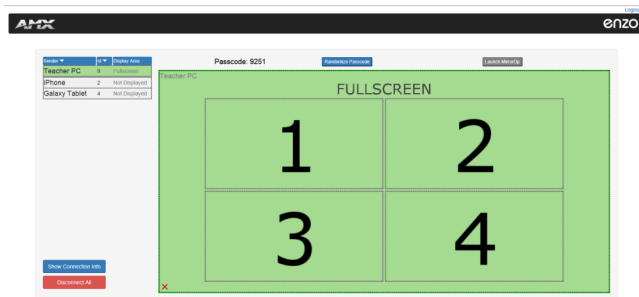
NOTE: When switching between file types on an iOS device, the device may disconnect from the ENZO and will not appear in the send list on the web page. This is a known iOS bug. The user must reconnect using the iOS MirrorOP app.

Additional Functionality:

In the event a student or teacher needs the IP address or passcode during a screen mirror session, you can super impose the information without have to end screen mirroring by clicking the "Show Connection Info". Clicking the button again, will hide this information.
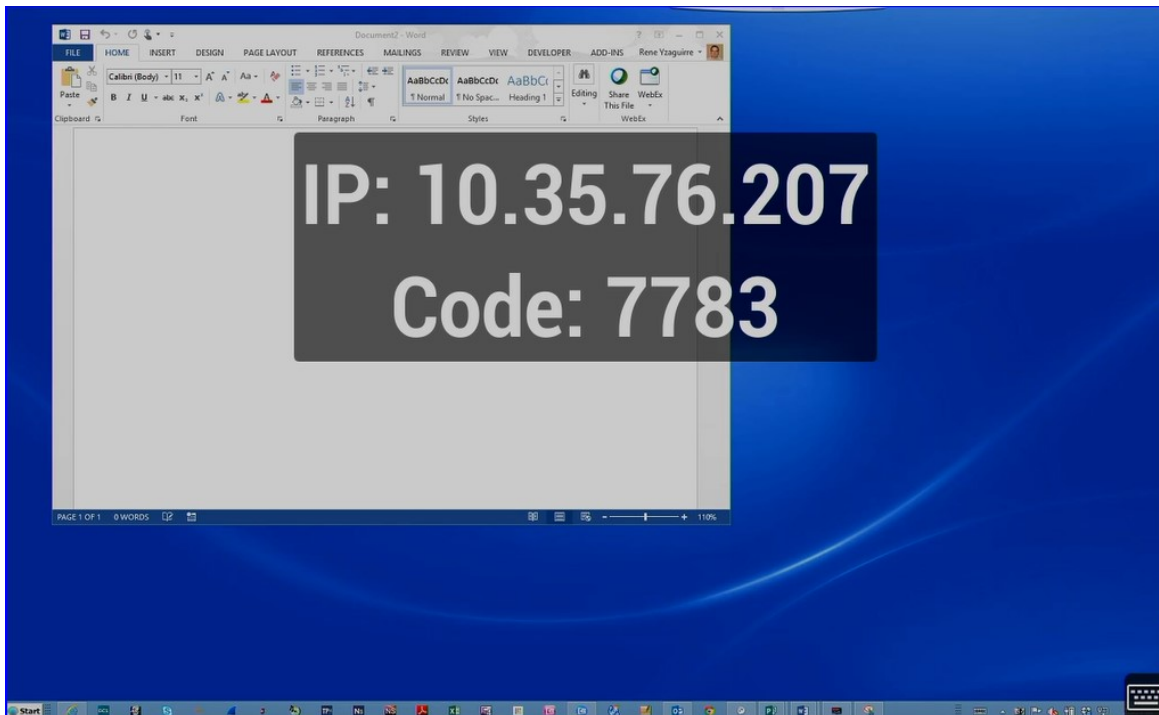
Additional Functionality:

In the event someone displays inappropriate content and the instructor does not have time to determine who this person is, click the "Disconnect All" button. Once done, all connected participants will be disconnected and everyone must reconnect as before.
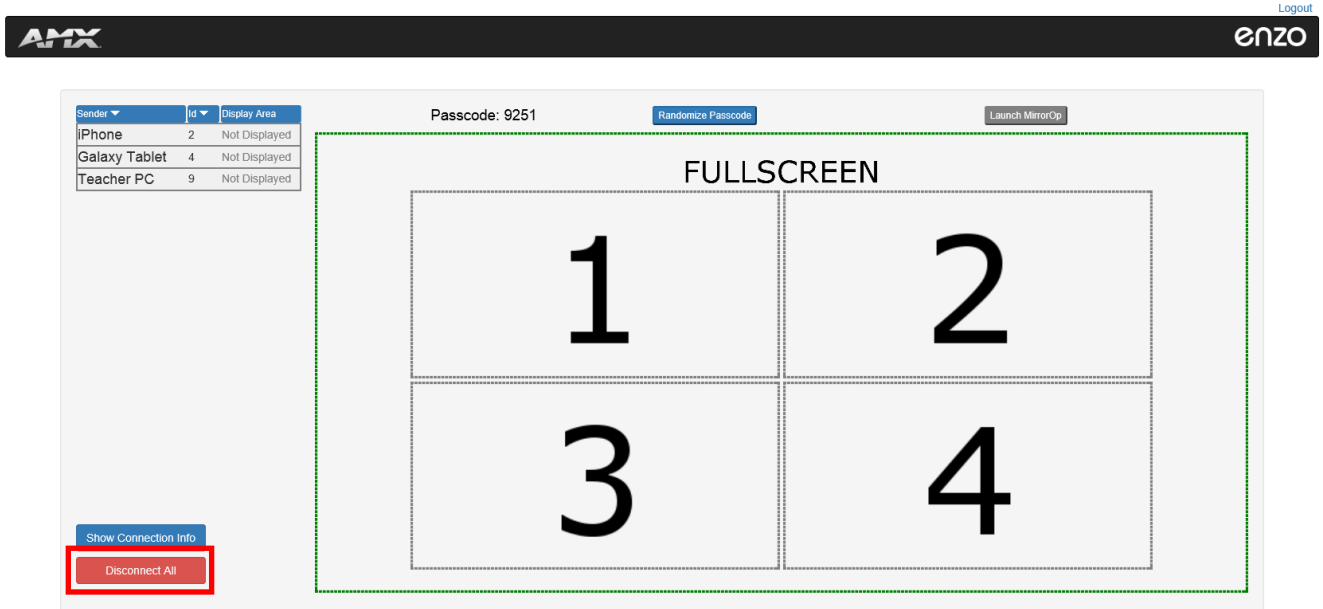
In the event a new passcode is needed during a mirroring session, click the "Randomize Passcode" button. This will update the passcode but it will NOT disconnect anyone already connected. Any new participants will need to use the new passcode.
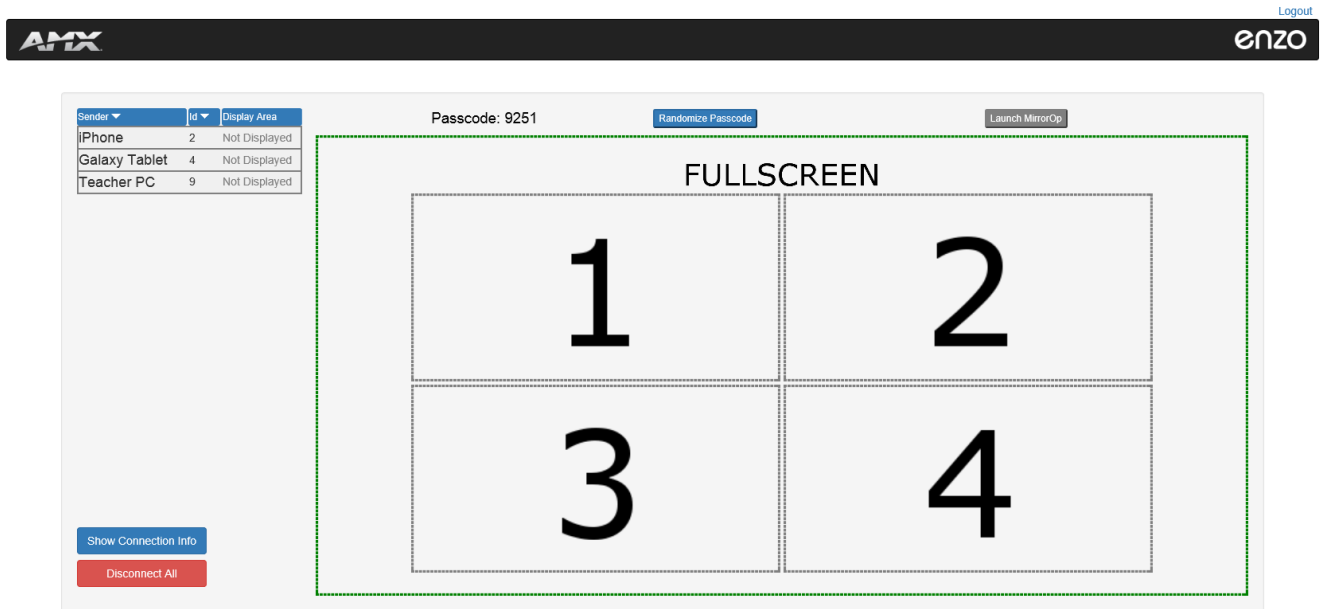
Video Tutorials

Local Downloads: https://www.youtube.com/watch?v=PhcJ4QmN12w

USB Storage: https://www.youtube.com/watch?v=jLFt0hCL5Ug

DropBox: https://www.youtube.com/watch?v=U25P-QyKmvo

MirrorOP: https://www.youtube.com/watch?v=AastTeDpO54

Moderator Mode: https://www.youtube.com/watch?v=ZuIB5_K62M4

Configuring Moderator: https://www.youtube.com/watch?v=65j6WlIii_s