



# VENUE NETWORK EVALUATION

TESTING AND TROUBLESHOOTING TECHNIQUES





HANDBID

# Overview

Understanding how to properly evaluate the quality of the network at your venue

Handbid requires a live Internet connection for your bidders, auction managers, and the iPads.

An unreliable, inadequate or congested network can impact the overall experience of the auction at your Event, thus it is important to properly test and evaluate the network prior to your event.

This guide will provide some guidance on how to best do this. If you have any questions about the contents of this guide, or questions about your specific venue, please reach out to us at [service@handbid.com](mailto:service@handbid.com).

# How will your bidders connect to Handbid?

Handbid is a cloud-based system, meaning that bidders will connect to Handbid's servers over a live internet connection.



Mobile Network



## Bidders should connect using their mobile data network

Your bidders should use their mobile data connection to connect with Handbid whenever possible. Mobile carriers have networks that are built to handle hundreds of connections in a certain area. In addition, mobile technology allows users to move around and maintain their connection.

### Testing the Mobile Network at the Venue

Will your bidders attend an event as part of your auction? If so, you will want to test the mobile network's data performance at your venue. We suggest that you do this using a phone and a network testing app while at the venue. Instructions on how to do this are included in this document.

### Recommended Mobile Network performance minimums

What is the minimum performance recommended for a good Handbid experience?

We recommend the following minimum mobile network data performance:

- 3Mbps download per 150 bidders
- 1Mbps upload per 150 bidders

### What if certain carriers have inadequate bandwidth or performance at the venue?

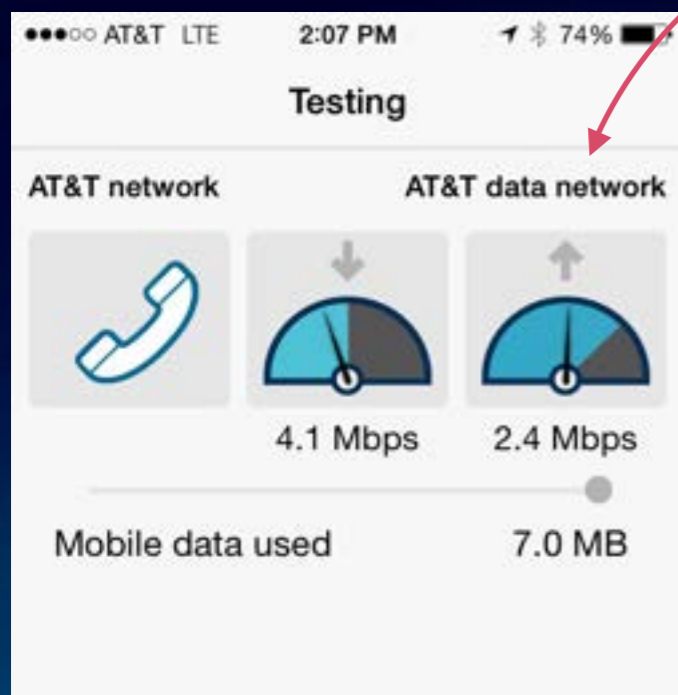
In situations where the bidder's mobile carrier does not have a signal, they can join a WIFI network.

# Testing your Mobile data network

There are several apps you can download that will run tests on the network performance. We are going to give you an example of how to use one of those apps.

## Root Metrics Coverage Map App

Make sure this doesn't say WiFi Network



This test is a good result. The download speed (4.1 Mbps) is greater than the recommended 3Mbps & the Upload (2.4 Mbps) is greater than the minimum 1Mbps

### Using the app "Coverage Map" from Root Metrics

Download the app "Coverage Map" from Root Metrics and start it up.

### Testing the Mobile Data performance

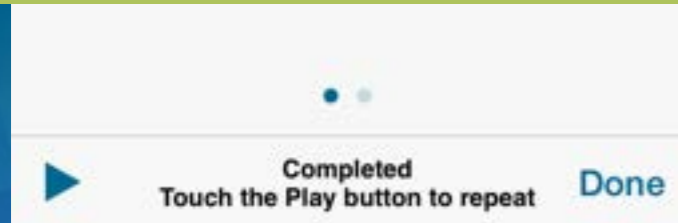
First we are going to test the mobile data performance so you need to make sure you have **WiFi turned off**. Once you do this, open the CoverageMap app. When it opens, you will be on a dashboard screen. Click on the "Test" button and then on the next screen, hit "Next" on the top right. This will commence a test starting with the voice signal. The elements you want to pay attention to are the download and upload.

### Test more than one network if you can

You will only be testing the network of the carrier you use on your phone. Most likely your bidders will use more than just one carrier. If you have more people on your team with accounts on other mobile carriers, have them download the same app and conduct the same tests.

### Test in more than one spot in the venue

Your bidders will roam around. Make sure you conduct the mobile tests in a few different areas at your venue. Be sure to cover all areas where you believe your bidders will congregate.

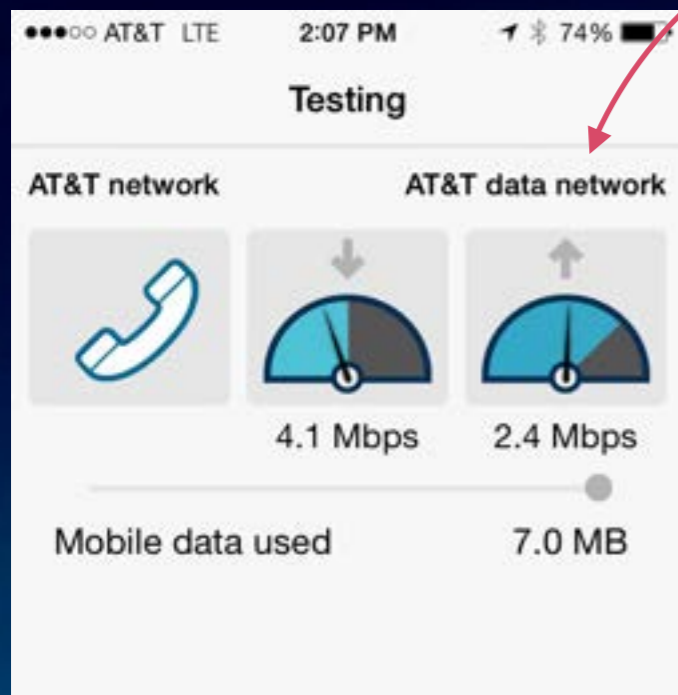


# Testing your WIFI network's performance

Use the same app to test the WIFI network at your venue.

## Root Metrics Coverage Map App

Make sure this says "WIFI Network"



This test is a good result. The download speed (4.1 Mbps) is greater than the recommended 3Mbps & the Upload (2.4 Mbps) is greater than the minimum 1Mbps

### Using the app "Coverage Map" from Root Metrics

Download the app "Coverage Map" from Root Metrics and start it up.

### Testing the WIFI Data performance

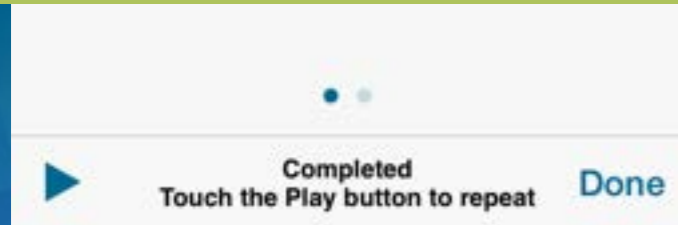
Next we will test WIFI performance so you need to make sure you have **WIFI turned on** and you are connected to the WIFI network that **you intend to USE** during the event. Once you do this, open the CoverageMap app. When it opens, you will be on a dashboard screen. Click on the "Test" button and then on the next screen, hit "Next" on the top right. This will commence a test starting with the voice signal. The elements you want to pay attention to are the download and upload.

### If you are going to use multiple WIFI networks, test them all

You may decide to have your bidders access one WIFI network and keep your equipment and iPads on another. If that is the case, be sure to all of the networks you intend to use.

### Test in more than one spot in the venue

Your bidders will roam around. Make sure you conduct the mobile tests in a few different areas at your venue. Be sure to cover all areas where you believe your bidders will congregate.

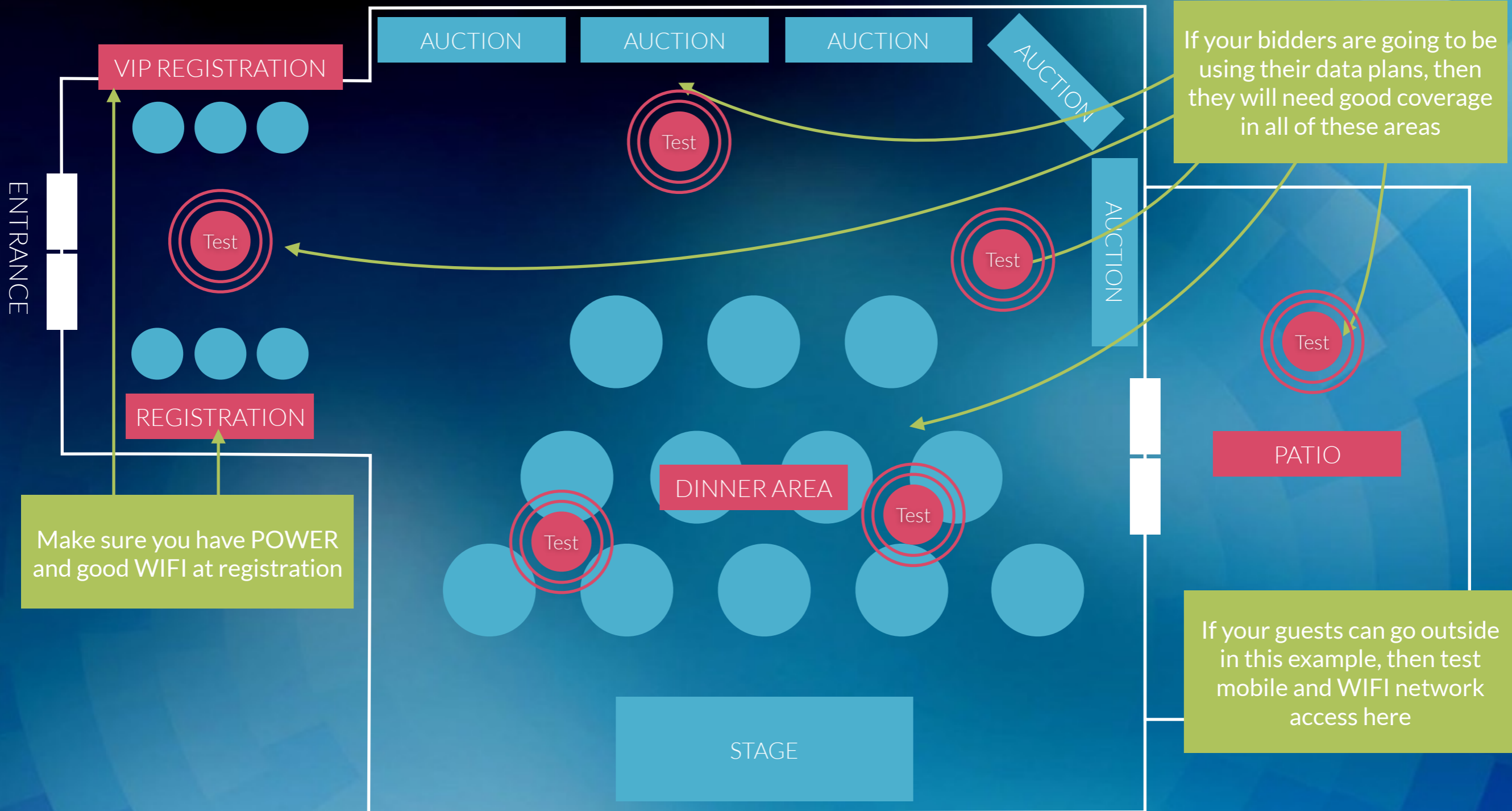




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# Conduct your tests in multiple locations!

We expect that your guests will roam, know where the trouble spots are!



If your bidders are going to be using their data plans, then they will need good coverage in all of these areas

Make sure you have POWER and good WIFI at registration

If your guests can go outside in this example, then test mobile and WIFI network access here

Make sure this says "WIFI Network"

# Guidelines for WIFI Access at your Venue

You need to discuss the following with your venue's technical contact



## WHAT TO TELL THEM

This year, we will be using a mobile bidding system for our event called Handbid. Users on Handbid will download an app from the Apple or Google App stores to access the auction. Those users without a supported phone will use iPads that we will make available at the event.



We intend for most of our guests to remain on their mobile data network when using Handbid, provided our testing shows that they can have a reliably good experience. However, we will need our iPads and laptops (used to manage checkin and checkout) be able to connect to a WIFI network and get a live internet connection to Handbid's servers. If we find that our guests can not get a good data signal with their carrier in the venue, then we will need to have them also access a WIFI network.

## WHAT WE WILL NEED FOR WIFI



**BANDWIDTH:** We will need access to a WIFI network that can provide access to our laptops, iPads and mobile users with poor data service. Provide an estimated number of users based upon the following formula:

Smartphone Users:  $\text{Number of Guests} / 2$

iPad Users:  $\text{Number of Guests} / 36$  (always round to nearest whole number)

Laptops: Number of checkin stations you will have

Add these up to get total users (example - for 400 guests, this would be 200 smartphone users, 11 iPads and 5-6 recommended checkin stations)

# Guidelines for WIFI Access at your Venue<sup>(cont)</sup>

You need to discuss the following with your venue's technical contact



## ASK FOR MAXIMUM BANDWIDTH BE AVAILABLE FOR WIFI

- Is your WIFI network equipped to handle hundreds of users?
  - What are the make and model of you're access points?
  - Are they meshed together to create a consistent signal across the venue / event area?
- What is the maximum bandwidth for your venue's internet connection?
  - Is all of that available to use for this event?
  - Do you throttle bandwidth for the network this event would use?
  - Will this event compete for bandwidth with other users on the network? Hotel guests, other events?
- Can we put the laptops and iPads on a separate & locked WIFI network to isolate it from bidders?
  - Can we connect to a hard-wired Ethernet port and have our own separate access point?



## UNDERSTAND THE CONNECTIVITY LIMITATIONS

- Our users will need to download an app, does the WIFI network restrict access to Apple and Google App stores?
- Will our users need to enter in a username and password to access the WIFI network?
- Handbid requires access be available on the following ports: 80, 443, 3002,3003 - are those available?
- Do you have enough DHCP addresses available?
  - How many DHCP addresses do you have available to be assigned?
  - Can you release any leases that exist on the DHCP server prior to the event to maximize users?





# Next Steps

Here are the list of steps you need to take to complete your evaluation

## 1. GET A TECHNICAL CONTACT AT THE VENUE

- Often times event venues contract out their Internet connectivity.
- Please get a name and contact for the venue's technical person and discuss your event and this document with them.

## 2. COMPLETE THE NETWORK TESTING

- Complete the testing outlined here in this document and discuss the results with the venue's technical contact
- If you have any questions about the results, please share them with us at [service@handbid.com](mailto:service@handbid.com)

## 3. WORK WITH THE VENUE TO ADDRESS ANY CONCERNS

- Handbid may provide some feedback or concerns or your venue may have questions for us. Please coordinate that communication so we can collectively make sure your event will go off without a hitch

## 4. ARE YOUR RESULTS BAD? LETS DISCUSS IT

- Handbid does not want you to run an auction using our software at a venue that can't provide a good enough experience for your guests.
- If we can't resolve the network concerns with you and the venue, then we will be the first to recommend that you not move forward with our solution.
- Often times there are ways to circumvent the venue's issues with a private WIFI network or mobile hotspots. We may recommend exploring this option as well.

## 5. QUESTIONS?

- Call us or email us and we will try to help.