CLEAN HANDS
KIOSK

An Odds On Promotions White Paper

Clean Hands Kiosk
Slideshow Digital Signage Installation & Setup Guide
V.3

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IT

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Contents

Overview

This document will guide you through the installation and setup of the Slideshow Digital Signage Android application for Clean Hands Kiosk. There are a few prerequisites required to complete the setup which are outlined below.

- Clean Hands Kiosk powered on and connected to the internet (Wi-Fi or Ethernet)
- USB keyboard & mouse Combo or just a USB mouse
- USB Flash Drive

Connecting Clean Hands Kiosk to Wi-Fi

1. Power up the Clean Hands Kiosk and allow the Android powered device to boot to the "desktop". Connect a USB keyboard & mouse or just a USB mouse to an available USB port.
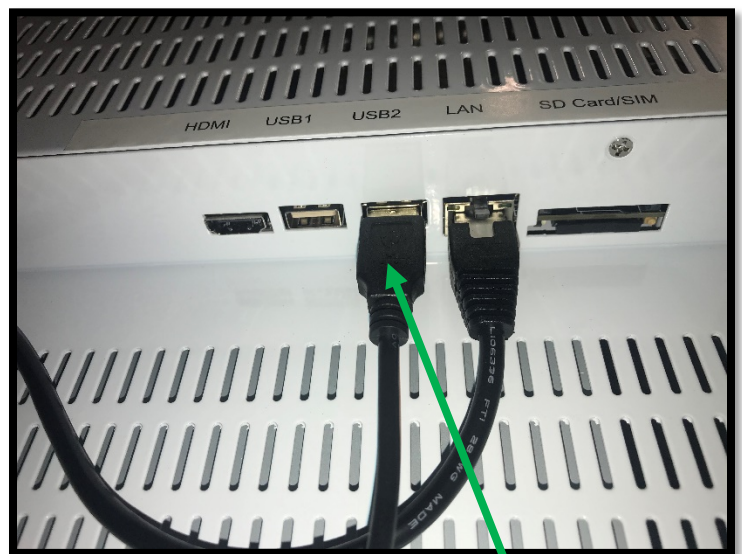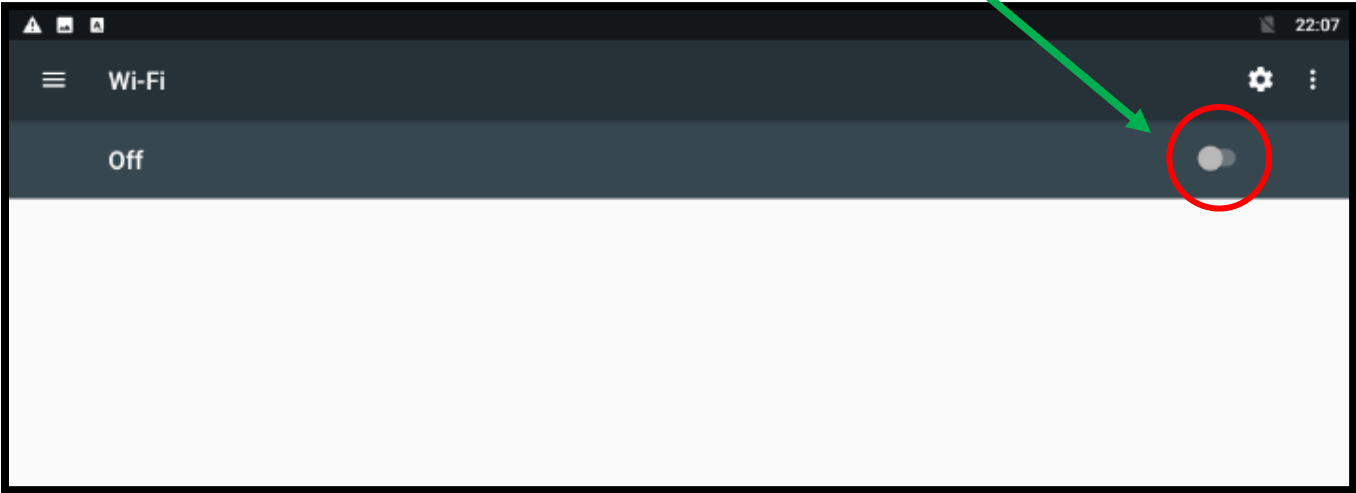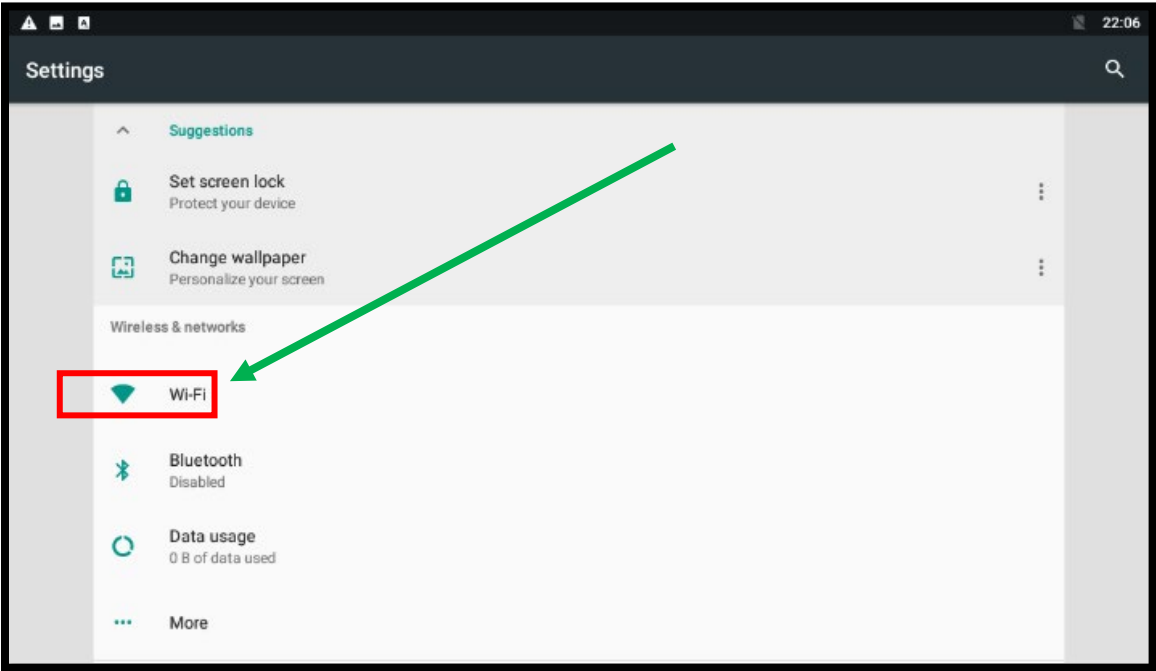
USB Keyboard & Mouse Combo

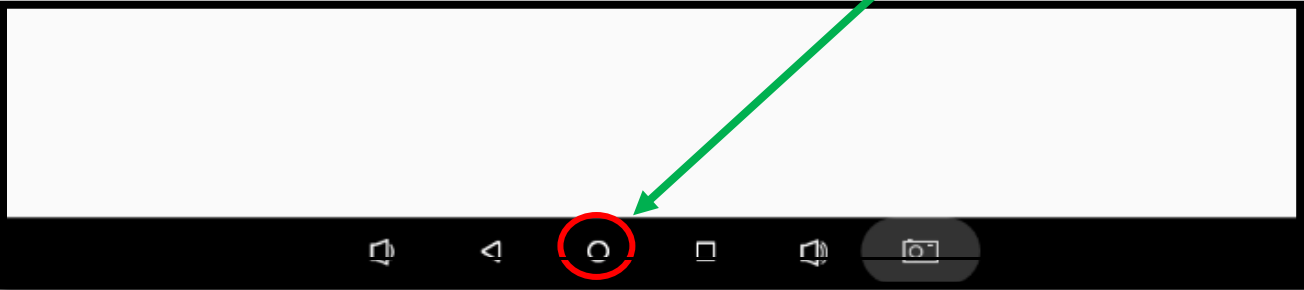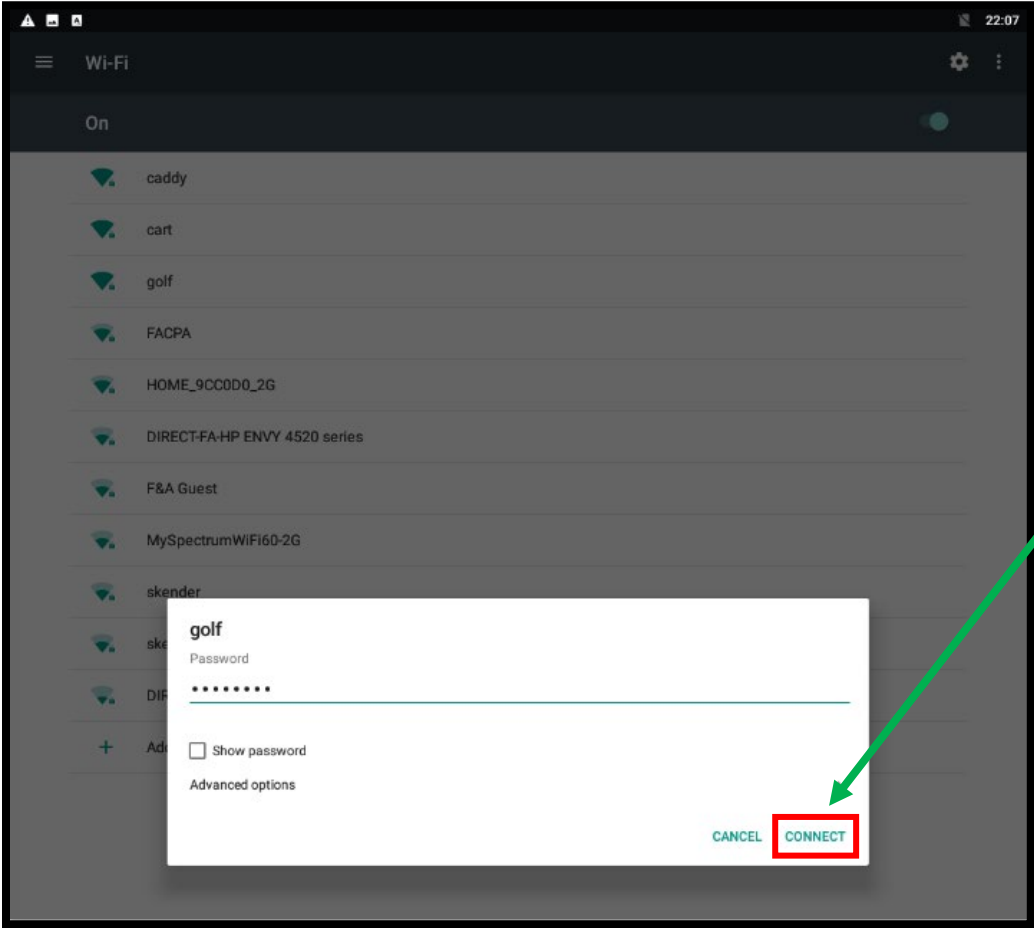2. Click the large white button at the bottom of the screen. On the next screen that appears, click "Settings".
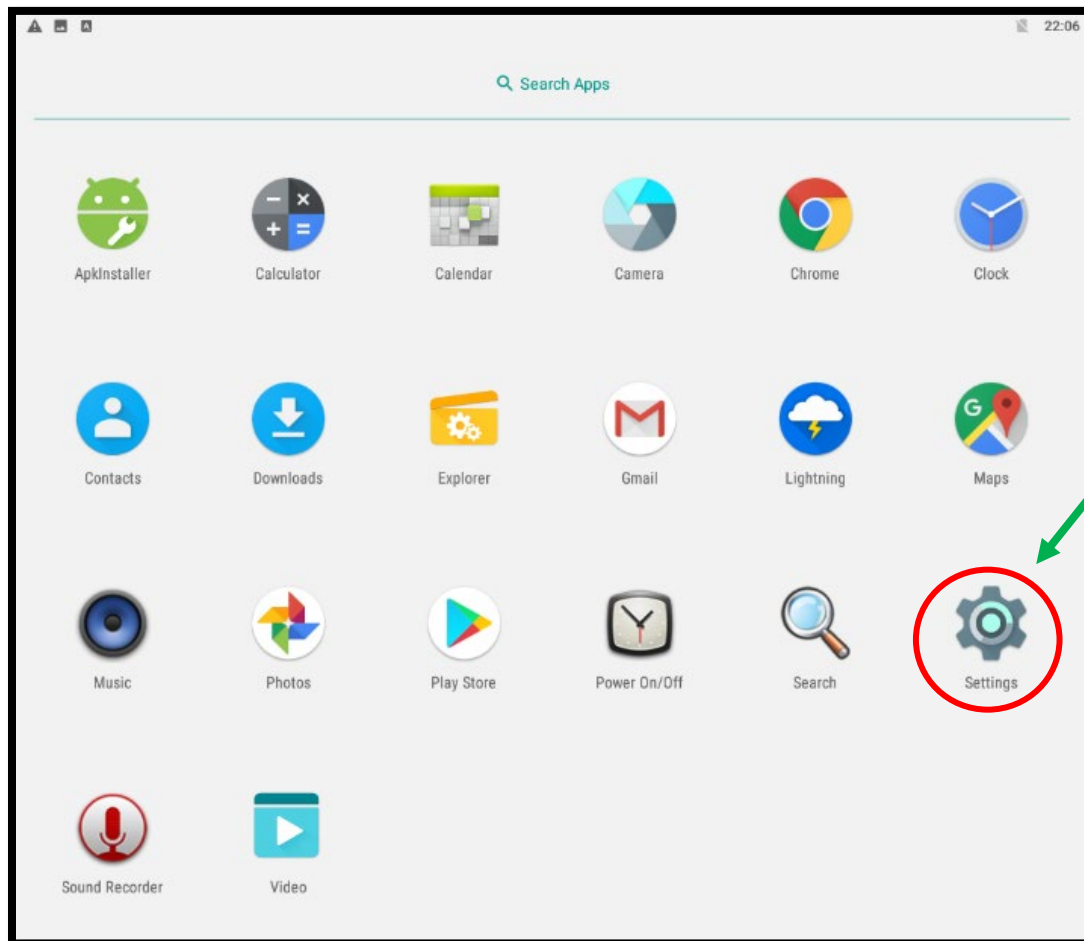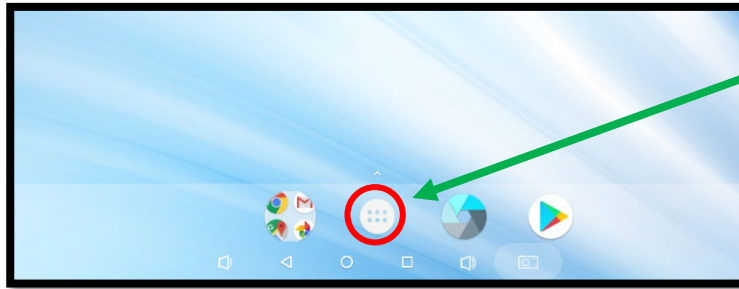
3. Click Wi-Fi menu option. Click the switch in the upper right-hand corner to turn Wi-Fi on.
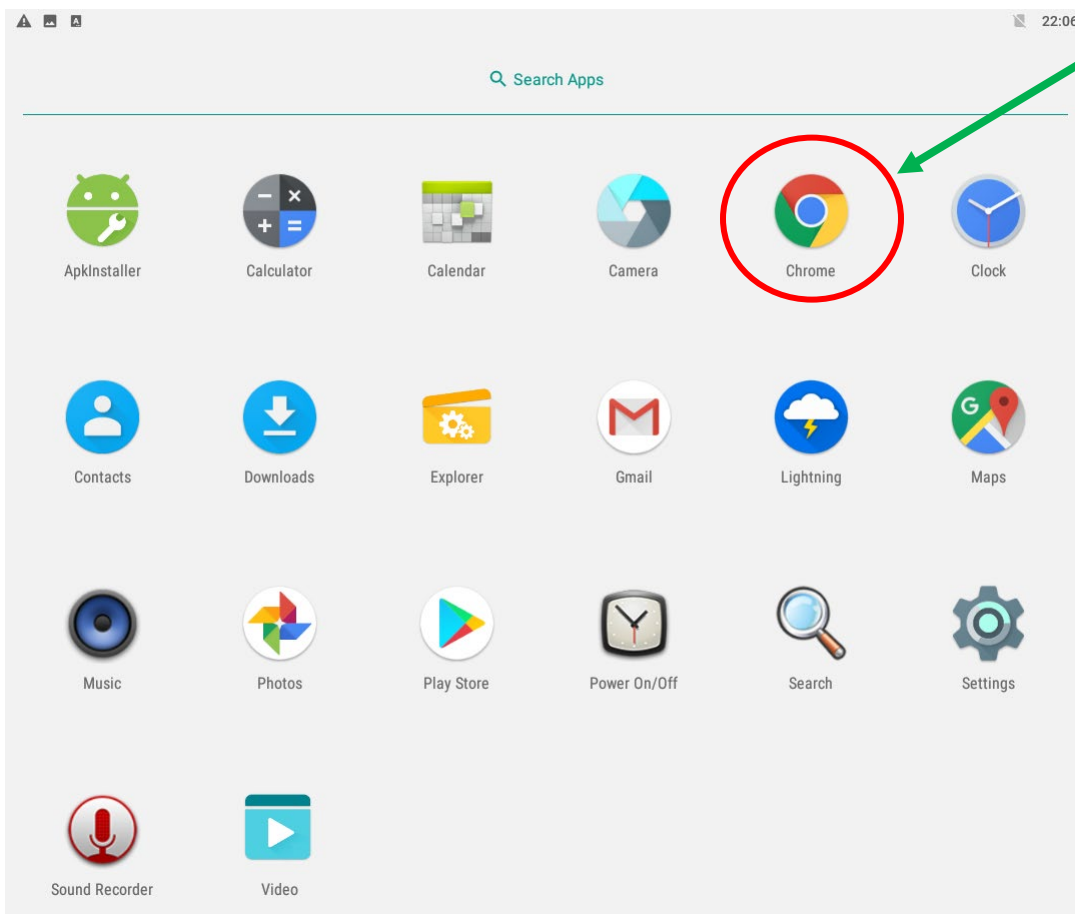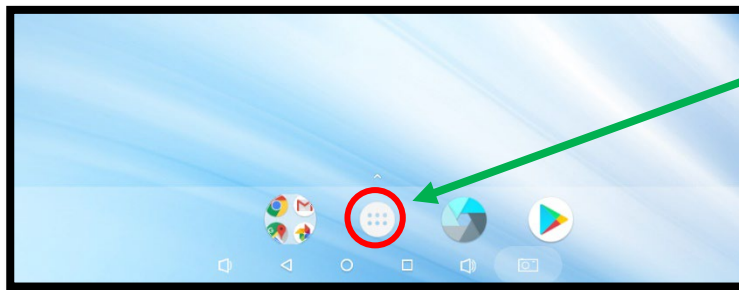
4. Select the correct Wi-Fi name from the list. Enter the password when prompted. Click "Connect". Once connected click the circle button at the bottom of the screen to return to the main desktop.

Download and Install Slideshow – Digital Signage Software

1. Click the large white button at the bottom of the screen. On the next screen that appears, click "Chrome".

2. The Chrome web browser opens. In the address bar type: "https://www.oddsonpromotions.com/downloads/slideshow.apk" and press enter. The slideshow.apk file will automatically download.
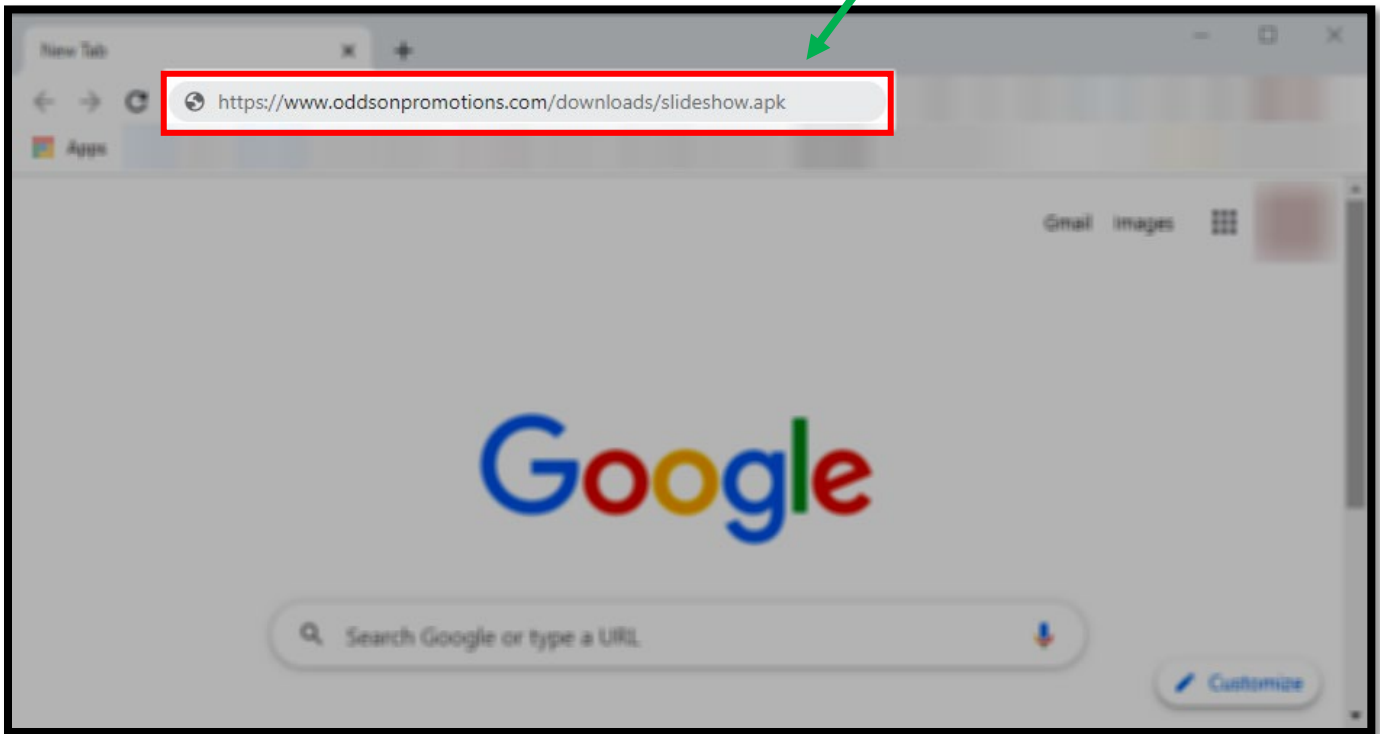
3. Chrome will prompt you that it needs "storage access to download files." Click "Continue".
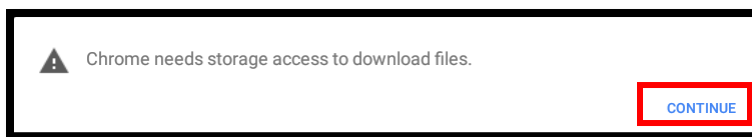
4. Chrome will prompt you that it needs to "access photos, media, and files on your device". Click "Allow".
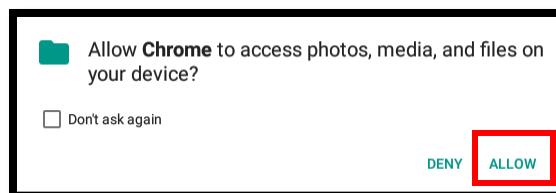
5. Chrome will prompt you a third time, "This type of file can harm your device. Do you want to keep slideshow-android-3.8.2.apk anyway?" Click "OK"

⚠ This type of file can harm your device. Do you want to keep slideshow-android-3.8.2.apk anyway?   ✕

                                      CANCEL   OK
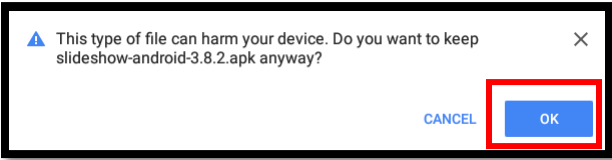
6. Click the open circle button at the bottom of the screen to return to the "desktop".

7. Once on the "Desktop" click the large white button to return to the list of installed apps.
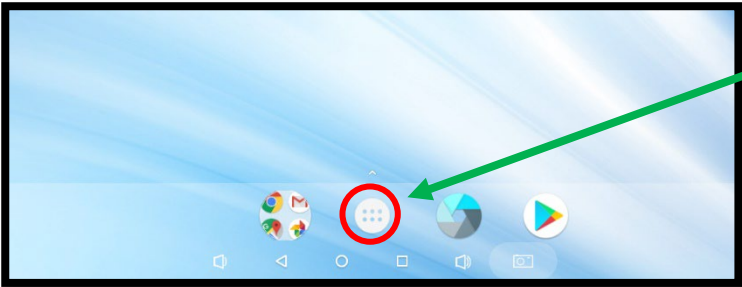
8. Click "Explorer" to open the file explorer app.
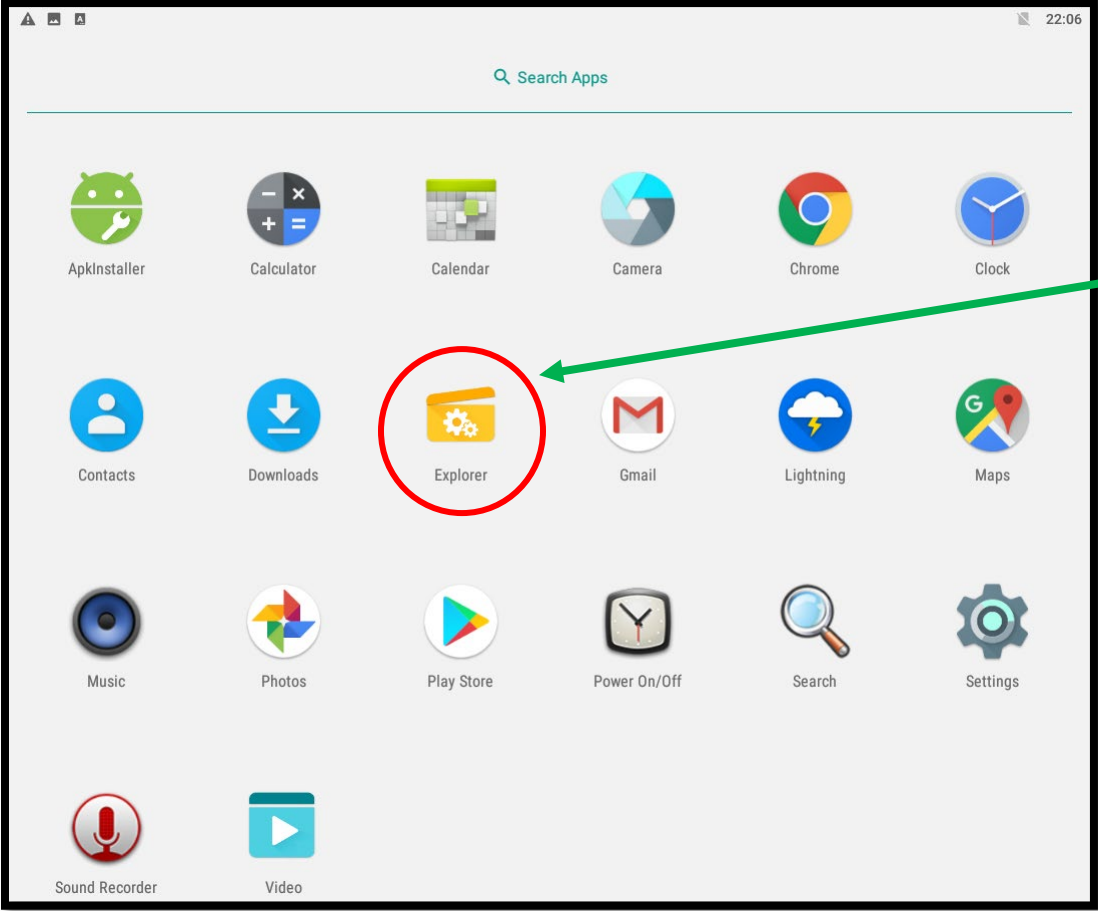
9. The file explorer app opens. Click "Internal Memory".

10. Click the "Download" folder.

11. Click "slideshow-android-3.8.2.apk" to begin the installation.

12. Click "Install".

13. After installation is complete, click "Open".

Configuring Slideshow Software

1. The first time the slideshow app is launched a list of common settings will be displayed. Click, "Start at system boot" and Enable enhanced video player". Click "Press back or click here to return" to continue.
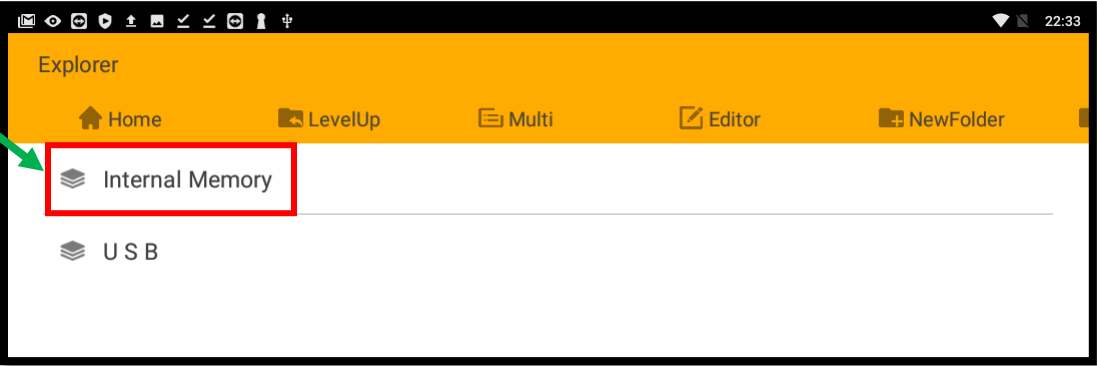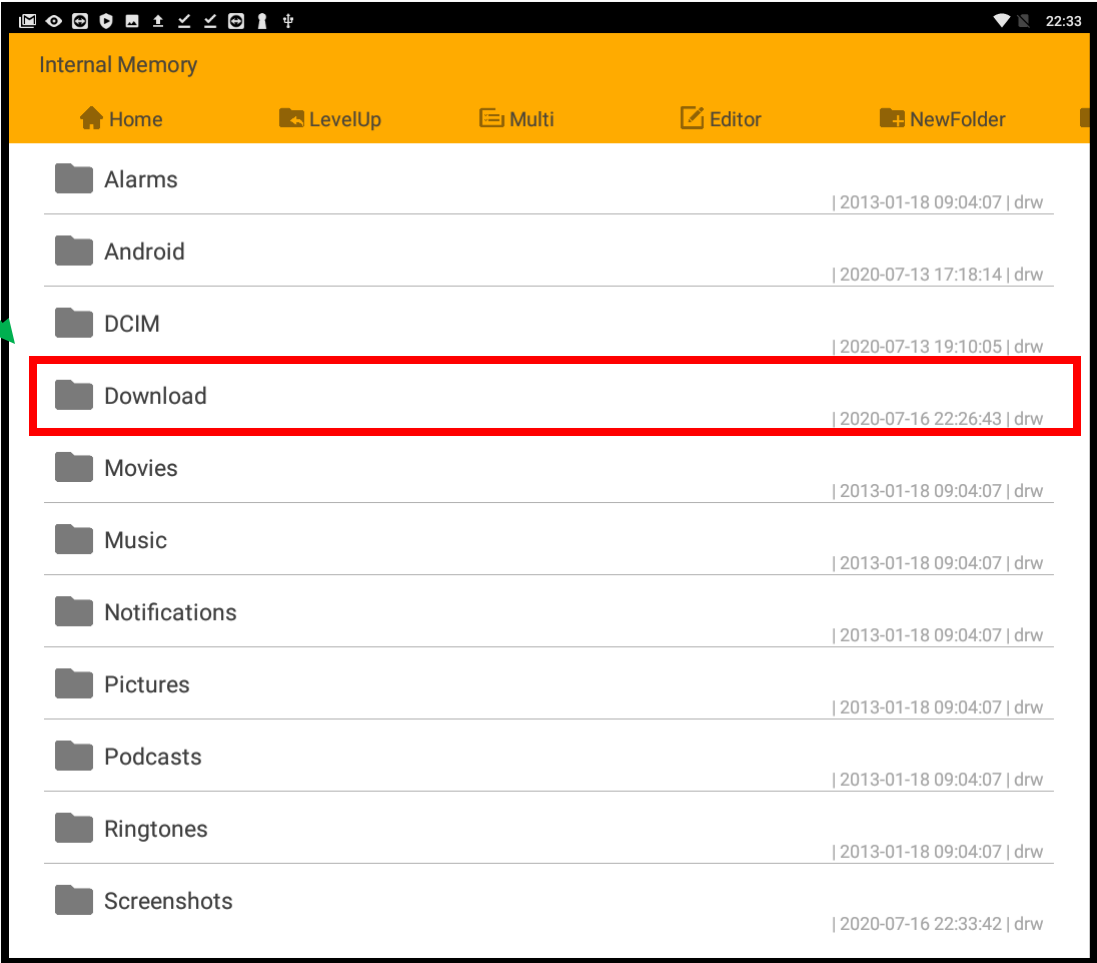
Slideshow settings

Start at system boot
Start this application automatically after Android boots ☑

Device name
rk3288

Use SD card
If checked, files for playing will be saved on inserted SD card, instead of internal memory. Reload is required for applying this change. ☐

Enable web services
Allow remote control through browser and FTP. Works only within LAN network (same wired/wireless network). ☑

HTTP port number
80

Language
English

Screen

Screen orientation
Default

Image scale type
Fit center

Animation type
No animation

Animation length (ms)
0

Enable enhanced video player
If checked, enhanced video player will be used for playing videos. This video player supports shorter lag between videos and various scaling... ☑

USB Flash drive

Action on Flash drive insert
Copy files from Flash drive

Folder on Flash drive
slideshow

Press back or click here to return

2. The Slideshow application will restart. You will be presented with a "No file found" screen. Take note of the instructions displayed on the screen. Specifically, the "web interface" bullet point. In this example the web interface can be reached by opening a web browser on any PC or laptop connected to the same network as the Clean Hands Kiosk and entering the web address into your favorite web browser. In this example the web interface can be reached at http://192.168.2.90:8080. **Your address will be different.**


- The "No file found" page displayed above describes the different methods of uploading files. The next section will discuss using the USB flash drive method. There is also a section which describes connecting the slideshow application to Google Drive. This is a more advanced configuration which allows you to manage the slideshow by modifying the slides in your Google Drive. The kiosk will automatically download the slideshow slides on a preset interval. Read on for instructions on how to set this up. Please take note of the address that is displayed on your kiosk. Your address will be different than the one displayed above.

Loading Slides using a USB Flash Drive

This section will describe loading slideshow images using a USB flash drive. Slideshow images should be 1080x1920 resolution. Refer to the chart below which describes supported file types. More information can be found at https://slideshow.digital/documentation/.

Type	File name extensions	Supported formats	Notes
Image	jpg, jpeg, png, bmp, gif, webp, svg	JPEG, PNG, Bitmap, GIF, WebP, SVG	Files with resolution more than twice the size of the panel are first scaled down, in order to save the memory. See https://developer.android.com/guide/topics/media/media-formats#image-formats for more details.
Video	mpg, mpeg, avi, mp4, 3gp, mkv, ts, flv, f4v, webm, wmv, m2v, m4v, mov	Usually MPEG-2, MPEG-4, H.264, H.265	The exact codec and bitrate support is highly dependent on the hardware. See https://developer.android.com/guide/topics/media/media-formats#video-codecs for more details.
Audio	aac, flac, mp3, wav, ogg, mid	AAC, FLAC, MP3, PCM/WAVE, Vorbis, MIDI	See https://developer.android.com/guide/topics/media/media-formats#audio-codecs for more details.
PDF	pdf		Only first page is displayed.
HTML	html, htm, xhtml		Supported HTML/CSS/JavaScript features depend on the Android version (embedded browser is used).
Excel	xls, xlsx	Excel 97-2003, Excel 2007 and newer (only on Android 5+)	It is possible to change styling of the table via web interface, menu Settings – Device settings – CSS style for XLS.
Link	url		URL link file containing shortcut to web page or text file with single line containing web page URL.
Text	txt	Plain text in UTF-8 encoding	For displaying as moving text.
RSS	rss, xml	RSS, Atom	With UTF-8 encoding.
Stream	–	RTSP, HTTP/HTTPS live stream See Audio and Video for codecs	See https://developer.android.com/guide/topics/media/media-formats#network for more details.
Archive	zip, tar, ar	ZIP (Store, Deflate or Deflate64), TAR, AR	Used just for downloading/synchronizing multiple files together. Archive files are always unpacked at the beginning.

1. Plug a USB flash drive into your PC or Mac. Create a new folder on the USB flash drive called "slideshow". The Slideshow application will read the contents of this folder when you plug the USB flash drive into an available USB port on the Clean Hands Kiosk.
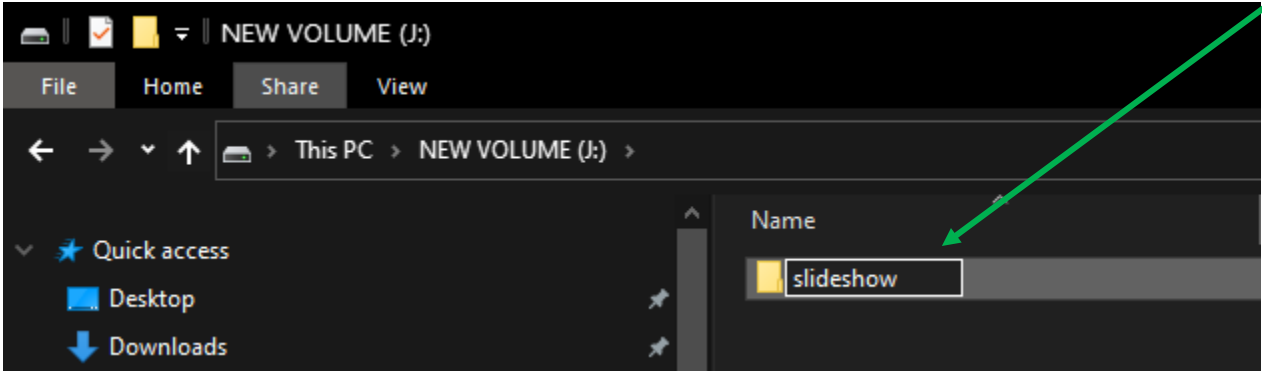
2. Copy any slideshow images into the newly created slideshow folder on the USB flash drive.
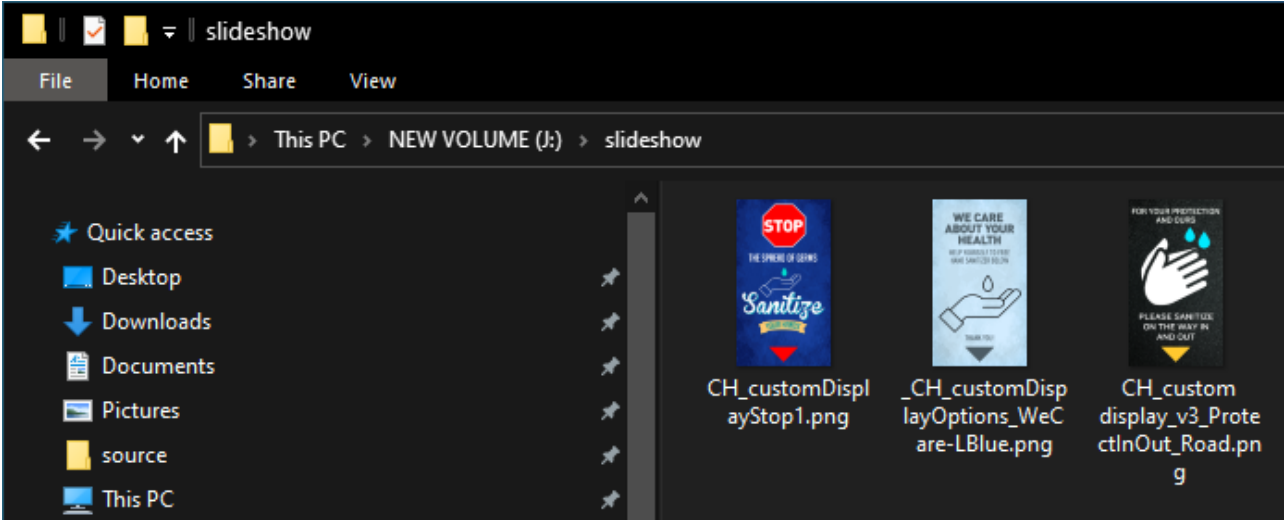
3. Plug the USB Flash drive into an available USB port on the Clean Hands Kiosk. The slideshow slides located inside the slideshow folder on the USB flash drive will be copied to internal memory of the Clean Hands Kiosk and begin to play. Once the slideshow is visible you can unplug the USB flash drive.

Configuring Slideshow Application to synchronize with Google Drive

If you own multiple Clean Hands Kiosk it may be desirable to configure the slideshow application on each kiosk to automatically synchronize against a Google Drive. The slideshow application will automatically download the contents of a folder on the Google Drive on a set interval. When updating or changing slides the user just needs to change the slides on the Google Drive and all Clean Hands Kiosks will automatically download and display the new slides. You can also create different folders on your Google Drive and attach different kiosks to each folder. This will allow you to have different slideshows on different kiosks if you so choose.

1. Take note of the web interface address that was described in step 2 of the "Configuring Slideshow Software" section. (Outlined in red) <u>Your address will be different.</u>

No file found

Slideshow for Android

You can upload files through:

- Web interface - Enter address *http://192.168.2.90:8080* into browser on your computer (default username/password is admin/admin) and choose Upload file in Files menu
- FTP server - Connect to FTP server *ftp://192.168.2.90:8021* and upload files
- USB Flash drive - Insert Flash drive with files you want to upload in folder *slideshow* into the USB port of the device
- Direct copy into the folder */slideshow/slideshow* in internal storage of the device

To access settings, press the menu or enter button, swipe from left or make a long click on screen. For advanced settings (customized layouts, playlists, etc.), open address *http://192.168.2.90:8080* in browser on your computer.

Visit https://slideshow.digital/documentation for tips how to use more of Slideshow's features.

- If you missed the detailed web interface information and already have a slideshow playing, plug in a USB keyboard to an available USB port and press the "I" key. Detailed information will be display. Take note of the "IP Address:" value. Remember to add ":8080" to the end of the IP Address to access the web interface from another computer. Example: http://192.168.2.134:8080

About device - rk3288

Device: rk3288
Model: Android / rk30sdk / rk30board / armeabi-v7a
Hardware: RAM 1997 MB, CPU 4 core(s) 0x4 0x 0xc0
RAM usage: 1024 MB / 1997 MB, 6 MB / 512 MB
Android: 7.1.2 (rk3288-userdebug 7.1.2 NHG47K eng.lsy.20200515.195420 test-keys, SDK 25)
Rooted: No
MAC address: AC:64:CF:C8:41:15
IP address: 192.168.2.134 (Gateway: ::, DNS: null)
WiFi: "golf" (BSSID: 1a:e8:29:14:e5:0c, 72 Mbps)
Device ID: 58a16df05d4f2f61
Free space (internal memory): 2638 MB out of 3698 MB (71%)
External storages:
Screen resolution: 1080 x 1920 px
Device time: 17.07.2020 18:07:39 (GMT+00:00)
Since last start: 1:50:46

Version: 3.8.2-en

2. Open your favorite web browser on a PC or Laptop connected to the same network as the Clean Hands Kiosk. Input the web interface address in the address bar. The login page will display. Enter the default credentials to login.

- Username: admin
- Password: admin
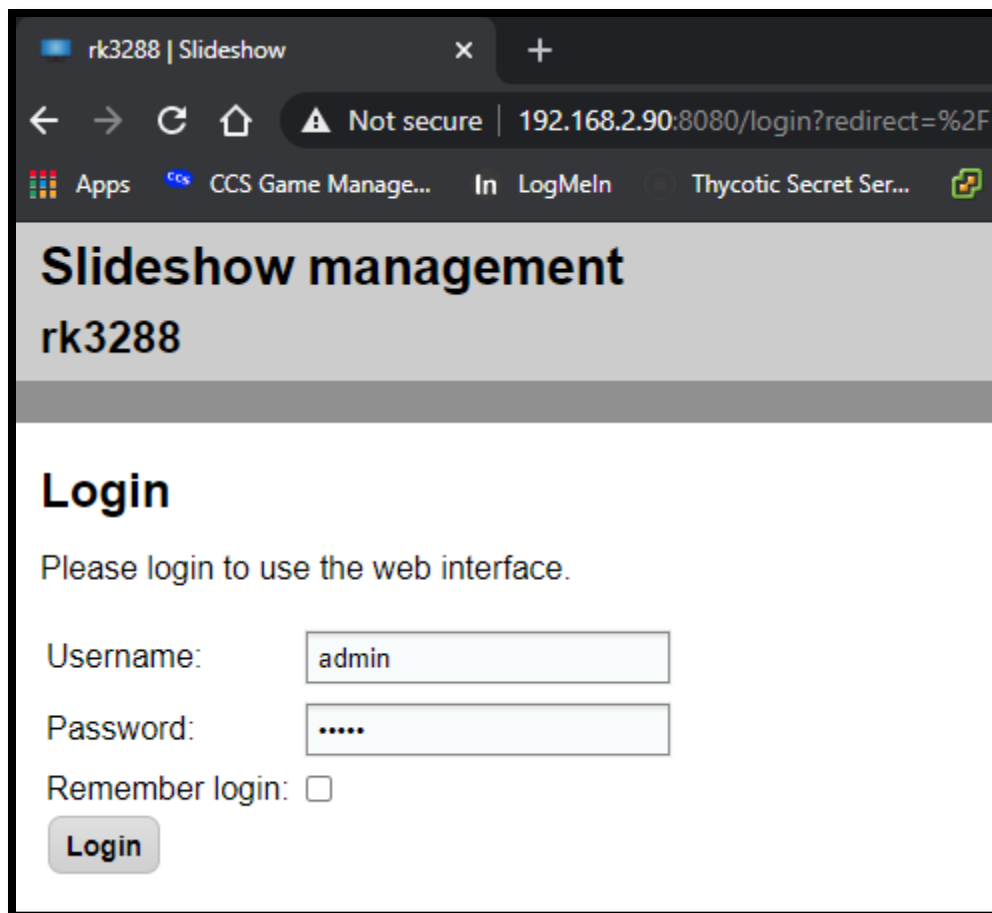
3. Once logged in you will be presented with the main menu. Click the "Tools" menu option, then select "Periodical Download".
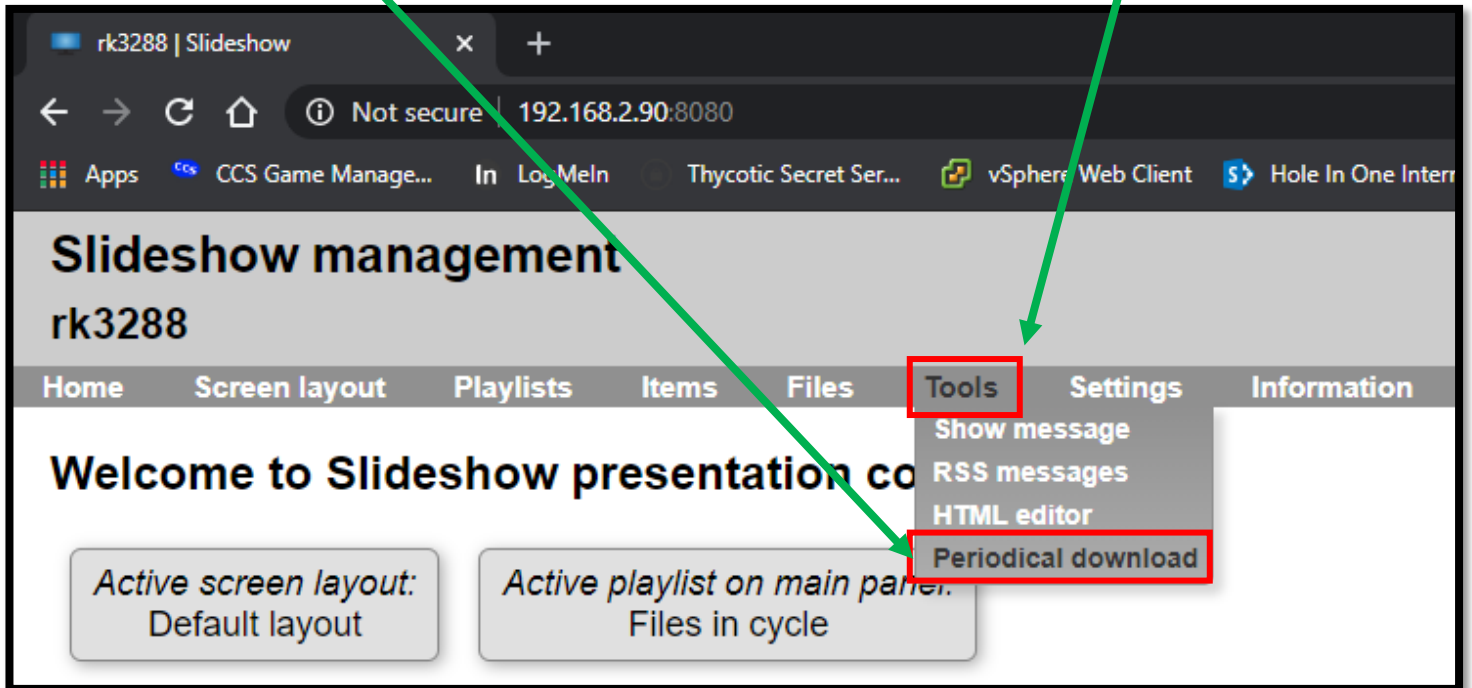
4. The "Periodical download" page is displayed. This page will allow you to program the Clean Hands Kiosk to automatically download slideshow slides from a Google Drive, on a preset interval. From the "Type" drop down box choose "Google Drive. Click the "Login with Google account" button.
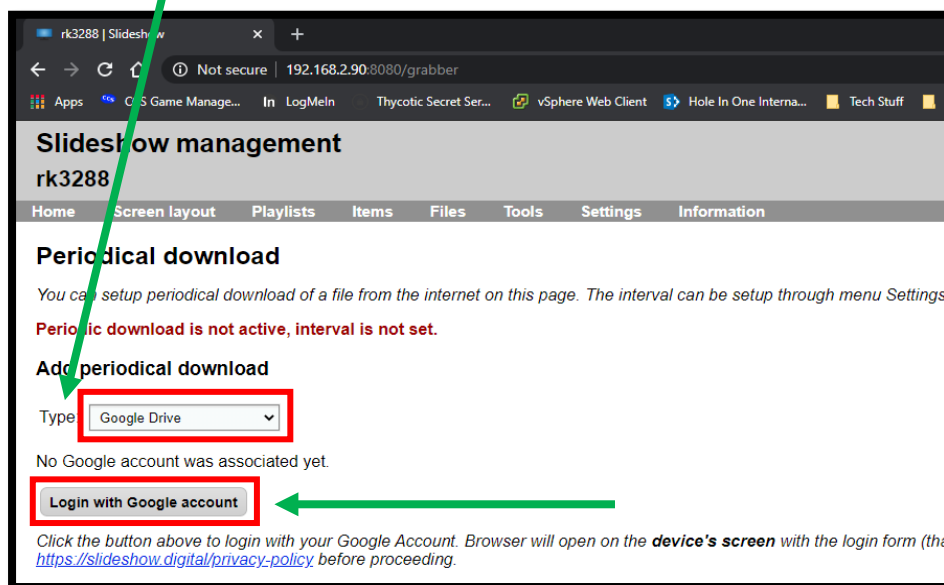
5. After clicking the "Login with Google Account" button it may look like nothing happened, however a new screen appears on the Clean Hands Kiosk. (Left) Select "Chrome" and click "Always". You will be prompted to enter your Google account username and password. Click "Next".
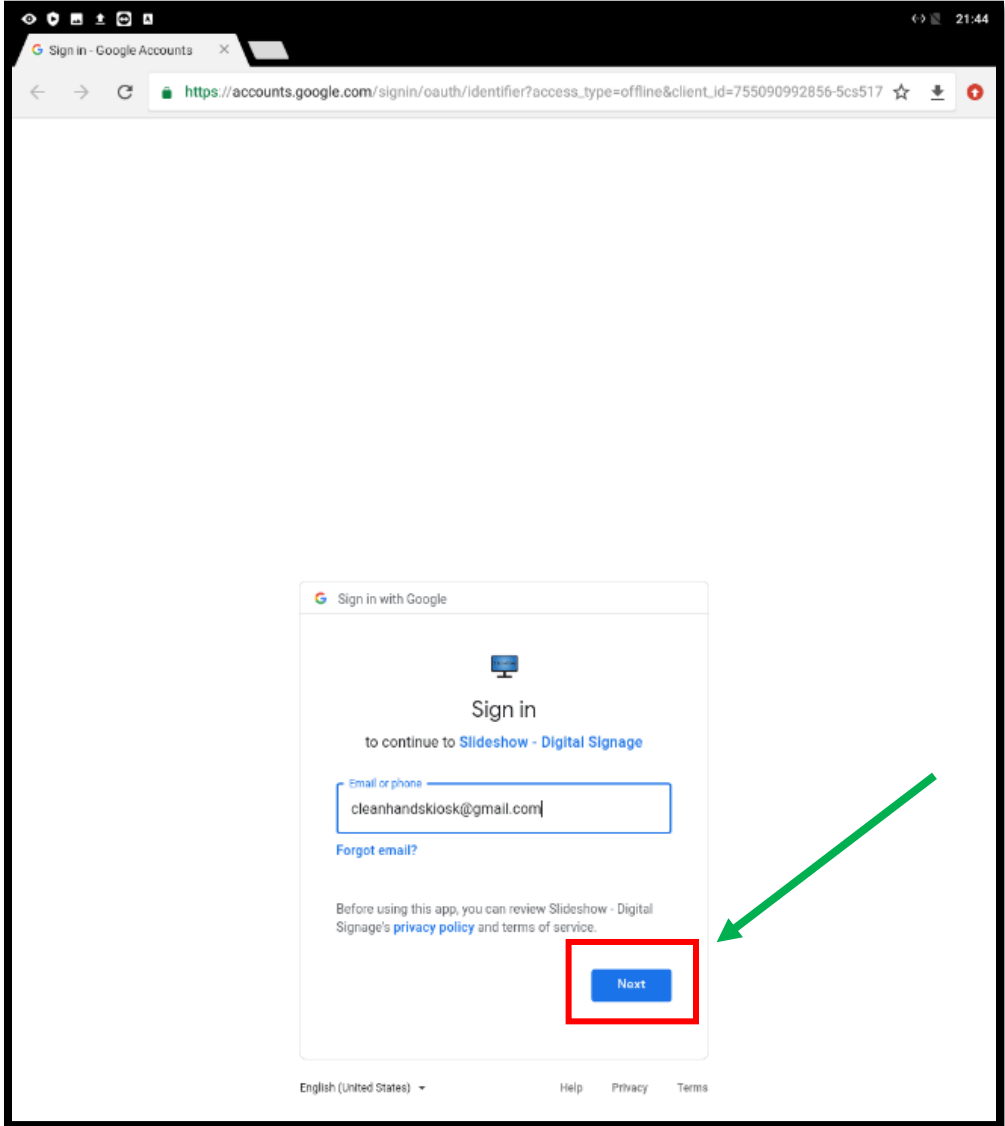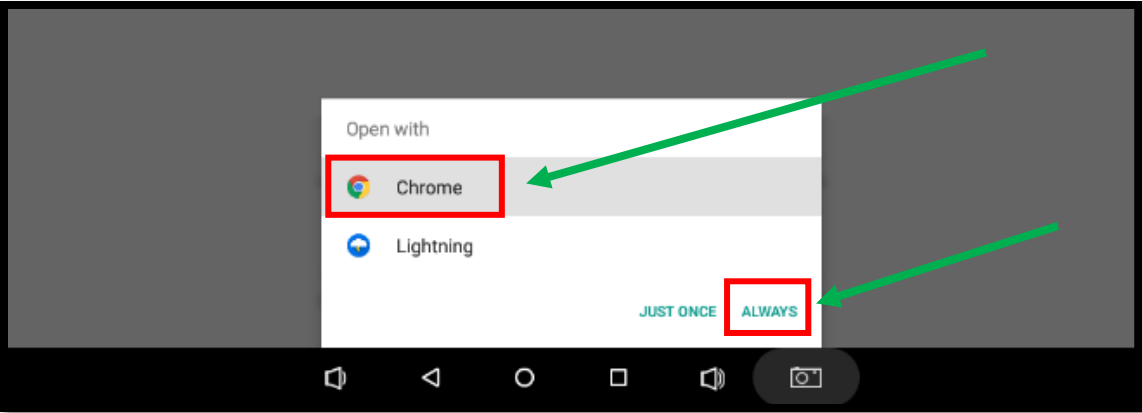
6. After entering your password and clicking "Next", you will be asked to "Grant Slideshow – Digital Signage permission." First, click "Never" at the bottom where Chrome is asking to save your password for this "site". Then click "Allow" to grant permission to access your Google drive. You will be asked to confirm your choices again. Click "Allow".
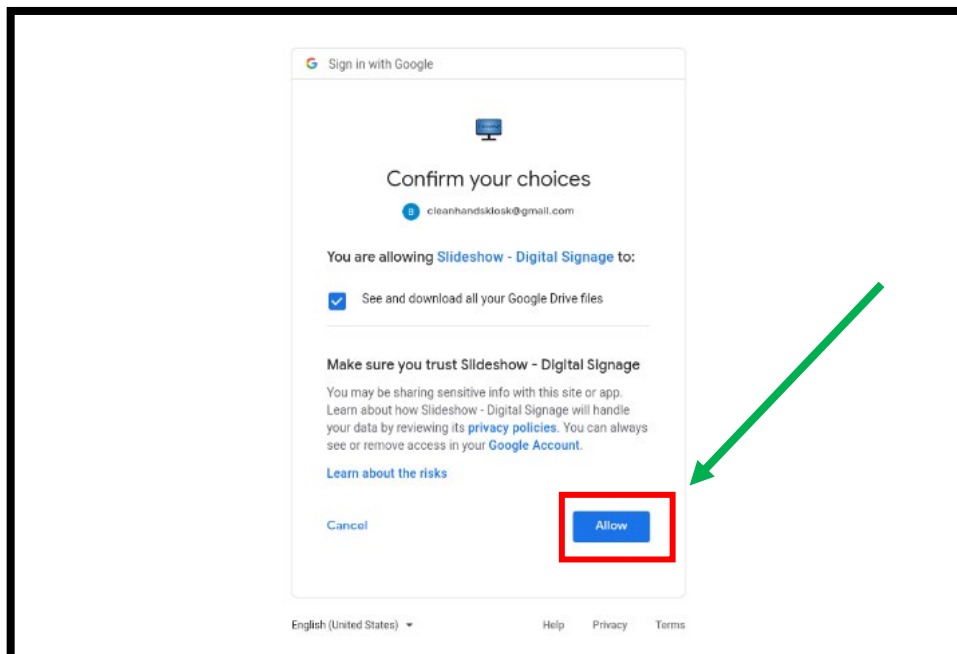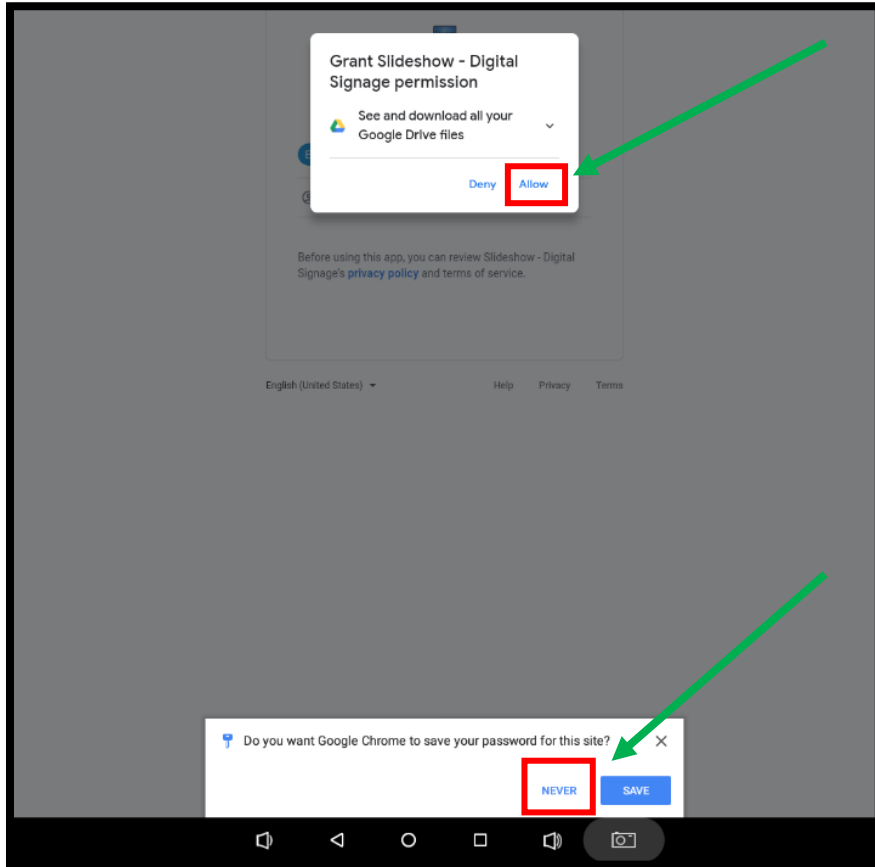
7. After clicking "Allow" the Clean Hands Kiosk will have successfully logged into your Google Drive. Click the empty circle button at the bottom of the screen to return to the desktop. (Circled in red)
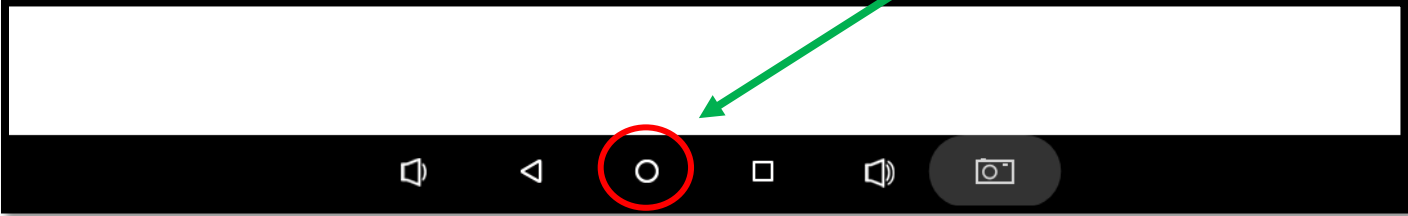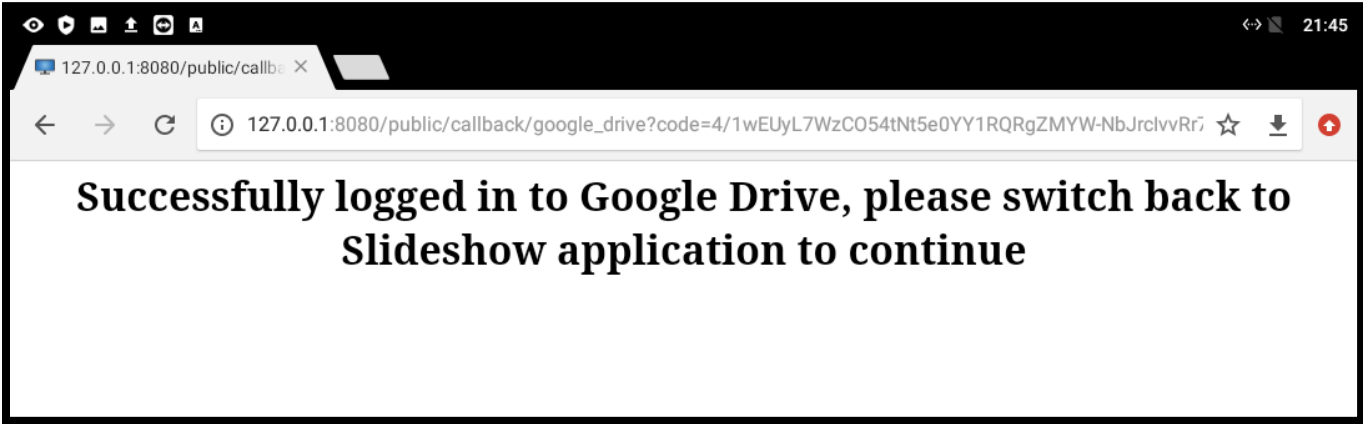
8. Click the large white button at the bottom of the screen to return to the list of apps. Click the Slideshow app icon to return to the Slideshow.
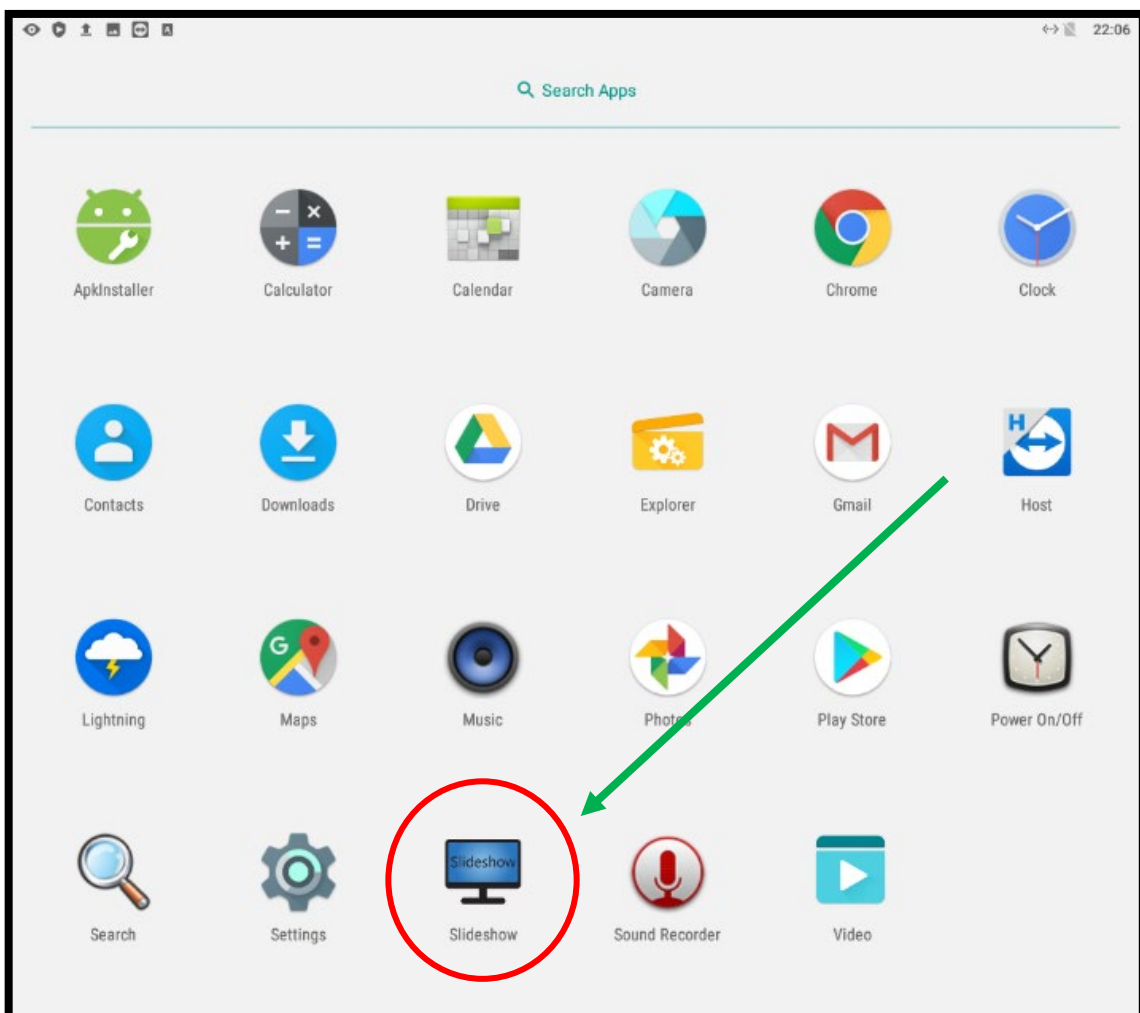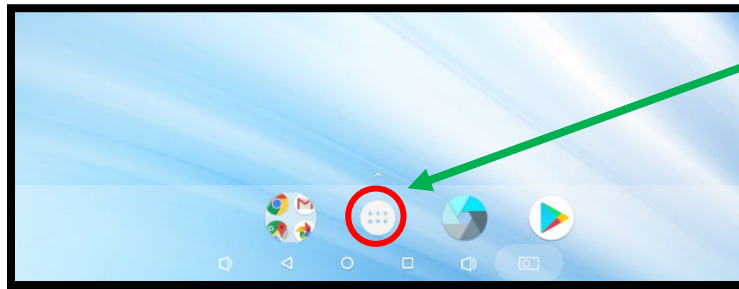
9. From your PC or Mac login to your Google Drive. Go to www.google.com and click the "Google Apps" icon, then click Google Drive.
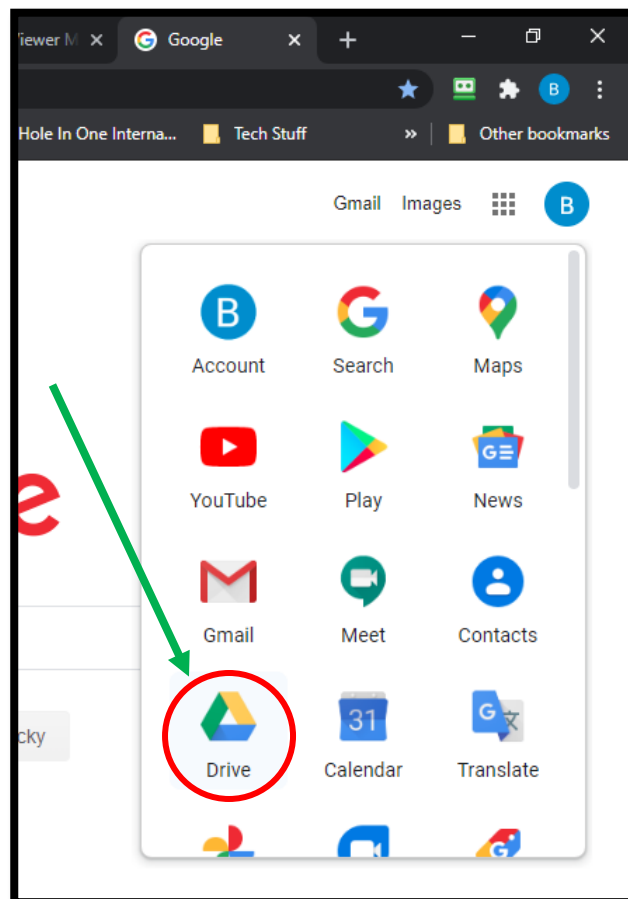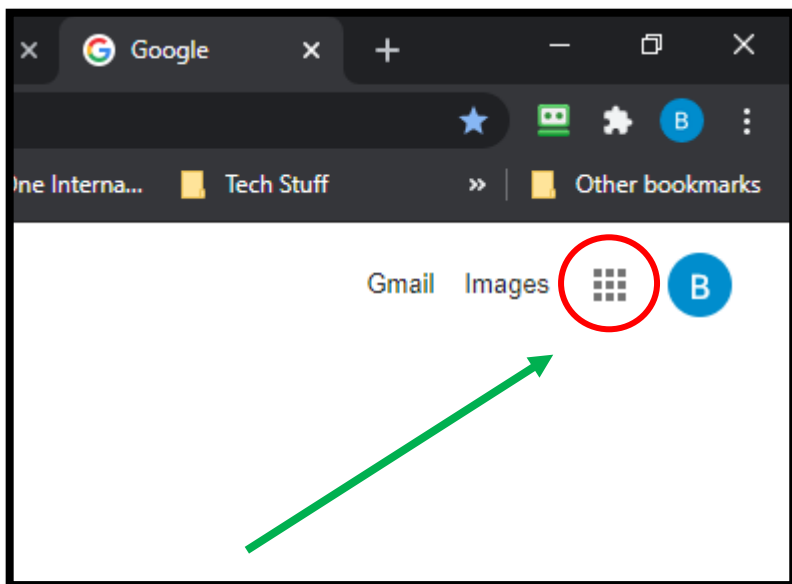
10. The Google Drive interface will display.
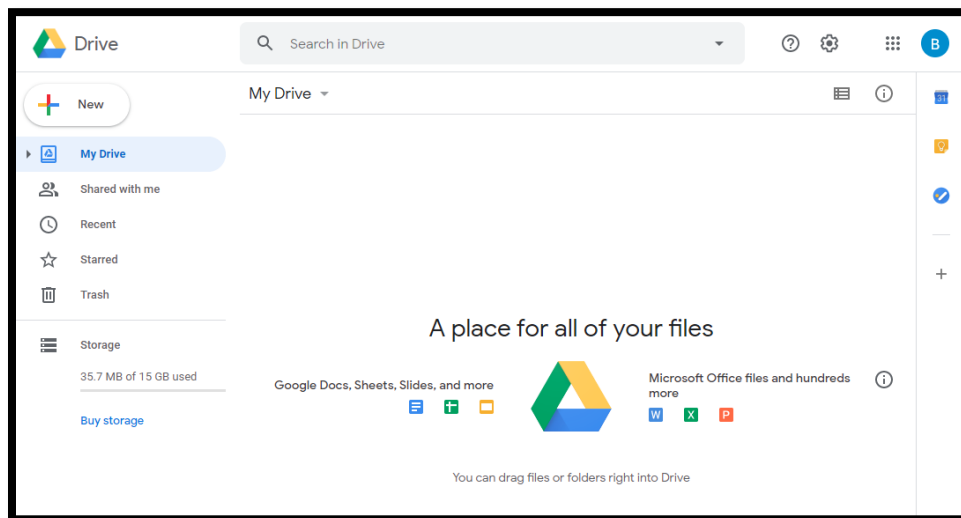
11. Create a new folder in your Google Drive. For this example, the folder will be called "Slideshow". Right click anywhere inside your Google Drive and Select "New Folder".
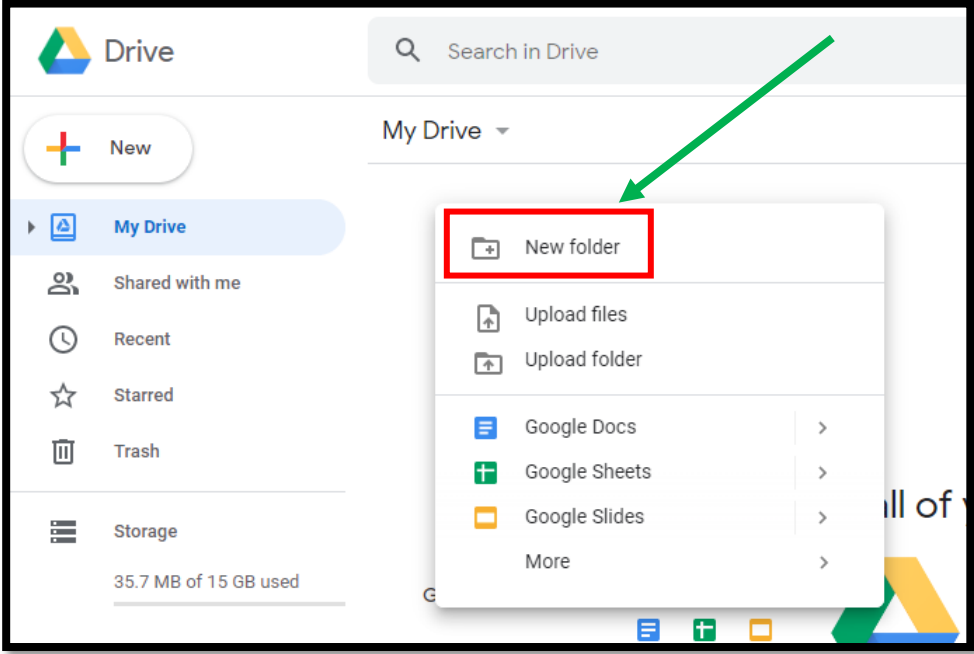
12. Name the folder "Slideshow". Click "Create".
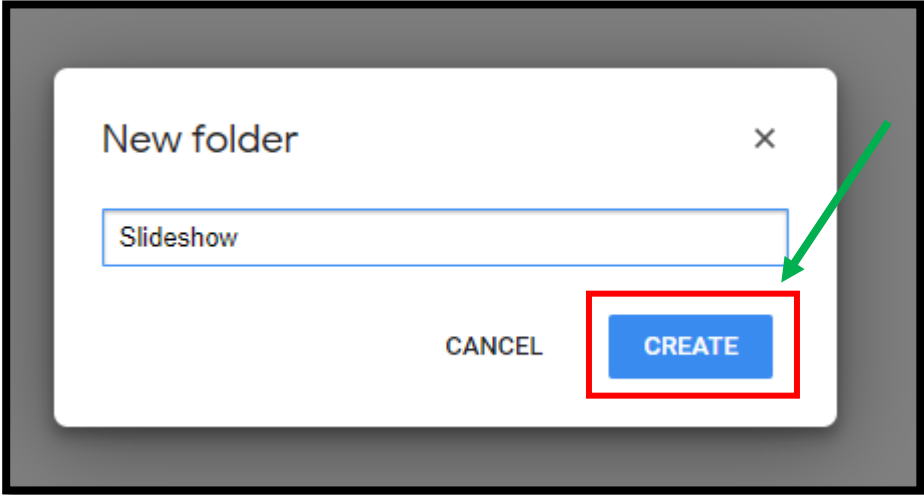
13. Double click the slideshow folder you just created. (Shown on the left). The contents of the folder are empty. (Shown on the right)
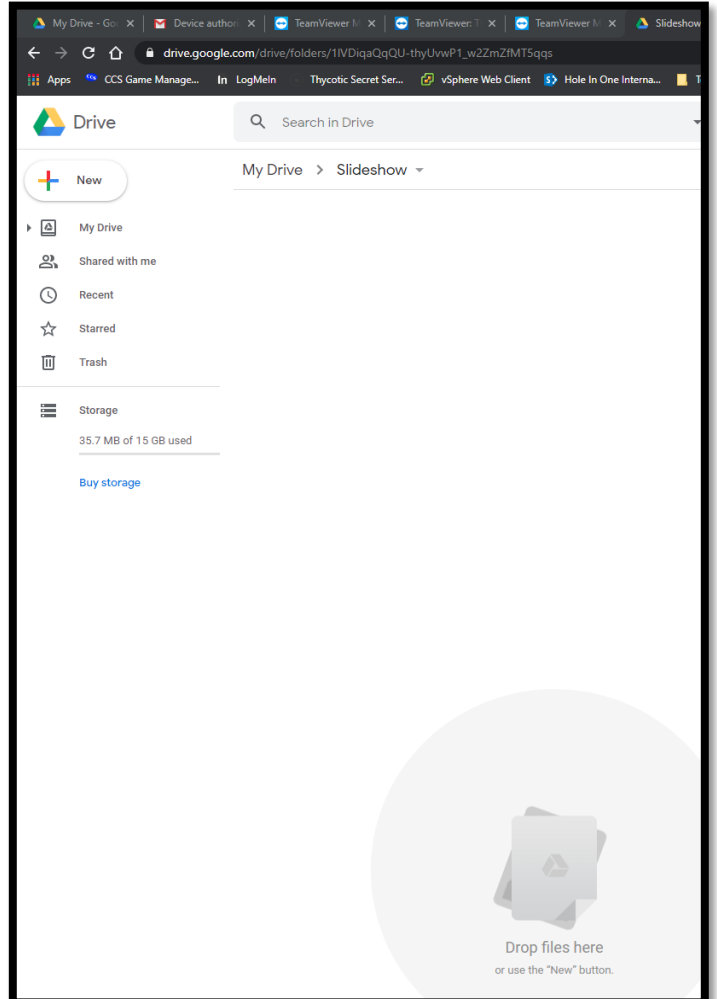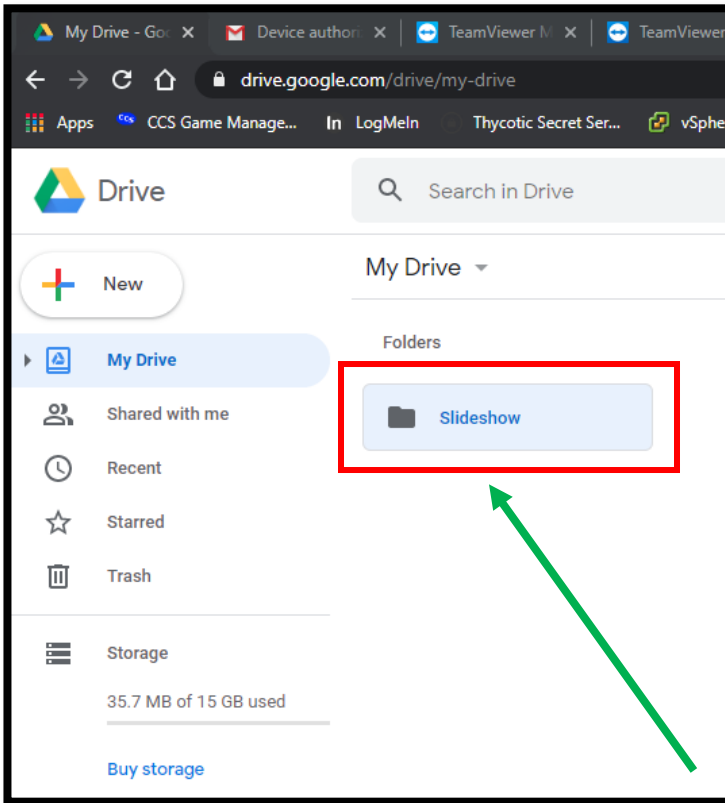
14. You can drag and drop slideshow slides into the slideshow folder on your Google drive or you can right click and select upload files. Populate the slideshow folder with the images you would like the Clean Hands Kiosk to display.
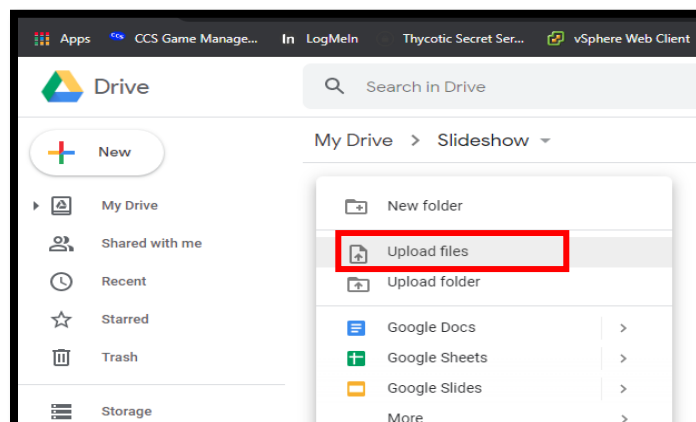
15. Returning to the Slideshow application web interface. You will see some new options to set the folder the Slideshow software will synchronize from. Select the "Slideshow" folder then select the "/" internal folder. Click the checkbox to "clear folder" after every download. Then click "Save"

16. A new entry will appear at the bottom of the page under "List of periodical downloads" click "Download now" to command the Clean Hand Kiosk to immediately download the contents of the slideshow folder on your Google Drive.

17. The Clean Hands Kiosk will now rotate through the slides until you manually click "Download now" again or "Update". If you wish to configure the kiosk to automatically download the contents of the Google Drive folder on a set time interval continue to the next section.

Configure Download Interval

It may be desirable to configure a download interval to command the kiosk to automatically clear and redownload the contents of your Google Drive folder. This is useful if you have several kiosks and wish to update them all at once by updating the contents of your Google Drive. After the download period elapses the kiosk will clear all the slides stored in memory and re-download the contents of the Google Drive. If no changes are made to the contents of the Google Drive the same slides will download and continue to display.

1. Click the "Settings" menu, then click "Device Settings".

2. The "Device Settings" is displayed. Set a value for the "Download interval" setting in number of seconds. For this example, it is recommended to set the interval to 60 seconds. This means the slideshow app will automatically re-download the contents of the slideshow folder on your Google drive every 60 seconds. You may set this interval to whatever you want. If no changes are made to the contents of your Google drive folder, the same slides will continue to display on the kiosk. If changes are made, the kiosk will automatically display the new slides after the download interval time elapses. Click "Save" when finished.

3. After clicking save it is necessary to restart the slideshow application for the changes to take effect. Click the "Settings" menu and click "Reboot / Reload".


4. The Reboot page is displayed. Click the Reload application button to restart the slideshow application so the changes can take effect.
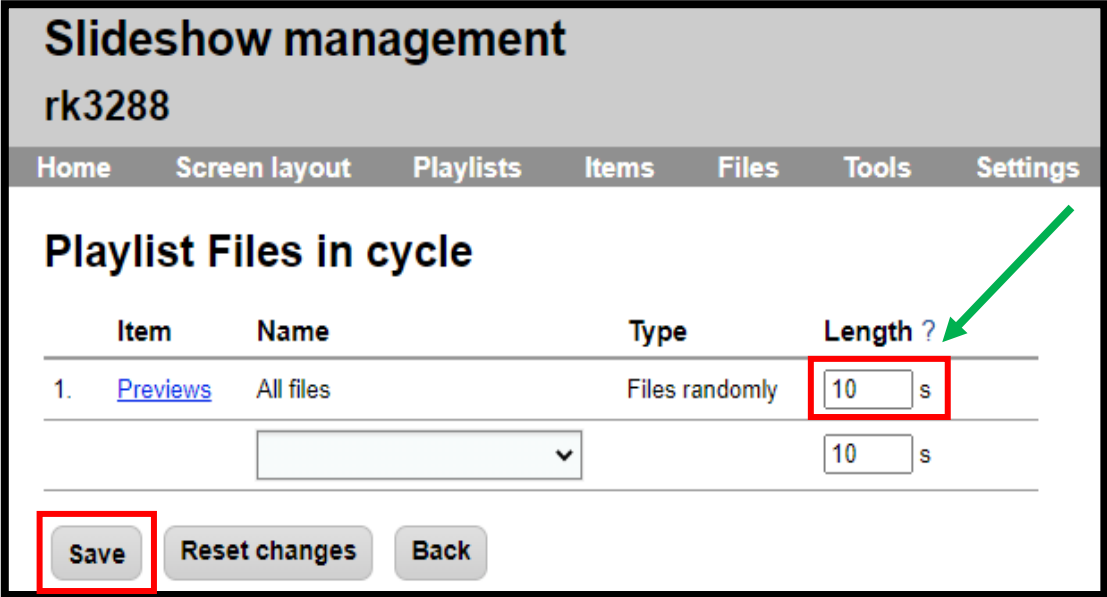
Image Transitions

The slideshow application can render animated slide transitions. You can also configure the amount of time each slide is displayed.

1. From the slideshow application web interface click the "Playlist" menu option. Then click "Edit items in playlist".
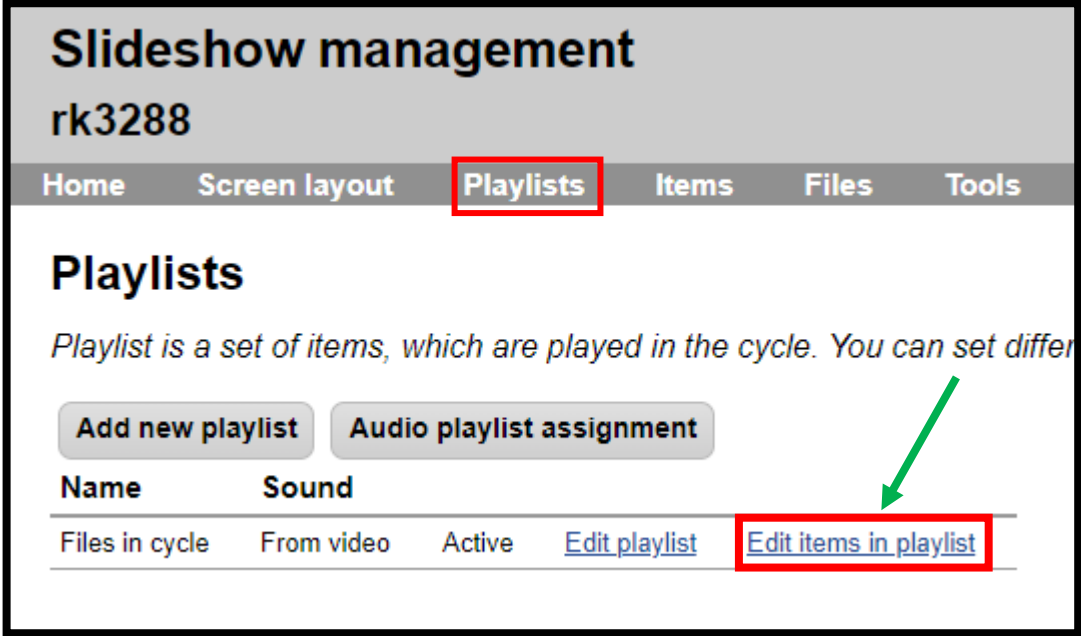
2. Adjust the "length" setting to whatever you desire. The default is 10 seconds. Click "Save" when finished.

1. To configure animated slide transitions, click the "Screen layout" menu option. Then click "Edit screen layout".
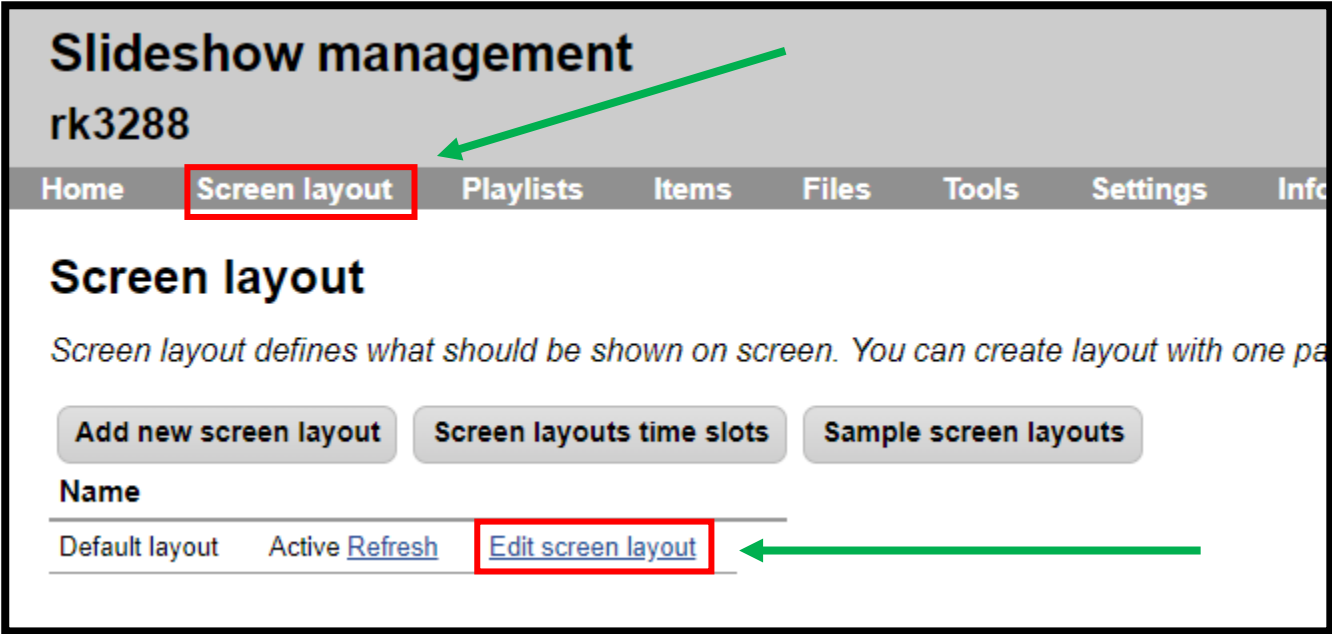
2. Select "Random" from the "Animation type" drop down box and set the "Animation length to 2000ms. Scroll all the way down to the bottom of the page and click "Save".

Troubleshooting

Rotate the Display

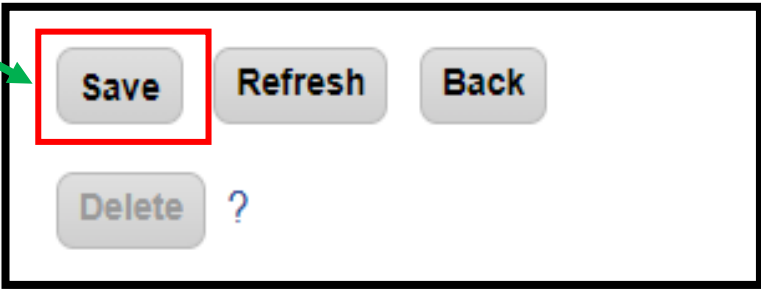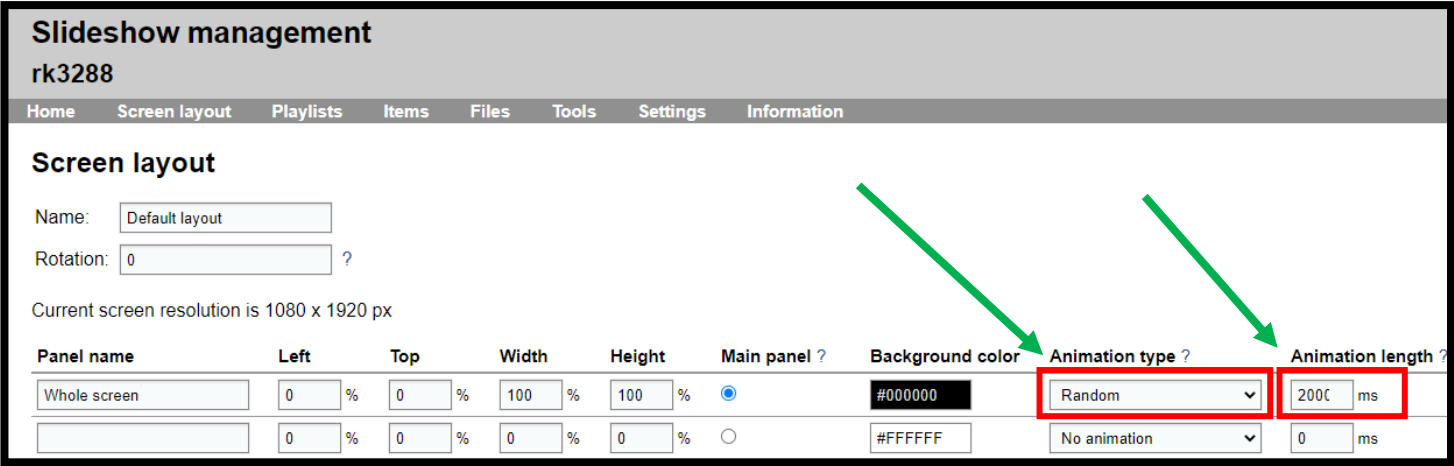In some cases, the Android user interface may display in landscape mode on a portrait display. Everything on the screen will be rotated 90 degrees. To correct this problem:

- Plug in a USB keyboard & mouse combo or just a USB mouse.
- Navigate to the settings app
- Click "Display"
- Click "HDMI"
- Click "HDMI Rotation"
- Choose 270

The display will rotate into portrait mode and everything should look normal again.

Slideshow Keyboard Shortcuts

There are some keyboard shortcuts that can be useful when working with the Slideshow – Digital Signage App. To use these keyboard shortcuts a USB keyboard must be plugged into the Clean Hands Kiosk and the Slideshow – Digital Signage App. must be running.

Key	Function
A	Show software settings
B	Beep (test for speakers)
D	Show display settings
H F S	Show help
I	Show information about the device
R	Reload the application (close & reopen
S	Show Wi-Fi Settings
W	Show advanced settings, which is basically the same as the web interface

Slideshow – Digital Signage App for Android Official Documentation

The Slideshow – Digital Signage Android application has many functions and features. To review the official software documentation please visit https://slideshow.digital/documentation/ for more detailed information.