Wi-Fi Network Recommendations

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1. INTRODUCTION

In order to optimize the attendee experience as well as the successful use of your app on-site at an event we make the following recommendations on event Wi-Fi setup.

2. SETUP

- Wi-Fi Networks should be set up in a 'mesh' configuration so that users can seamlessly move from one router to another without ever needing to reconnect to the network within the convention space

- Wi-Fi Networks should be open, that is, login not required. If a network password is deemed to be a requirement we suggest communicating this to the attendees in as many ways as possible. For example:

  - Include "Wi-Fi Access" instructions in the Info Booth
  - Send in-app message to attendees the day prior to on-site registration
  - Email blast to attendees
  - Signs posted at the event Registration desk, Mobile App support desk and other secure areas throughout the event

3. ACCESS POINTS AND BANDWIDTH

3.1. Bandwidth

- Our apps do not typically consume large quantities of data. Access Points are generally the main concern (See details below).

- On average, once installed, our applications might use anywhere from 2 MB to 10 MB of data throughout the day.

- As an example, if we go with 10 MB as a conservatively high average that comes to 20.85 MB/second if we assume 7500 users.

- Given that some attendees will be utilizing multiple devices for not just our applications but also email, YouTube, Facebook and any other activity people use their devices for the network should ideally be able to support significantly more than the example above.

- Wi-Fi networks often get bogged down at events but generally it is not the usage of our applications that is the main culprit. Of course, if the network is chugging the functionality of our applications can suffer. We do design our applications so that a significant amount of the data is cached and can be accessed without a network connection after the initial data update. That said, data updates and some features do require a live network connection.

- Our apps are typically at least 5 MB but can be upwards of 50 MB. This should be considered if it's expected that a high number of app installations

will be happening on-site e.g. in the registration area or if the app is promoted at the Keynote. On a similar note, the download of an event is at least 2 MB but can be upwards of 10 MB.

- Uploading of photos – our app will accept up to 8 MB in size, thus it is important to be conscious of whether delegates are using the HDR setting when taking a photo or any other means of setting a high resolution when uploading as this will determine how much data they consume when submitting a photo.

- Viewing of photos – the Concep system will reduce any uploaded image above 2 MB back down to 2 MB and thus that could be the amount of data the app will consume when viewing a photo. That being said, lower resolution photos can be submitted however they will not be able to see what the size is to understand how much data they will consume when viewing the photo.

3.2.   Access Points

- Access Points (i.e. the number or devices that can connect to a Wi-Fi network) are generally the concern when we consider our applications and on-site Wi-Fi networks.

- There are many variables that influence how many devices a network should be able to support, such as the demographic (techie, senior citizen, etc.) as well as the marketing of the app or availability of paper agenda. There is no magic formula to predict this, but if we are targeting 100% adoption of our app at a 1000 person event that is comprised of tech-centric people, we should account for more than two devices per person on average accessing the network at any given time - which means we should recommend 2500 access points. Remember that almost everyone will have a phone and most will also have a laptop or tablet. Many people have three devices at events.

4. HIGH USEAGE PLACES AND TIMES

- Our analytics, and anecdotal evidence observed at events, show that we typically see extremely large spikes in our app usage at the following places and times:

  - Immediately before and after Sessions, in particular large keynotes
  - During peak registration periods - While it's best practice to promote installation of the app prior to attendees arriving onsite, Registration teams can greatly influence app adoption by reminding attendees to download the app, and signage in these areas also helps. Of course, this needs to be taken into account when setting up the Wi-Fi network.

- If our app is mentioned at keynote addresses we typically see a spike in downloads and usage

- It's important that the above scenarios are taken into account so that high traffic areas have the appropriate number of access points and also that the network can serve up enough bandwidth during the expected high-usage times.

5. LIVE POLLING

- Our Live Polling feature requires that every audience member has a strong, stable connection to the internet for their device. So, it's important that enough access points are available in the location that the sessions will take place to support at least two devices per person.

- Each live polling request is only a few KB, but again we have no control over what other things people may be using their devices for during a presentation. Ample bandwidth should be available to ensure Live Polling success.

- Live Polling results are also presented in real-time through a standard browser, so the presenter or production crew's computer also requires a stable connection to the internet. We recommend a dedicated hard-wired internet connection, isolated from the connection that the audience members use.

- Supported browsers for the Results page include the current version of Chrome and Mozilla. Internet Explorer is not recommended.

6. ON-SITE SUPPORT

- If you have event staff for on-site app support, ensure that the mobile help desk (or wherever the team will physically be located) has a hard-wire internet connection, ideally separate from the attendee network.

- The team should also be located in an area that has access to the Wi-Fi network. This is absolutely critical for troubleshooting and providing support.

7. CONTACT

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