

Why does my iPhone not connect to Keynote?

Q: Why does my iPhone not connect to Keynote?

- Why does my iPhone not connect to Keynote?
- Why can my iPad not connect to my Apple TV?
- Why does AirPrint not work on MIT wireless?
- Why does AirPlay not work on MIT wireless?
- Why does my iPod Touch not connect to Keynote?
- Why does Keynote Remote not connect to my Mac?
- Why does Remote on my iPhone not connect to my Mac?

Context

- Apple Keynote or Apple iTunes applications connecting to computers and devices
- Apple iPad connecting to Apple TV
- iPhone/iPod Touch **Remote** or **Keynote Remote** applications
- Other applications relying on Bonjour for making device-to-device connections
- MIT's 802.11b/g/n enterprise wireless network (showing **MIT SECURE**, **MIT**, and **MIT GUEST** SSIDs)

Answer

Several consumer iPhone/iPod Touch/iPad applications from Apple rely on Bonjour, an implementation of the ZEROCONF protocol for automatically discovering devices on a home or small business network, to connect to each other or other network devices. Currently these applications and services include:

- **Remote** (iPod Touch, iPhone, iPad)
Used to remotely control iTunes on your Mac from your iPhone
- **Keynote Remote** (iPod Touch, iPhone, iPad)
Used to remotely control Keynote on your Mac from your iPhone
- **AirPlay**
Used to stream music or video from or to a portable device
- **AirPrint**
Used to print to special AirPrint-enabled printers

While ZEROCONF and Bonjour work well on home or small business networks, they are not compatible with large enterprise networks which can frequently have thousands of devices in the same wireless address space. ZEROCONF relies on multicast traffic to discover devices on the network, which exhibits crippling performance and load issues on large enterprise network implementations. Even if it were enabled on the network, results would be slow to return and potentially return lists of hundreds of devices to choose from, which can be unmanageable on devices such as iPhones or iPads.

MIT will continue to explore possible work-arounds to allow community members to use consumer technologies such as Bonjour, AirPrint, and AirPlay in campus locations, but at the moment these and other consumer technologies relying solely on Bonjour and multicast will not work on the MIT enterprise wireless networks.

More information

- Excellent article at [Princeton University](#) going into more detail on the issues
- [Wikipedia entry on Bonjour](#)
- [Wikipedia entry on Apple AirPlay](#)
- [Wikipedia entry on Apple AirPrint](#)
- [Wikipedia entry on Zeroconf](#)