Discovery services on MIT wireless networks

Discovery services on MIT wireless networks

Many devices designed for home wireless networks have the ability to discover (or be discovered by) other devices on the same wireless network. These "discovery services" typically use a technology that has gone by different names over time, including Bonjour, zeroconf, and UPnP. What these services all have in common is that they depend on "multicast" transmissions being available on the wireless network they're attached to. The wireless network infrastructure at MIT is configured to not pass multicast traffic. This configuration reduces congestion and ensures fast, reliable connections on the MIT wireless networks.

Unable to print to a wireless printer

Printers that connect to the network with a wireless card need multicast discovery-based services to work. Printers should be connected to the wired ethernet and configured with a static IP address. This will enable computers to connect to the printer using the IP address or an MIT hostname.

iOS-based remote applications don't work

Some iPhone or iPad applications allow you to remotely control software, your computer or other devices over the network.

Other devices that may be impacted:

- Network Attached Storage devices
- Wireless media streaming devices, such as Chromecast, AppleTV, Amazon Fire
- "Smart home" devices, such as the Philips Hue line of light bulbs