READ THIS OR YOU WILL LOSE SALES!

New York Comic Con Exhibitor Network Planning Guide

Dear Exhibitor:

Internet services are a necessity for many exhibitors at New York Comic Con. We've worked with the Javits Center to improve wired and wireless networking for this year's show. We've also written this guide to help you plan for the show. ***Please read it carefully***.

Crowded means busy: What works at your store, office, warehouse, local coffee shop or home won't necessarily be reliable at the Javits during busy show hours. Wireless - both Wi-Fi and cellular - are crowded. Your device is sharing with 100,000 others! Have a backup plan, especially for mission-critical uses: Card Payment processing, live website demos, online-only games (or tournaments), video streaming. We discuss each of these areas below.

If Wi-Fi is critical: Wi-Fi wireless networking has two bands: 2.4 GHz (more crowded, less reliable) and 5 GHz (Less crowded, more channels, more reliable). This matters, if you rely on wireless: iPhones and most cellphones don't support the 5 GHz band; iPads, some other tablets, laptops do. If Wi-Fi is essential, the 5 GHz band is much more likely to work. See the end of this document for information on what gear supports what band.

For help: The Javits Center's show support desk is always your first stop for problems with telephones, wired or wireless network service. Please work with them first. They're located with the other service desks in the Crystal Palace, under the escalators.

You've got a friend in the business: This year, New York Comic Con has also retained Location Connect, who will be monitoring the network (especially wireless) from setup through teardown. If something breaks, needs configuration, or you just can't figure out a setting, they may be able to help. They'll also have some loaner equipment (routers, switches, etc.) for exhibitors, on a first come, first serve basis. Please contact the NYCC show office if you can't resolve a problem with help from the Javits and we'll get Location Connect in contact with you.

Card Payment Processing: Plan Ahead

If you sell stuff, you probably take payment by credit or debit card. At home, you probably never think about interference - your Wi-Fi or cellular merchant processing setup just works. There will be wireless interference at NYCC. **If it's bad, you could be unable to process payments on-site. We urge you to plan accordingly.**

The quick rules:

- A phone line is still the most reliable way to process cards.
- Wired Ethernet is more reliable than wireless.
- With Wi-Fi (wireless Ethernet), the larger the device, the more likely it'll work: Desktop or laptop better than tablet; Tablet better than cellphone.
- If you set up your own Wi-Fi network: Use 5 GHz, not 2.4 GHz. Protect it with a strong password. Set channel selection to "auto". Leave it on throughout setup, so we can detect and avoid interfering with it.
- Radio interference is a big problem at the Javits - there are thousands of other Wi-Fi and cellular users. *Your MyFi probably won't work in peak show hours.*
- With cellular, "lots of bars" may not mean lots of coverage. Many devices are sharing limited radio spectrum. What works in one spot may not work in another. Patience is a virtue and retries may be required.
- Whatever you plan to use, test long before you pack. Make sure you have all your parts - does your computer need a wired Ethernet adapter? Do you have all your chargers? Batteries? Support phone numbers? System passwords? Backup plans?
- Have backup plans.

Payment processing: Options
From most reliable at #1, your options:
1. Phone line and payment terminal. A VeriFone®, HyperCom® or etc. merchant terminal with a wired phone modem is inexpensive, simple, and reliable. You'll need a merchant account that supports it, and you'll need to order a phone line from Javits. Set this up well ahead of time and test.
2. Wired Ethernet line with wired computer, laptop or terminal. Almost as reliable as a phone line, though not inexpensive. Can be shared by multiple computers or devices, works with Square®, PayPal®, Intuit Merchant Service and other online-only payment methods. Requires wiring and planning, and ordering the Ethernet service from Javits. You'll also need electrical power, not only for your gear but Javits's network adapter.

Does your computer have a wired Ethernet port? Many newer laptops don't (Apple Retina Display, MacBook Air, many ultraportables). Bring your Ethernet adapter.

3. Cellular data card or USB card plugged in directly to your computer, with attached credit card reader. Big advantage: No Wi-Fi interference. Disadvantage: Cellular interference and contention with the 100,000 other cellphones on-site. Card processing may be delayed due to cellular contention. You may need to try several times to get approval during busy show hours.

4. Cellphone with payment software (Like Square or PayPal) and credit-card reader or Standalone cellular credit-card terminal. The same cautions apply as with number three. Older standalone terminals may have more problems than the latest cellphone.

5. Laptop or other wireless device on your own 5 GHz Wi-Fi. Set up your own Wi-Fi through an Ethernet drop purchased from the Javits, and support your own users. Please use a WPA2 (or stronger) password to avoid "squatters" on your own network. Please set up early, and leave your equipment on, so our network scan can detect it and avoid interference. This helps everyone.

6. Laptop or other wireless device on "Javits-Fast" 5 GHz Wi-Fi. You can purchase daily or weekly access directly from the Javits, either beforehand or onsite, using your computer or device. If your device supports the 5 GHz Wi-Fi band, you should see "Javits-Fast" in the list of network names. Connect to it, open your browser, follow the instructions, make sure to save the network name in your preferences. There should be far less interference than with "Javits" (See below). Note: If your computer goes to sleep, you may need to re-select the "Javits-Fast" network, re-open your browser and re-connect.

7. Wireless device using Javits 2.4 GHz Wi-Fi. Purchase daily or weekly access directly from the Javits, online, using your computer or device. Older devices will only see "Javits", not "Javits-Fast", when you look for network names; that's the 2.4 GHz network. To connect, follow the same instructions as in number six. Warning: Interference can be severe during busy show hours. You may get kicked off regularly. Card processing may be delayed or difficult. If at all possible, avoid this option.

8. Wireless device using your MyFi® or the like. Popular, works well at your office and most small shows. Lots of people just throw their MyFi in their pocket and assume it'll work wherever they go. Problems? Two sets of interference: Cellular and Wi-Fi. We've seen Wi-Fi devices 2" apart unable to connect, during busy show hours. Why? Almost all Wi-Fi sharing uses the older 2.4 GHz band, which is subject to extreme interference during big shows. Result: You may be unable to connect, or stay connected.

9. Manual card processing via phone calls. Some merchant service accounts still allow card processing via a voice phone call. Voice calls are more likely to work than data calls, so this manual process may be a fallback option for you.

10. Manual card processing via charge slips. If your merchant account supports paper charge slips (A few still do), consider this option.

Website Demos, Casual Online Games, Online Contests

Summary: Live website demos will work best on a wired network connection, which you order from Javits. Choose the speed you need to support the number of simultaneous demos you're planning—at least 100 Kbps per device. The least expensive speed, "Shared" (about 500 Kbps), will probably work for most simple demos.

Wireless: Connect to "Javits-Fast" if you're using the facility Wi-Fi (you can pay by the day or week). If you set up your own Wi-Fi, make sure you connect to the 5 GHz link, not the 2.4 GHz radio. Demos on 2.4 GHz Wi-Fi will experience much more interference.

Routers and wireless gear: For large booths, we strongly recommend a professionally-designed and –supported wireless network, with multiple wireless access points, not whatever's on clearance. This is not an area to skimp on. Our friends at Location Connect can assist.

Your options: See the previous section, but skip number one (Phone line) unless you're happy with dialup speed. If you are happy with dialup, make sure to bring a phone modem, a phone cord and your ISP account info.

For more: Please contact your sales rep if you have further questions.

Gaming Tournaments

If you're planning an online computer gaming tournament, one requiring the Internet and not just a local server, we strongly recommend you purchase a wired network connection from the Javits and connect everything via wired Ethernet through a professional router.

Network speed: Every game's speed requirements differs; some are as little as 100 kbps per player, some closer to 1 Mbps. Simple math will tell you how big a circuit you'll need. Don't forget to leave room for surfing and checking e-mail.

Wireless game systems (Nintendo DS, PS Vita) use 2.4 GHz Wi-Fi only. For standalone games, this isn't a problem, but head-to-head or network games may have interference issues. Plan accordingly.

Whitelisting: To prevent abuse, many games lock out multiple connections from the same IP address—they "blacklist". You may need to get your connection whitelisted, especially for more than three simultaneous players. Be warned, this can take hours to days to go through. Contact the game publisher for more details.

For more: Please contact your sales rep if you have further questions.

Video Streaming

We're hosting: If you're using New York Comic Con's IGN Theater for an online stream, presentation, chat, etc., we'll take care of the setup for you.

You're hosting: If you're planning on streaming video from your own booth, purchase a wired network connection suitable for your streaming plans. You'll probably need at least a Javits "T-1" speed connection (1.544 Mbps) for decent stream performance, though simple content (panel discussions, PowerPoint) are often acceptable via a Javits "Shared" connection (500 Kbps). Double capacity for redundant publishing points. Also, leave room for other Internet access (staff checking e-mail, etc.). You should have a network router which prioritizes streaming traffic, as well. Professional engineering is encouraged for high-profile or critical events.

For more: Please contact your sales rep if you have further questions.

Devices Known to Support 2.4 GHz and 5 GHz Wi-Fi

While not a complete list, here are devices known to support both Wi-Fi bands. If you're using the building's Wi-Fi, connect to "Javits-Fast" if your device sees it—this is the 5 GHz band, much less interference than "Javits" (2.4 Ghz) band. If you set up your own Wi-Fi, use the 5 GHz link, not the 2.4 GHz radio. Wireless routers that support both bands start at $30 more than single-band-only routers and worth every penny.

Known to support both Wi-Fi bands (2.4 and 5 GHz):
- Apple iPads (Not iPhone 4 and older)
- Apple laptops and desktops built after 2008
- Nearly all Windows laptops built after 2008
- Samsung Galaxy Tab, Galaxy S2 and successors
- Some other premium cellphones

"Supports" doesn't always mean reliable. The smaller the device, the more likely it'll have a nervous breakdown in loud radio environments like the Javits. Even if your phone supports 5 GHz Wi-Fi - and some do—interference from other devices can cause problems. Bigger devices tend to be more reliable; whenever possible, plan your demos on tablets or (even better) laptops.

Devices with 2.4 GHz only
Less-capable tablets and most cellphones support only 2.4 GHz. Expect interference. A partial list:
- Apple iPhones® and iPod Touch
- Most smartphones, including "Hotspot" or "Sharing" mode
- MyFis and similar wireless-sharing devices
- Low-end netbooks
- Low-cost tablets, including Nooks, Kindles, Sony Readers, etc.
- Portable Game consoles, including Sony PS Vita, Nintendo DS
- Internet radios, picture frames, wireless video cameras, other fixed-function devices

The Fine Print

Other important details to remember:
- Complimentary wireless Internet is for use by attendees only. Performance is best effort, and is not guaranteed. Don't plan on using it to make sales.
- Exhibitors cannot rely on the complimentary Internet for demonstrations. Your agreement says not to, it may not work, and that's why we urged you to get wired Internet service.
- Cellular service is stronger on the third floor and Crystal Palace areas. Service on the first floor can be spotty.
- What works at 9:00 AM on setup day may not work when the doors are open. Cellular and Wi-Fi interference will increase as the crowds do.
- You can help make everyone's wireless Internet better: Turn off all MyFis and phone hotspots; Turn off all wireless sharing on your computers and handhelds; Don't download giant files or stream from your phone.
- Don't turn on file sharing or Wi-Fi Direct on your devices, please.
- We will be monitoring network usage, especially on wireless (Wi-Fi). Please don't be a bandwidth hog.
- Wi-Fi service is installed throughout the keynote, Crystal Palace, foyer and show floor, so you may find better service by moving around the Convention Center.
- Service is not installed in other areas of the Convention Center. Sorry, you can't sit outside and access it.

CONTACT YOUR SALES REP FOR MORE INFO

Sponsorship & Non-Endemic Advertising and Exhibiting
Larry Settembrini, Group Sales Director
Phone: 203.840.5321
Email: Larry@ReedPOP.com
Twitter: @LSett

Exhibitors with Company Names Beginning with # or A-H
Mark Fitch, Sales Executive
Phone: 203.840.5518
Email: Mark@ReedPOP.com
Twitter: @Phantom_Fitch

Exhibitors with Company Names Beginning with S, T, W
Mike Armstrong, Sales Manager
Phone: 203.840.5333
Email: Mike@ReedPOP.com
Twitter: @armstrongmike

Exhibitors with Company Names Beginning with I-Z
Jenny Martin, Sales Executive
Phone: 203.840.5454
Email: Jenny@ReedPOP.com
Twitter: @Gingersnap_Jen