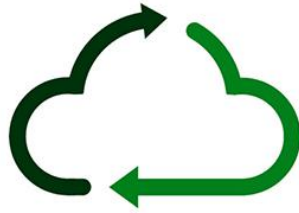


# Quickstart Guide



## E-Smart Screen (ESS)

Display Your Vision Whenever, Wherever!

EwrTech Team- v0.1 (beta)

Reserved.

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# Section 1: Introduction

## What's ESS?

ESS allows you to display any type of content (images, videos, web pages, slideshows, audio files, and more) on your screen or TV based on a schedule you create. You can schedule the contents to run on a specific date and select days of the week to run it. The scheduler is highly flexible, you can schedule a slide to display throughout a period of time, a single time, recur daily, hourly, or even run every second.

Some advanced features:

- Watch regular TV channel or listen to your favorite radio
- Simple text to speech (natural voice)
- Can schedule voice reminders to tell you the current time, weather, or even tell a joke
- Create QR and add them on top of your image
- Dual monitor support, schedules slides for each monitor separately
- Advanced networking features, can serve as secure Hotspot or a VPN
- Run as a regular Linux server, easily access SSH through web browser

You can consider ESS as an **advanced digital signage with a lot more features and capabilities**.

In addition, you can add extra **EWR Applications** and use them as Add-ons to run along side the ESS.

The ESS Bundle version includes:

- **E-Pad** (PC Mode)
- **E-Share** (Screen Sharing)

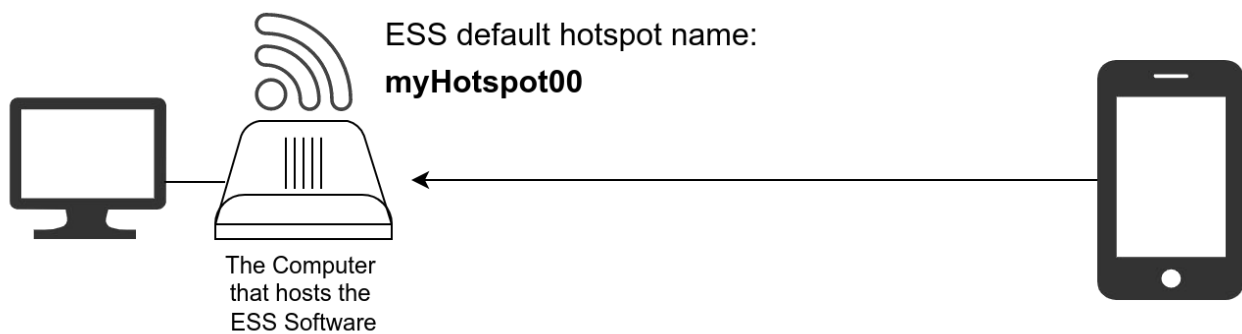
The core features don't require internet connection and we support both x86-64 and arm64 cpu architecture.

## Access - Login Info

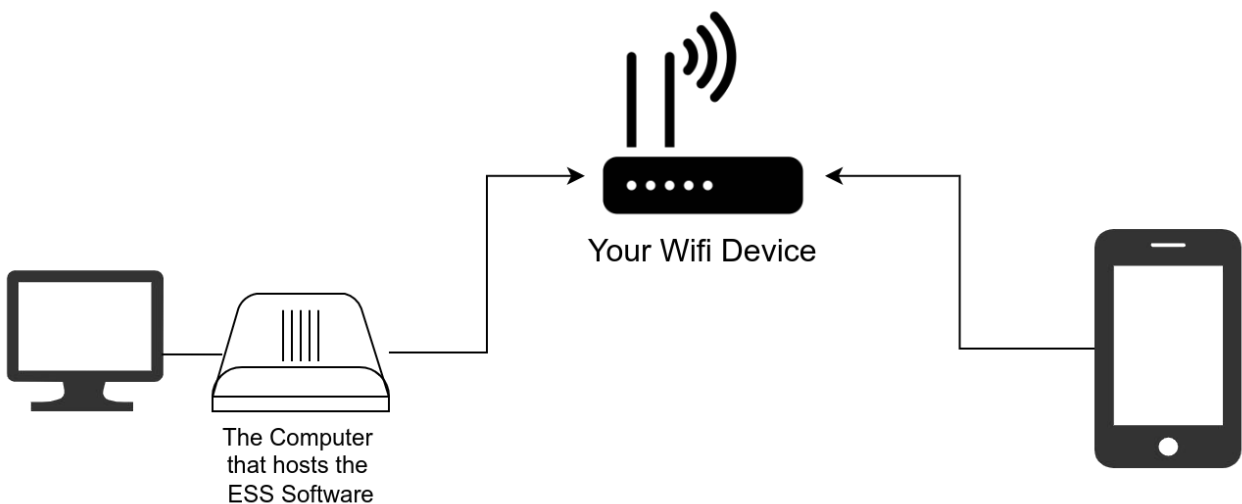
There are multiple ways to access the ESS system, via Ethernet, USB, and the Wifi or the Hotspot if your ESS device supports the Access-Point Mode.

The device turns to a hotspot when it's not connected to any Wifi / Access Points, this way you always have an option to connect to it.

To connect to the device directly, search for the default ESS hotspot SSID.



Once you connect to the ESS device via hotspot, you can then join the ESS device to your own Wifi:



## Steps:

- 1- Connect your monitor or TV to the ESS device
- 2- Turn on your monitor and set the output source accordingly
- 3- Connect the power adapter to the ESS device. If the device is set to **auto-power**, it will turn on automatically as soon as you plug into the power source. Otherwise, press the power button to turn it on
- 4- Once the device is turned on, **wait 5 to 10 minutes** for the initial configuration
- 5- By default, the device is set to the Hotspot mode for easy access. Connect to it directly just like when you connect to a regular Access Point / Wifi Router
- 6- Use your laptop or phone to connect to the ESS device, scan the Hotspot:

# Default Hotspot SSID : **myHotspot00**

# Default Wifi Password: **myHSPass\_99**

Once you are connected to the **myHotspot00**, you can now access the ESS system using your web browser

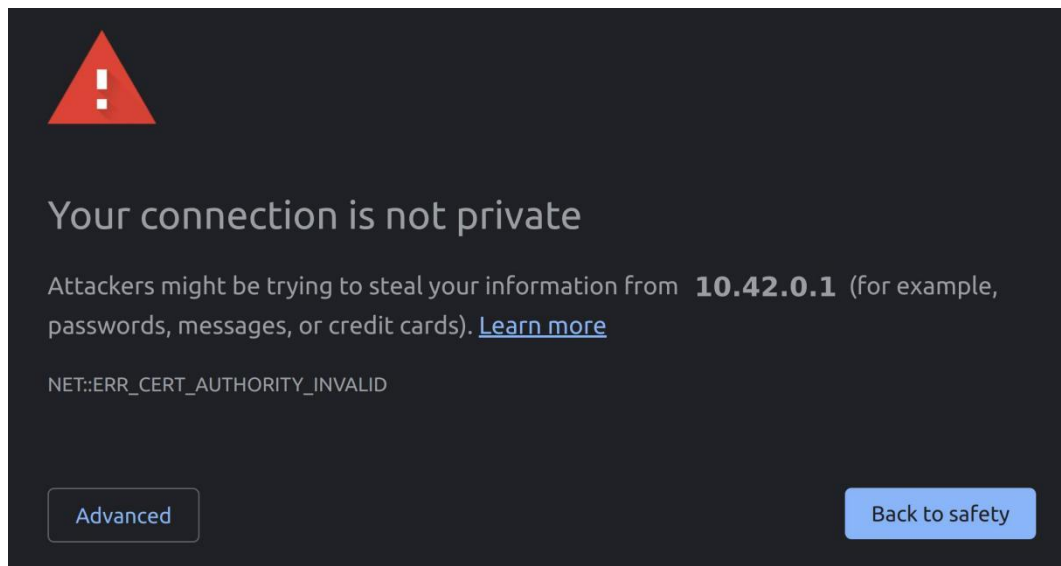
Note: the ESS device's wifi card must support the Access-Point mode, otherwise you can't connect to the hotspot.

---

## Login to ESS (https)

A- After you are connected to the ESS default hotspot, open your browser and type the default ESS IP Address: **https://10.42.0.1:9001** (must type https://)

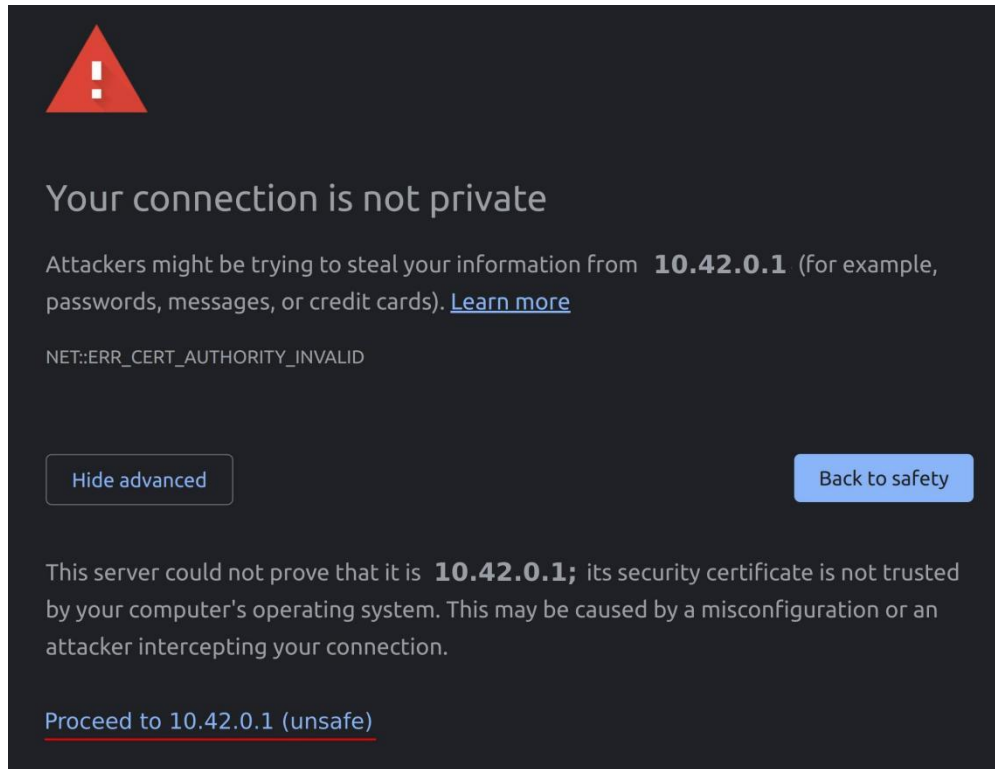
You will get a security warning, similar to this: (depending on your browser)



You will see this because ESS uses a “**Self Signed Certificate**” so you can use the system on your private network. This is safe, **Cisco** and **Google** use Self Signed Certs for systems that require to work without a FQDN. To learn more, see the official page: [https://en.wikipedia.org/wiki/Self-signed\\_certificate](https://en.wikipedia.org/wiki/Self-signed_certificate)

- Click on “**Advanced**” (some Web Browser may have a button saying **Continue**, or similar)

- Look for the ESS IP address.



- Click on "Proceed to 10.42.0.1 (unsafe)"



ESS

Login

Default Username:

**admin**

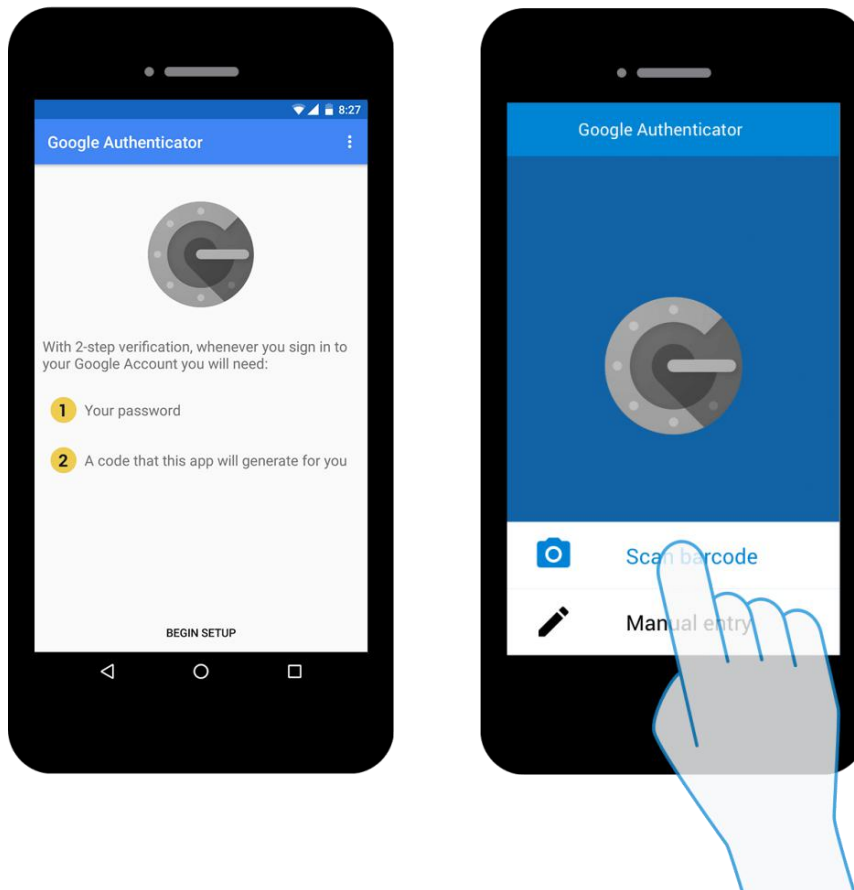
Default Password:

**Admin@123**

- We need to pass the 2FA. You must install a **2-Step Authentication App** on your phone. There are many, and we recommend the **Google Authenticator**. You can find it in the App Store and Google Play store.



B- After you install **Google Authenticator**, open it and scan the QR Code below:



Optionally, you can add the 2FA code to **Google Authenticator** manually if you need to:  
**NEASXACZ4YOTOPU6XUZCRCFXZY23ZOV**





## 2FA


The code changes every **30 seconds**

If you have any issues connecting to the device or logging in, please see: [Section 4](#).

## Section 2: Content Types (Slides)

Almost anything you can display on your regular PC screen or an audio file or link you can play is considered a content for ESS.

For example, you can upload an image from your computer or phone to schedule and display it on either the first or the second monitor, display a public web page, play audio or video or a YouTube link, create a QR code, watch TV, set time reminders, and more. Here's a list of contents:

After you login, click on the  plus sign to add a new slide. Then select the content type:

Select Content Type:

Select content to display ▼

Go Back

Web Page

Image

Video

Audio

Slideshow

QR - Text

### - Web Page

Allows you to schedule and display a publicly or locally available link using any standard protocol, and optionally set a refresh time.

The Web Page slide's minimum time is 5 minutes and the refresh minimum is 15.

#### Monitor 1 - Configure Web Page Slide :

Start Date:	Start Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
End Date:	End Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
Week Days:	<input checked="" type="checkbox"/> <u>S</u> <input checked="" type="checkbox"/> <u>M</u> <input checked="" type="checkbox"/> <u>T</u> <input checked="" type="checkbox"/> <u>W</u> <input checked="" type="checkbox"/> <u>Th</u> <input checked="" type="checkbox"/> <u>F</u> <input checked="" type="checkbox"/> <u>Sa</u>

☐ Ignore URL and only use failover page

Refresh	<input type="text" value="minimum 15 minutes"/>
URL	<input type="text" value="https://example.com/page1.html"/>

### OFFLINE USE

☒ Use "Site is not reachable"

Upload HTML Site (.zip) ⓘ

Choose File	No file chosen
-------------	----------------

Name:	<input type="text" value="Slide name defined by user"/>
-------	---

Go Back

Save

- Slideshow

You can combine photos and videos to create a slideshow and run it based on the schedule you create.

Monitor 1 - Configure Slideshow Slide :

Start Date:

mm/dd/yyyy

Start Time:

--:-- --

End Date:

mm/dd/yyyy

End Time:

--:-- --

Week Days:

S M T W Th F Sa

Upload Images/Video (jpg,png,gif,mp4,avi | <= 1G)

Choose Files

No file chosen

☐ Vertical

☐ Priority

☒ Loop

Slide Duration:

1

Seconds

Text:

Optional

Name:

Slide name defined by user

☐ Mute

Go Back

Add

- QR - Text

Allows you to generate a QR code / link and add it on top of your photos, then display it based on the schedule you create. You can also display text.

Add QR slide

- ☒ Display QR Code with Image
- ☐ Display Text - No QR Code

Cancel

Previous

Next

Add QR slide

Monitor 1 - Configure QR Slide :

Start Date:

mm/dd/yyyy

Start Time:

--:-- --

End Date:

mm/dd/yyyy

End Time:

--:-- --

Week Days:

S M T W Th F Sa

☐ Priority

Text:

Title Text - Optional

Name:

Slide name defined by user

Cancel

Next

## - Audio

You can schedule to an audio file, listen to the radio or podcast, or use the **Text-to-Speech** feature with commonly used keywords such as **TIME**, **WEATHER**, and **DATE**.

We provide some example links for popular radio channels. You can also find free channels online.

### Monitor 1 - Configure Audio Slide :

Start Date:	Start Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
End Date:	End Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
Week Days:	<u>S</u> <u>M</u> <u>T</u> <u>W</u> <u>Th</u> <u>F</u> <u>Sa</u>

☐ Text to speech ☐ Live Audio ☐ Loop

Upload Audio (mp3 | <= 6MB)

You can type a sentence and it will convert it to natural sound speech, and use common keywords with your sentence. Example:

It is **TIME** and the weather is **WEATHER**

Time and WEATHER are both keywords.

### Monitor 1 - Configure Audio Slide :

Start Date:	Start Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
End Date:	End Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
Week Days:	<u>S</u> <u>M</u> <u>T</u> <u>W</u> <u>Th</u> <u>F</u> <u>Sa</u>

☒ Text to speech ☐ Live Audio ☐ Loop

Time Gap (Seconds):

Text

## - Video

Allows you to schedule and play a TV channel, upload your own video files, use YouTube, IP Camera, live streams, and more.

We provide some TV channels examples in the slide. You can search online for IP TV links.

If you try to add two video slides to run on the same monitor / Display, and set the time for both slides to run at the same time or overlap each other, the system will require you to change the time of the slides to prevent playing two videos on the same monitor at the same time.

### Monitor 1 - Configure Video Slide :

Start Date:	Start Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
End Date:	End Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
Week Days:	<b><u>S</u></b> <b><u>M</u></b> <b><u>T</u></b> <b><u>W</u></b> <b><u>Th</u></b> <b><u>F</u></b> <b><u>Sa</u></b>

☐ Use URL

Upload Video (mp4,avi | <= 1G)

☐ Vertical ☐ Priority **i**

### Monitor 1 - Configure Video Slide :

Start Date:	Start Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
End Date:	End Time:
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="--:-- --"/>
Week Days:	<b><u>S</u></b> <b><u>M</u></b> <b><u>T</u></b> <b><u>W</u></b> <b><u>Th</u></b> <b><u>F</u></b> <b><u>Sa</u></b>

☒ Use URL

☐ Vertical ☐ Priority **i**

## - Image

Schedule and display any image format, jpg, png etc.. For example, a restaurant can display breakfast menu from 7AM to 11PM, and display the lunch menu from 11AM to 3PM.

### Monitor 1 - Configure Image Slide :

Start Date:

mm/dd/yyyy

Start Time:

--:-- --

End Date:

mm/dd/yyyy

End Time:

--:-- --

Week Days:

☒ S

☒ M

☒ T

☒ W

☒ Th

☒ F

☒ Sa

Upload Image (png,jpg | <= 6MB)

Choose File

No file chosen

☐ Vertical

☐ Priority

Text:

Optional

Name:

Slide name defined by user

Go Back

Save

## Time (Scheduler)

When you add a new slide, you will see three options for the **Time**. You can select the one that best suits your scheduling needs.

### Daily:

This is commonly used and works for most cases. You can start and end the slide at specific times and dates, and also select the days of the week.

### Hourly:

Schedule the slide to run at a specific **Minute** of the hour, and start and end at a specific date.

### Period:

This is suitable to run a slide through out a long period of time without stopping it. If you want to run a slide for more than 24 hours continuously, this may be the most suitable scheduling type.

## Add a new slide

Time & Output

Daily

Display 01

Daily

Hourly

Period

Select Content Type:

Select content to display

Go Back


Add

## Section 3: Settings

You can change the display resolution, set a standby time, configure the VPN remote access, and much more under the settings menu.

Click on the gear icon  located on the top right corner:

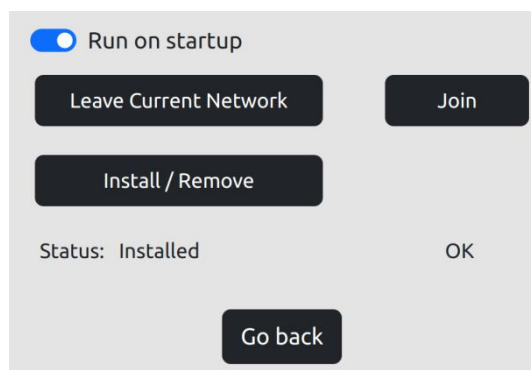
Most of the settings are self explanatory.  
Some features need additional clarification:

- General
- Network
- User
- Display
- System
- Emergency
- Support
- Upgrade
- About
- Factory Reset
-  Power

### VPN and Remote Access

We support all major VPNs, both the software and hardware based. We recommend the highly secure and scalable VPN called **ZeroTier**, but other options that we provide are just as good. It all depends on your specific needs.

With a click of a button, you can install and configure the VPN to have secure remote access to your device, and all your network!

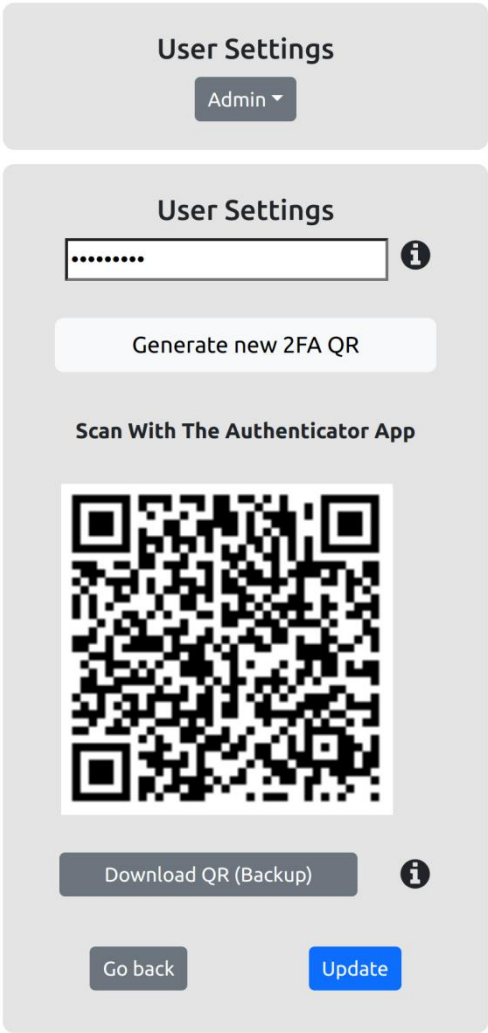


# Change Your Password & 2FA

ESS has three different users. You may only see two in the menu “User Settings”.

You can change the password for each user separately.

You must change your password and 2FA for better security. Do not run the system with the default username and password.



# Set Monitor Resolution & Position

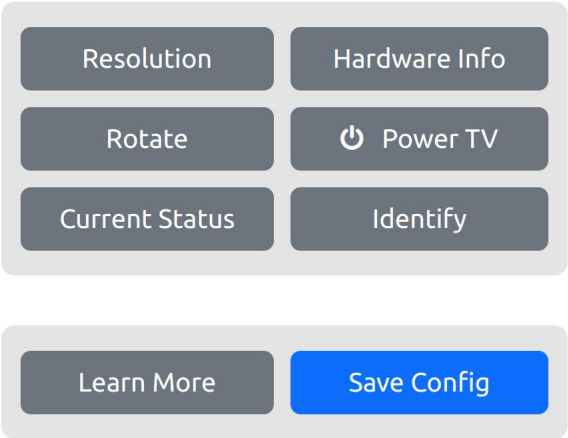
You can configure dual monitors, change a monitor to vertical, and more. Go to the **Setting Menu**, click on **Display**

Click on the button **Resolution** and select the pre-configure profile settings.

The default profile works for most monitors.

You will see the changes in the monitors when you select different profiles. Once you select the most suitable profile for your monitors, you must click on the blue button:

**Save Config**





# Power Saving - Suspend System

You can schedule the ESS device to suspend based on the schedule you can create.

You can save energy and your hardware and monitors may last longer when not in used, when they don't need to be.

## Suspend System

☐ Disabled

Schedule

Learn More

Logs

up 3 hours, 25 minutes

**WARNING!**  
You will not be able to access the system when it's suspended.

# Connect to your Wifi

By default, the ESS creates a hotspot for you to connect to it directly. Once you are connected, you can then connect to another Wifi, and when the Wifi you have connected to is no longer available, it will **fall back** to the hotspot so you don't lose access.

For more details, see [Section 4](#).

Go to the **Setting Menu**, click on **Network** then click on the button: **Set Wifi**

Kingscastle  
ATTHdvustA  
SpectrumSetup-30  
black  
ATTp2KmVnW  
SpectrumSetup-E5  
NO FREEBIES  
NO FREEBIES 2  
patti's  
Jasper69

Enter SSID

Go Back

Continue

## Apps (Additional Applications)

EwrTech has many products, a couple of them are bundled with the standard ESS version (this version), the **E-Share** and **E-Pad**.

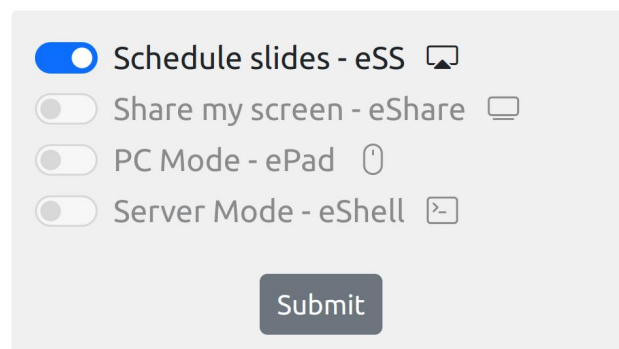
### E-Share:

Allows you to easily share your screen with the monitors connected to the ESS device, or send invite links for sharing your screen with others. You can also use a webcam and stream a video file directly from your phone.

### E-Pad:

This simply turns the system into a standard PC that you can use as a web browser, or do anything else you can do when using a Linux Desktop PC. You can use your phone or any other device as a virtual keyboard and mouse to interact with the system.

For more information, please check the user manuals for the specific product you are interested in.



A screenshot of a settings interface with a light gray background. It contains four toggle switches, each with a label and a small icon to its right. The first toggle is blue and labeled 'Schedule slides - eSS' with a monitor icon. The other three toggles are gray and labeled 'Share my screen - eShare' (with a monitor icon), 'PC Mode - ePad' (with a keyboard icon), and 'Server Mode - eShell' (with a terminal icon). Below these toggles is a dark gray 'Submit' button.

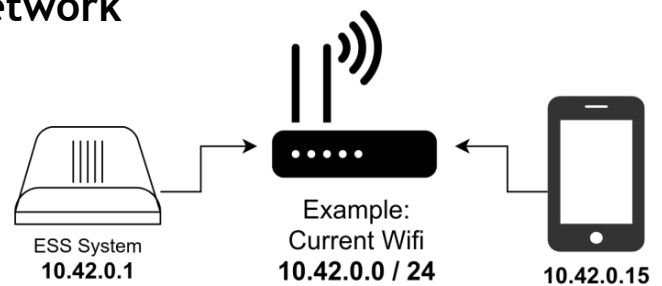
Toggle State	Label	Icon
On (Blue)	Schedule slides - eSS	Monitor
Off (Gray)	Share my screen - eShare	Monitor
Off (Gray)	PC Mode - ePad	Keyboard
Off (Gray)	Server Mode - eShell	Terminal

Submit

## Section 4: Join ESS To A New Wifi Network

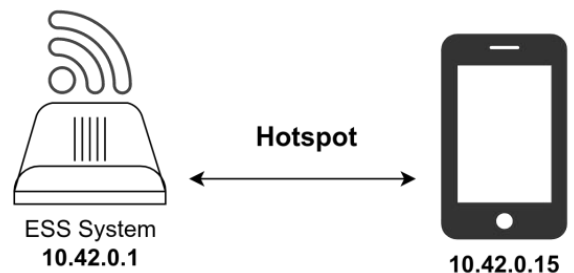
The ESS device can be connected to a Wifi as a regular device, or you can turn it to a Hotspot to connect to it directly.

You can't access ESS if you are not on the same network. In this example, the ESS IP address is: **10.42.0.1**



The Wifi card in your ESS device must **support Access-Point Mode**, otherwise you may not see the hotspot name or be able to connect to it.

A Wifi device (Router / Access-Point) assigns a unique ip address to each device. When you turn the ESS to Hotspot, it changes to a router. It takes a few minutes for changes to apply.



1 - Once you are connect to the ESS device, open your browser and type:

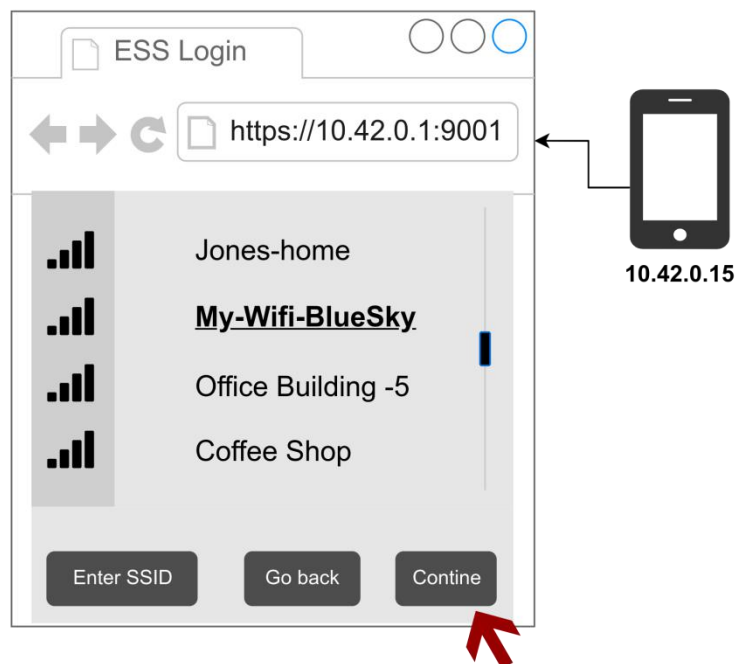
`https://<ESS IP ADDRESS>:9001`

Example:

`https://10.42.0.1:9001`

If the ESS device is joined to your own Wifi router, it will obtain a new IP address from the router.

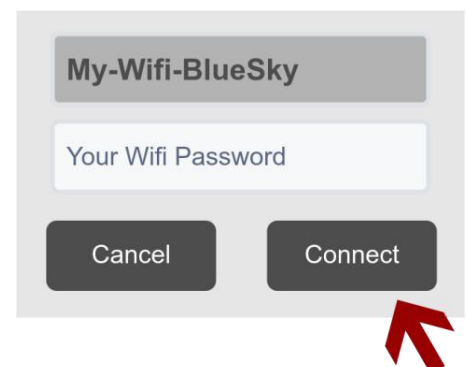
**Note:** when connecting or disconnecting to a network, **it takes a few minutes for the changes to take effect.**



2- **You will get disconnected once you click on the button "Connect"** because the ESS device will be joined to a new network: **My-Wifi-BlueSky** and thus will have a new IP address.

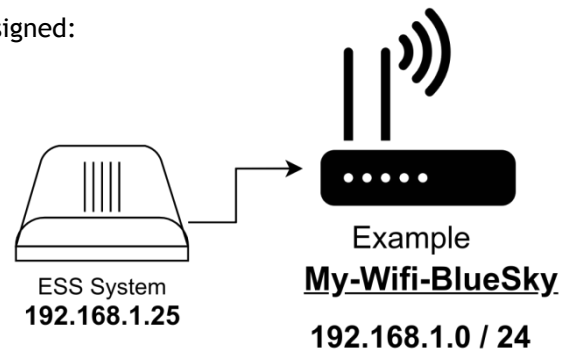
You will need to find the new IP address the ESS device has obtained.

To access the ESS again, connect your laptop or phone to the same Wifi (**My-Wifi-BlueSky**) and find the new IP address assigned to the ESS system.



Note: if it fails to join the new network (**My-Wifi-BlueSky**), it will **fall back** to the current network.

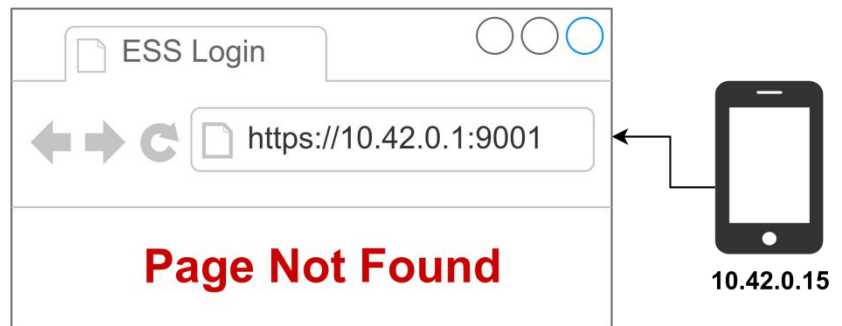
3- In our example, the new router (**My-Wifi-BlueSkye**) has assigned:  
**192.168.1.25** IP address to the ESS system.



4- As you can see, the ESS system has joined a new network, and has a new IP address (**192.168.1.25**).

You will get an error if you are still trying to access the old ESS IP address.

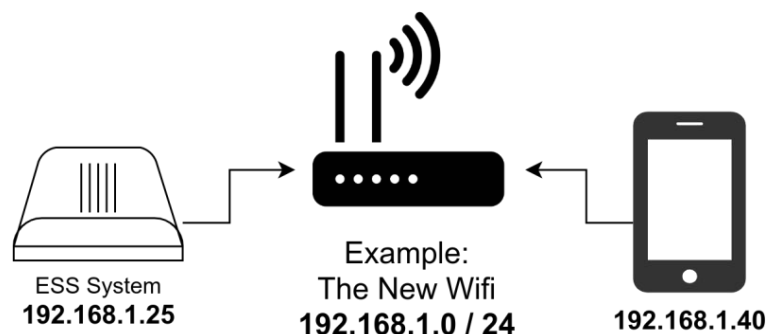
You have to connect to the same Wifi and find the new ESS IP address to access it again.



5- Once you are on the same network, find the new IP address assigned to the ESS device.

The new IP will be displayed on the monitor and stay for 1 minute.

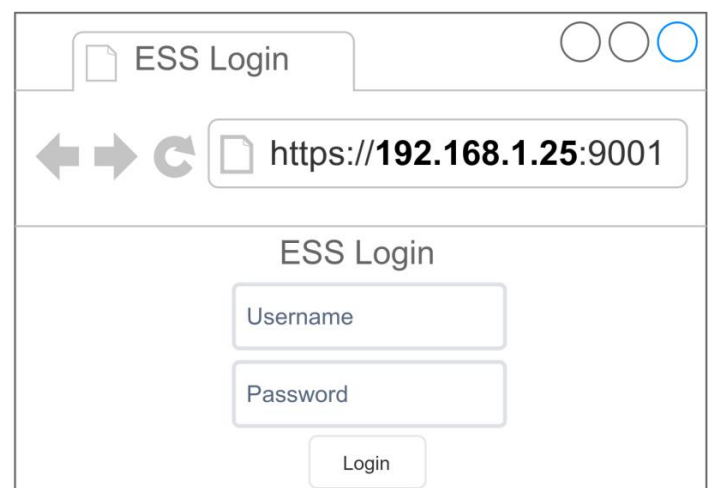
Another way to find the IP, use **PING** command:  
**ping -4 essbox00** in the command-line.



If you still can't find the IP of the ESS device, there are many other ways you can try.  
That's beyond the scope of this quickguide. You may consult with your IT, or contact us.

6- Finally, go to your browser and type the new IP address of the ESS:

**https://192.168.1.25:9001**



# Thank you!

**Note:**

ESS software is still in the development stage. This a basic help document and will change in the future.

We provide other methods to access the system: USB, Ethernet, and VPN.  
If you encounter any issue or need help please feel free to contact us:

<https://www.ewrtech.com/>

Toll Free: +1 (833) 830-0330

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