

Service & Maintenance

serv·ice *verb*: perform routine maintenance or repair work

main·te·nance *noun*: the upkeep of property or equipment

Version 1.26.17

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Importance of Thorough Service & Maintenance

The CTM Way

We care about the satisfaction of our location partners—they are integral to our success and deserve exceptional service.

ExploreBoards should always be perceived by our location partners as a valuable, useful and necessary resource to enhance their guest /customer experience.

We commit to delivering a superior experience to our clients and partners—a pursuit of excellence in our daily interactions.

Our ExploreBoard experience should be the “best in class” visitor information solution on the market today. Damaged or malfunctioning equipment in the field is unacceptable.

We care about the success of our clients—our goal is to deliver value and drive results.

Visitors should find ExploreBoards welcoming and inviting, excited to interact with high quality and relevant local information. To achieve valuable (and trackable) usage reports and deliver a high return on each client’s investment, the most up-to-date client content should always be appearing on ExploreBoards located in high profile, heavy traffic locations

We embrace open and transparent communication and feedback.

We rely on your constant feedback to understand how our screens are performing in the field.

We recognize that success comes from a relentless passion for creativity, innovation and improvement—empowering us to drive positive business results every day.

Your feedback and constant communication helps us continually improve our equipment, products and services.

We recognize that doing things the right way is the only way —and is always rewarding.

We understand that the investment of our time and attention to providing high quality service visits is rewarding for clients, visitors and host partners

Toolkit:

Paper Towels

Do not use anything that could scratch the glass on the screens. Microfiber cloths may also be used, and do a nice job of removing lint from the glass.



Compressed Air Can

Do not shake the canister



Glass Cleaner

Any glass cleaner may be used. Spray the cleaner on the cloth or towel and not directly on the glass. Any liquids leaking into a non-sealed unit may cause damage.



Remote Control

With working batteries... Some screens have input and volume controls blocked by the frame on the stand and will require remote control access for any screen adjustments.



NEC screens have a detached remote control you will need to bring. Many ELO screens will have a remote already attached to the screen by a cord. Newer ELO models do not have (or require) a remote control.

Allen Wrench

To access the player inside some stands



Service Visit Checklist

Visual Inspection:

Before starting any maintenance, observe the stand placement, connections and document any problems by photo or video.

- Has the stand moved or been relocated?
- Is the screen content appearing properly?
- Inspect the cords and visible connections for wear and safety.

Inspect & Clean the Stand:

- Clean the base of the stand.
- Check the visitor information decal for wear/damage
- Remove the cover (if applicable) to access player

Service the Player:

- Turn the player off and clean the player and surrounding area
- Confirm secure connections from player (to screen and to internet)

Clean the Screen & Frame:

- Turn the screen off and inspect screen for damage
- Clean screen and frame while it is black/off
- Once cleaned, turn screen and player/tablet back on
- Confirm the start up/loading message for any errors (only green—no red checks—on loading screen)

Confirm Internet Connectivity:

- Test the host profile for maps loading properly
- Send e-mail and text message to Ops Manager
- Reattach the stand cover (if removed to access the player)

Document Your Visit:

- Xora photos after cleaning: (#1) Black Screen/Tablet turned "off" (#2) Player -not needed for tablets (#3) Full screen/stand turned back "on"
- Notify Ops Manger of any outstanding issues

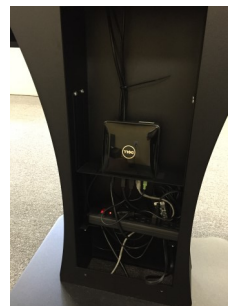
Documenting Visits:

#1) Photo of Cleaned Screen



Take photo when "off." The black screen allows us to better confirm the screen's condition.

#2) Photo of Cleaned (Exposed) Player Area Inside Stand

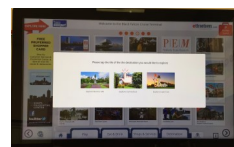


Please try and take sharp (not blurry) photos.

ExploreBoard tablets do not have a player, so proceed directly to photo #3 when servicing a tablet location.

#3) Photo of the Entire Stand (or Tablet) After Reboot

Please take a photo of whatever is appearing as the default home screen content at the location.



Please try and take a sharp (not blurry) photo. This may be difficult depending on lighting, but it helps us see that content has loaded properly.

Visual Inspection

Thorough service and maintenance visits are critical to providing a “best in class” visitor information platform.

Damaged or malfunctioning ExploreBoard equipment in the field is unacceptable. Please document (by photo/video) and report any irregularities immediately.

Host Partners:

Location partners should see our commitment to quality and be proud to host an ExploreBoard.

- *How does a dirty or damaged board reflect on their business?*
- *How does this blend in with their location? Are cords hidden?*
- *Is the “welcome” message and host logo/profile up-to-date?*
- *Is the board being used regularly?*
- *Is the board routinely moved or unplugged by their staff?*
- *Have they moved our board to a less prominent location?*

Visitors:

ExploreBoards should be located in a high traffic area that invites the visitor to interact with the touch screen.

- *Does the screen look sanitary enough to use?*
- *Is anything blocking the visitor’s access to the board?*
- *Is it obvious that this touch screen provides local visitor information?*
- *Is the “touch” working properly? Quick response time?*

Clients:

When a client approaches an ExploreBoard, do they see our attention to detail and commitment to showcase their business through a “high def” experience.

- *Is the screen easily viewed by visitors passing by?*
- *Are profiles loading quickly?*
- *Are maps, directions and send-to-me features working?*

Look for:

Has screen been moved or relocated since the last service visit?

Notify your Operations Manager if there is a change in location that will affect the performance and/or internet connection

Cord Connections

Are cords strained, stressed or out in the open where a user could trip or easily pull the cord out?

Rust / Damage

Has the base sustained any damage or scratches from being moved around?

Screen Problems

Uneven brightness or dark spots?

Missing Parts

Has any equipment, including screws, gone missing?

Missing Images/Content

When approaching the screen, the content should be rotating out every 8-10 seconds. Is any content blank or is the board getting stuck open on any screen?

Visitor Info Decals

Is it obvious that our screen provides visitor information?

Servicing Stands: Cleaning

Stands are sometimes moved by our host partner's staff and can become unplugged or disconnected between service visits.

Confirm Stand Placement & Set-up:

- Confirm that the ExploreBoard is plugged in and all cords are not showing any signs of wear/strain.
- Has the stand been moved?
Ensure that the screen is easily viewed by visitors in the area.
- Check for any missing parts (screws, panels, etc.)

NOTE: ExploreBoard stands come in a variety of stand models and sizes.

Clean the Base of the Stand:

Remove dust entirely.

(Do not just brush it back on the floor.)

Check on the Visitor Information Decal:

If your stand has a decal, be sure it is intact and is not peeling. (No missing letters, please)

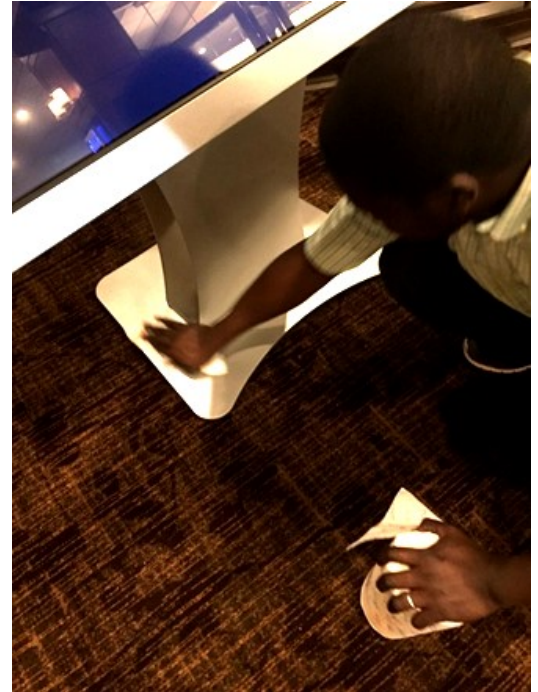
Remove any Panels to Access the Player:

You will likely need an Allen wrench for this step.

On a routine service visit, your goal is to remove dust/debris and visually inspect the wires and connections for damage.

You should not need to take apart the entire set-up or cut any zip-tied cables to inspect the connections and clean inside.

NOTE: Do not reattach the back panel to the stand until an internet connection is confirmed in a future step...



Servicing Players: Cleaning

Players are both the “heart” and “brains” of the ExploreBoard. These computers must be properly connected to a power source, to the internet, and require two connections to the touch screen for all systems to function properly.

There are several different models/sizes of players depending on the age of the equipment and type of screen being used.

Turn Both the Player & Screen Off:



NEC Screens :
Standing in front of the screen, find the power, menu and input buttons (for 42", 32", and 19") located on the bottom right of the screen .

ELO Screens:
Standing in front of the screen, reach behind the bottom right to access menu and input buttons Press these two buttons simultaneously to bring up the menu and make changes.

Carefully Clean the Player & Surrounding Area and Document with a Xora photo

Use paper towels and air canisters to remove all dirt and dust. The fan area needs to be cleaned and set into a spot where air is circulating in order to keep the player from overheating. Some players do not have fans. In this circumstance, simply clear any dust from port areas using your air canister.



Turn the player off before cleaning it.



Players quickly collect dust and debris.



Ensure the player is free of debris so air can circulate and keep the player from overheating.

Servicing Players: Confirming Connections

To function properly, the player requires several successful connections.

Check the Power Source Connections:

1. Confirm that the screen has power
2. Confirm that the player has power
3. If applicable, confirm that the router has power



RP505 Media Players



RP 900 Media Players



RP 915 Media Players



RP 930 Media Players

Check the Ethernet Cable (Internet) Connection:

Hard-Line Connections:

Confirm that player is connected to the wall or switch that is hard-wired to the host's internet network.

WiFi Connections:

WiFi connections require a strong wireless network signal to access the internet. Confirm that player is connected to the WiFi Router.

3G Connections:

3G accesses the internet through the same cell/radio towers providing voice service to your phone. Just like a smartphone, 3G (USB) sticks require a designated phone number and paid monthly service plan. Confirm that player is connected to the router and that the 3G stick is inserted in the router's USB port to acquire the signal.



ETHERNET CABLE & ETHERNET PORT:

Ethernet cables support a high speed internet connection between players, routers and wall ports.

Wi-Fi Only Connections:



CISCO LINKSYS ROUTER:

The router (box) needs to be connected to a power source. The Ethernet cable needs to be connected from the player to the router's single port.



NETGEAR WNCE3001 ROUTER:

The router (box) needs to be connected to a power source. The Ethernet cable needs to be connected from the player to the router's single port.



ENGENIUS ROUTER:

The router (box) needs to be connected to a power source. Ethernet cable should be connected from the player to the router's Port1 to the player.



IOGENIUS ROUTER:

The long router (box) needs to be connected to a power source. Ethernet cable should be connected from the player to the router's only port.

Wi-Fi-OR-3G Connections:



TP-LINK ROUTER:

The router (box) needs to be connected to a power source. Ethernet cable should be connected from the player to the router. **Can be used as a Wi-Fi or 3G device (with activated USB 3G stick)**



TOP GLOBAL ROUTER:

The router (box) needs to be connected to a power source. Ethernet cable should be connected from the player to the router's single port. **Can be used as a Wi-Fi or 3G device (with activated USB 3G stick)**

Servicing Players: Confirming Connections

To function properly, the player requires several successful connections.

Check the Screen Connection to Player:

1. All screens and all player models use a USB cable connection for the “touch” function to work.
2. Depending on screen and player models, there are several options to connect the screen and player for content to appear.



RP505 Media Players can accept only HDMI cable inputs..



RP 900 Media Players can accept HDMI, DVI and VGA cable inputs.



RP 915 Media Players can accept HDMI or DVI cable inputs, *but not* VGA cables.



RP 930 Media Players can accept HDMI, DVI and VGA cable inputs.

In the event that a screen using a VGA cable needs to be connected to an RP915 or RP930 player, use a DVI/VGA adapter to connect.

Check the Player’s Connection for Sound:

Depending on the host location’s preference, sound/speakers may be enabled for profile videos. (Some locations may not want sound.)

- Insert the Audio Cable to the spot marked for headphones on the RP505 players. Otherwise, insert the cable to the port with the matching color on the screen.
- If sound is activated, speakers are incorporated in the screen itself and volume can be controlled through remote or buttons/settings.
- If sound is activated, always confirm the volume!



USB CABLE & USB PORT:

USB cables will connect ALL PLAYERS to ALL SCREENS for the touch feature to work properly.



HDMI CABLE & HDMI PORT:

HDMI cables support high definition digital content from the player to the screen. All ELO screens and most NEC screens will have an HDMI option



DVI CABLE & DVI PORT:

DVI cables support both analog and digital content from player to screen and has pins. Some NEC and older ELO screens will use this cable.



VGA CABLE & VGA PORT:

VGA cables support analog content from the player to the screen. Some NEC screens will use this cable.



DVI TO VGA ADAPTER:

Connect a VGA Screen to a DVI Player. (RP505/RP915)



AUDIO SOUND CABLE & AUDIO SOUND PORT:

Color coded (usually green) this cable will connect the player to the touch screen. The speakers and volume controls are activated through the screen.

Servicing Screens & Tablets: Overview

Thorough service and maintenance visits are critical to providing a “best in class” visitor information platform.

Damaged or malfunctioning ExploreBoard equipment in the field is unacceptable.

Host Partners:

Location partners should see our commitment to quality and be proud to host an ExploreBoard.

- How does a dirty or damaged board reflect on their business?
- How does this fit in with their lobby? Are cords hidden?
- Is the “welcome” message and host logo/profile up-to-date?
- Is the board being used regularly?
- Is the board routinely moved or unplugged by their staff?
- Have they moved our board to a less prominent location?

Visitors:

ExploreBoards should be located in a high traffic area that invites the visitor to interact with the touch screen.

- Does the screen look sanitary?
- Is anything blocking the visitor’s access to the board?
- Is it obvious that this touch screen provides local visitor information?
- Is the “touch” working properly? Quick response time?

Clients:

When a client approaches an ExploreBoard, do they see our attention to detail and commitment to showcase their business through a “high def” experience.

- Is the screen easily viewed by visitors passing by?
- Are profiles loading quickly?
- Are maps, directions and send-to-me features working?

Look for:

Fingerprints:

A dirty screen discourages use



Debris/Crumbs/Dust

High traffic areas and locations in lobbies (especially near doors) can accumulate dirt quickly in any exposed areas



Scratches

Look for any damage to the screen’s surface



Irregular shading or spots

Are there any parts of the screen that are preventing quality viewing



Servicing Screens: Cleaning

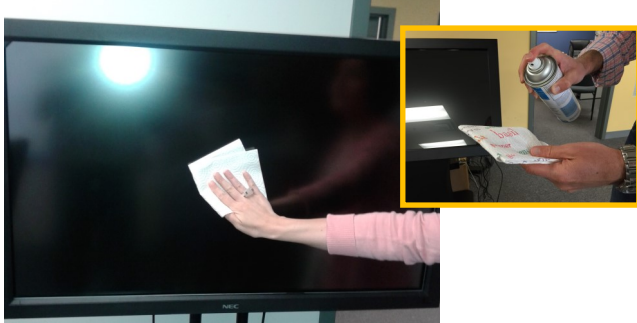
The “touch” feature works differently depending on the screen brand and model.

NEC screens use sensors in the corners to detect a break in an infrared signal (that overlays the screen) when a user touches it.

ELO screens have a surface wave overlay transmitting from all sides, activated (broken) when a user touches it.

While the board is dark, inspect for damage and clean it thoroughly with glass cleaner sprayed on the cloth or towel (not on the screen.)

Grease or dirt left on the screen can mimic a user’s touch to break the signal and record “over-touching” to specific profiles, causing false usage data to be reported.

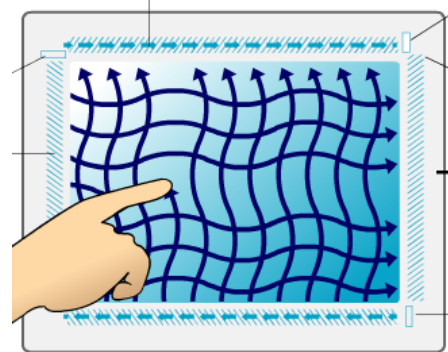


Using the air canister (and towels if necessary,) clear any dirt that has accumulated within the frame, removing any debris blocking the NEC’s corner sensors and recording false usage.



If there is a wide gap between your screen and the frame, contact Etractions or your Operations Manager for spacers to tighten up the exposed space.

After cleaning, document the visit by taking a Xora photo with the screen still “off.”



ELO screens have infrared surface waves transmitting from all sides that break the signal at the user’s touch to trigger a response.



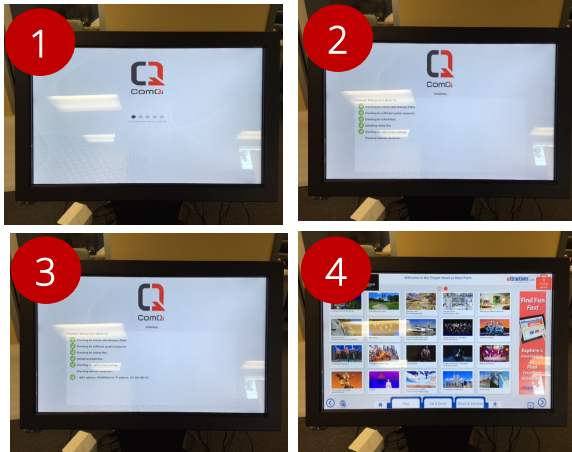
NEC screens use corner sensors triggered at the user’s touch to activate/record screen usage. Any debris lodged here can record false activity. Clean these sensors VERY carefully and thoroughly.



Debris accumulates in the frame. Clean thoroughly.

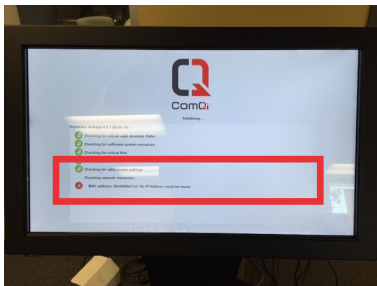
Servicing Screens: Connections

Turn the screen and player back on and watch the front of the screen to confirm all the connections on the ComQi loading screen. **NOTE: This is different for tablets)**



Look for all green check marks:

- ✓ Checking for critical valid directory paths
 - ✓ Checking for sufficient system resources
 - ✓ Checking for critical files
 - ✓ Validating media files
 - ✓ Checking for valid screen settings
- Checking network resources:
- ✓ MAC ADDRESS: 00e0666be732. IP address 192,168,100163



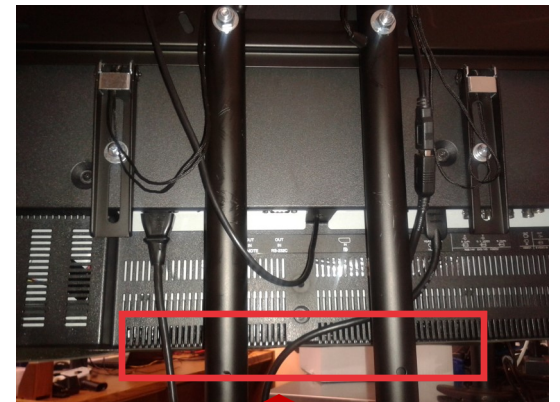
If you have any "red x" comments on the screen, proceed to troubleshooting or alert your Ops Manger

X

Once everything has loaded properly, document your visit with a Xora photo of the entire screen/stand when it is back "on." Proceed to testing the connectivity...



Black spots on NEC screen. This is not dirt. This generally means the screen is nearing end of life.



The cable and power source connections to the NEC screens are accessible underneath the screen



Newer ELO screen models will have their cable and power source connections *vertically* accessible on the back side of the screen.

Servicing Tablets: Cleaning

ExploreBoard tablets do not have a separate player and are usually set up on a single stand. Visually inspect the equipment, cords, plugs, location and screen content prior to cleaning the screen.

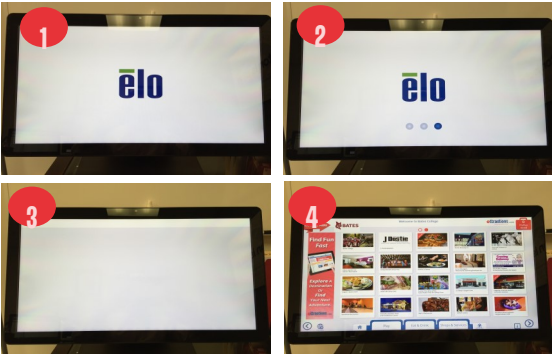
1. Power off the tablet

- Slide the panel off the back of the tablet
- Unplug the tablet to disconnect
 - *There is no on/off switch on the tablet*
 - *Depending on the location of the tablet at the host location, you may not have access to the power source*

2. Clean the screen while it is off/dark.

- Clean dust/debris from frame and any connections using the air canister.
- Spray glass cleaner on the cloth or towel. No liquids should be poured or sprayed directly on the screen.

3. Plug the tablet back in and watch it reboot to the home screen content



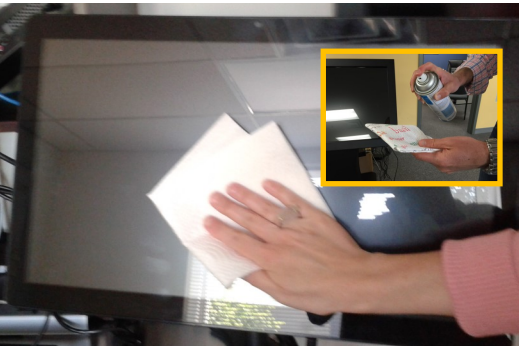
4. Document your visit with a Xora photo of the entire tablet when it is turned back “on”



Slide off the rectangular panel on the back of the tablet



Pull the plug out of the back of the tablet.



Clean the screen while it is turned off. No liquids should be sprayed directly on the screen. Spray the glass cleaner on the cloth and clean thoroughly.

Confirming Functionality & Connectivity

ExploreBoards rely on a constant and stable internet connection to function properly.

Usage Reporting:

We track every ExploreBoard interaction and touchpoint and the number of times ads and screen take-overs appear. A stable internet connection is necessary to pull hourly performance reports from each location.

Content Updates:

Ettractions client content can change daily. Profile and advertising files are updated and loaded nightly. ExploreBoards reboot daily at 6 a.m. EST to load any new files and data pushed through the night before.

If an ExploreBoard location is not connected to the internet, updates are not received. Potentially outdated profile and ad content will continue to appear from the last time the daily update was successfully received.

Maps & Directions:

Ettractions platforms are “geo-aware” and use Google maps to generate maps and provide on-demand directions for the visitor from their current location to a client’s business.

If an ExploreBoard is offline, the Map & Directions feature will not work. Maps will not load for the visitor, even if other profile content is appearing. It is critical that this feature be tested during each service visit to confirm the internet connection.

“Send-to-Me” Feature:

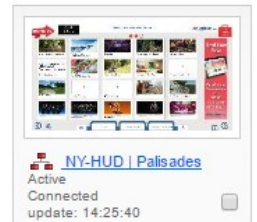
A popular ExploreBoard feature is the ability for the visitor to send specific profile client profile information from the touch screen to their e-mail or mobile device.

This feature only works when the screen is connected to the internet. It is critical that this feature be tested during each service visit to confirm the internet connection.

Look for:

Missing Photos or Images:

If tiles or ads are missing, this may indicate a weak connection. Sometimes the thumbnail image or ad space may have a small question mark in place of the image.



Maps & Directions:

If maps do not appear on the ExploreBoard, that board is likely offline.



Send-to-Me by Text Message:

Sending a text message to your Operations Manager will confirm your service visit and internet connectivity



Send-to-Me by eMail Message:

Sending an e-mail message to your Operations Manager will confirm your service visit and internet connectivity



Confirming Functionality & Connectivity

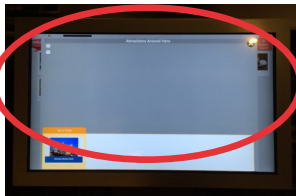
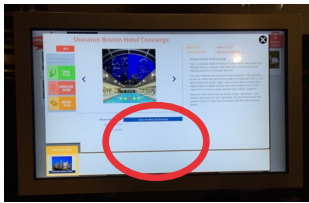
Map & Directions:

1. Touch the **“Explore Here”** arrow located on the top left of the ExploreBoard home screen to open the host location’s profile.
2. Below the photo box, select **“Tap to See Map & Directions”**

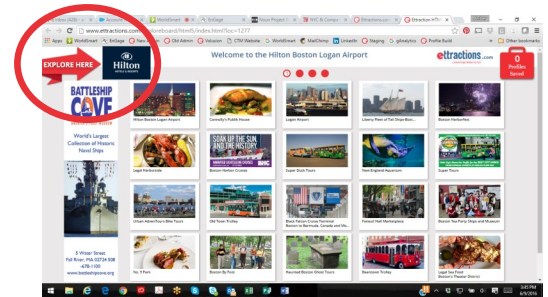


NO MAPS? UH-OH, NO INTERNET!

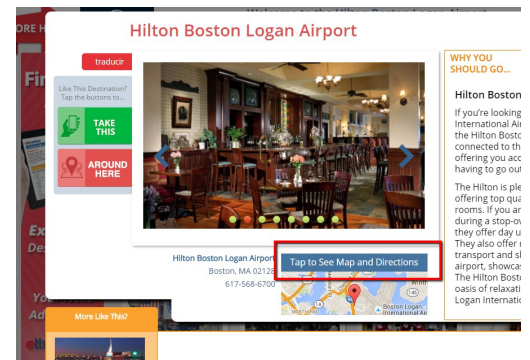
Contact your Operations Manager or Ettractions Support to resolve.



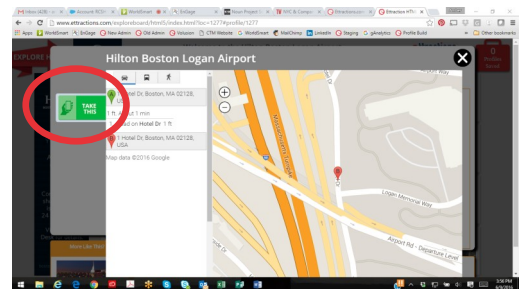
3. If you do see the map, proceed to tap the **“Take This”** tab on the open profile maps page
4. Select the **“Mail”** option
5. Carefully enter your Operations Manager’s e-mail address
6. Tap **“Send”**
7. Confirm the e-mail address was entered correctly then select **“OK”** to see the confirmation message **“Your directions have been sent.”**
8. If done properly, your Operations Manager will receive the confirmation e-mail from your service visit and will know the host location.
9. Repeat the same process with a **Text Message** to your Operations Manager’s phone.



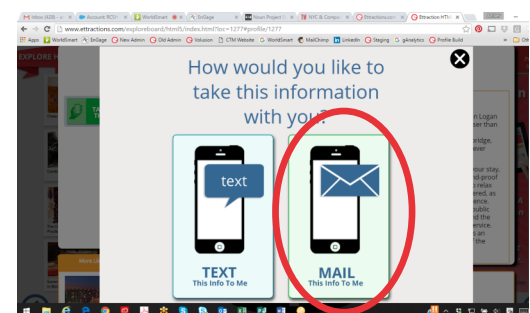
Access the host profile from the upper left of the home screen by touching the logo or “Explore Here” arrow



Look for the map image below “Tap to See Map and Directions” message.



You should see a map image next to the “Take This” map tab if board is online.



Test the connection by sending the profile to your Operations Manager’s e-mail address.

Pop Quiz!

1. What does an ExploreBoard visual inspection include?
2. What items will you need to bring on an ExploreBoard service visit?
3. What are you specifically looking for when servicing an ExploreBoard stand?
4. When servicing a player, what are all the connections you need to confirm?
5. Do ExploreBoard tablets have a player?
6. After the player is cleaned, what steps should be taken to clean the screen?
7. How do you know if the ExploreBoard is offline?
8. If during your service visit, you realize the ExploreBoard is damaged or not functioning properly, what should you do?

FAQs:

What if the host partner has changes or suggestions for profiles on their ExploreBoard?

Make sure this information is communicated immediately to your Operations and Sales Managers.

Most content changes can be added (or edited) within 2 business days if your sales team has a specific contact person who can communicate their requests and e-mail us with updated information and materials.

They can also send requests to editor@ettractions.com

How long should a typical service visit take?

Please allow 10-15 minutes. While it may seem like extra work to take everything apart and reassemble it ... and it may also seem risky to turn everything off... each cleaning and full reboot allows us to proactively catch issues that may take a board offline for several days and/or require additional "troubleshooting" visits.

Why do you require so much documentation?

There is a variety of equipment being used in the field with many components and different models.

We also work with many vendors and support teams. The more detailed information (photos, video, etc.) we have about what you are seeing and experiencing in the field, the more quickly we can isolate hardware vs. software problems and determine who can quickly fix them.