AUTOMATA

Technology Services

Networking and Sharing - iOS

Troubleshooting SIM, eSIM, and Cellular Issues
Using Personal Hotspot
Wi-Fi Connectivity for iOS
AirDrop for iOS

Troubleshooting Cellular Data

Lecture

SIM Card Troubleshooting

- **No SIM** or **Invalid SIM** error messages

  - Restart the iOS device from a cold boot.

  - Toggle Cellular Data on/off in Settings.

  - If the iOS device is in a case, remove the case and see if it helps.

  - Check for Carrier Updates.

  - For devices with a physical SIM card, remove the card ensure it's not damaged and place it back in the device.

  - If the SIM card was transferred from another device (an old iPhone for example) contact your cellular carrier.

eSIM

- Next generation 'virtual' SIM card that is not physical.

- Allows you to activate and switch from one carrier to the other without needing to swap SIM cards.

- You can activate two eSIMs (Dual SIM) on the same device, allowing you to activate a work phone number and a personal number on the same device.

- When traveling internationally, eSIM allows for easy activation on carrier networks in countries outside the US.

- **Note: MDMs can wipe or retain eSIM when using Managed / Remote Erase.**

No Service / Searching Issues

Practical Exercise

Using Personal Hotspot

Practical Exercise

Introduction to iOS Wi-Fi

Lecture

Types of Wi-Fi Networks

- **Public or Open Networks**

  - Most common. Doesn't require a password.

  - Not secure or encrypted (VPN recommended).

- **Private or Secured Network**

  - Home and business networks that require a password to join.

  - More secure, with encryption built-in.

- **Captive or Subscription Network**

  - Similar to public or open networks, but has a special web-page called a captive portal that prompts for a sign-in, sign-up, or login. Common in hotels, airports, etc.

Connecting to Wi-Fi Networks

Practical Exercise

Understanding Wi-Fi Selection Priority

Lecture

Network Selection Priority

Highest to Lowest ⬇

- Networks Configure by MDM Payload
- Latest Wi-Fi Standard (WIFI 6E, 6, 5, etc)
- Wireless Frequency (6GHz, 5GHz, 2.4GHz)
- Security (WPA2 Enterprise, WPA2, WPA, etc)
- Signal Strength

Troubleshooting Wi-Fi Networks

Lecture

Troubleshooting Wi-Fi Issues

- Restart the iOS device from a cold boot.

- Toggle Wi-Fi on/off in Settings.

- Try connecting to the Wi-Fi network from another device to see if the network is functional.

- If the network is functional, try to change physical locations to see if connectivity improves.

- Reset Network settings and try again.

- Contact Apple Support if the issue persists (linked in Resources).

Configure iOS VPN

Practical Exercise

Sharing Files with AirDrop

Practical Exercise

Troubleshooting AirDrop Issues

Practical Exercise

Managing Safari Profiles

Practical Exercise