Dear AT&T Customer:

Some 4G LTE capable devices may experience loss of service due to incorrect Access Point Name (APN) configurations or device firmware behavior.

Potential Issue: Loss of service due to Device APN settings not being configured for the AT&T 4G LTE network.

Cause: These 4G devices are programmed with a 'general purpose' APN or another carrier custom/private APN as the default instead of a custom/private APN that works for the AT&T 4G LTE network. This device configuration issue needs to be addressed immediately to restore service.

Customer Action: Change Device Configuration from the default "general purpose" APN or the other carrier's custom/private APN to a custom/private APN that works on the AT&T 4G LTE network.

- **Windows 10** (See appendix A)
    a. Navigate to: Settings> Network & Internet> Cellular> Advanced Options
    b. Click "+" button for Add an APN
        - Define custom APN name in the field "APN"
        - Set APN Type as Internet and Attach
    c. If the Option to select "Attach" APN is not available, then it's possible that
        - PC is domain enrolled in a corporate environment and that option has been disallowed at the corporate level. Seek IT support from the appropriate party to make this option available. Or,
        - PC OEM restricted the option to set "Attach" APN, reach out to the PC maker for additional assistance.
- **Windows 11**
    a. Navigate to: Settings> Network & Internet> Cellular>Operator Settings
    b. Click "Add APN"
        - Define custom APN name in the field "APN"
        - Set APN Type as Internet and Attach
- **Android**
    a. Navigate to: Settings> Connections> Mobile Networks> Access Point Names
    b. Select "Add"
        - Define the custom APN in the field "APN"
        - Ensure APN Type is default
    c. Note this example is from Samsung S21, other android implementations may vary

- **iOS**
    a. APN can only be configured using an Apple authorized Mobile Device Management (MDM) tool.
    b. If above doesn't work, reset your APN settings
        - To revert to your carrier's default APN information, go to Settings > Cellular > Cellular Data Network > Reset Settings. If you installed a configuration profile, the profile's default information will be used instead.
        - If using an iPhone or iPad in an enterprise environment, you might need to contact your mobile device administrator to change your APN. If you change APN settings that a mobile device administrator set for you from a configuration profile, here's how to change it back:
            o On iPhone: Go to Settings > Cellular > Cellular Data Network, then tap Reset Settings.
            o On iPad: Remove the configuration profile and add it again.
        - If mobile device administrator, you can use Apple Configurator or another mobile device management solution to change the APN and other advanced settings.
- **Other IoT Devices**
    a. Use tools provided by device OEM to configure APN if available.
        - Ensure that if multiple APNs are listed that the custom APN is listed first.
    b. If the AT command interface is available, then use the command below to configure the APN into the first slot of the PDP Context by using cid identifier value of 1. See 3GPP TS 27.007 "AT command set for User Equipment (UE)" for additional details.
        - Format: AT+CGDCONT=<cid>,<PDP_type>,<APN>
            - Example: AT+CGDCONT=1,"IPV4V6","YOURAPNHERE"
- Note 1: Replace YOURAPNHERE with the actual custom APN
- Note 2: It is imperative that the APN be placed into cid slot 1 as that defines the default APN the radio will utilize to register to the network.
- If your device does not provide a mechanism to change the APN, then please reach out to the device maker for additional assistance.

Ensure device/module has the latest firmware version

- Some devices have radio SW installed that is targeted to be used on other mobile operators, which may be incompatible when using an AT&T SIM card.
- Contact your module/device provider to learn how to update your firmware.

Contact Customer Care

If this has not resolved your loss of service, please submit a trouble ticket:

- IOT Control Center: Go to Help > Knowledge Base > Contact Support (in page footer) > Select Submit a Case; complete the input request and select Continue.
- CRU/Telegence Mobility: Call 800-331-0500 for further assistance.

Additional Resources

- Cradlepoint – How to set an Access Point Name (APN)
- Digi support document and firmware update instructions

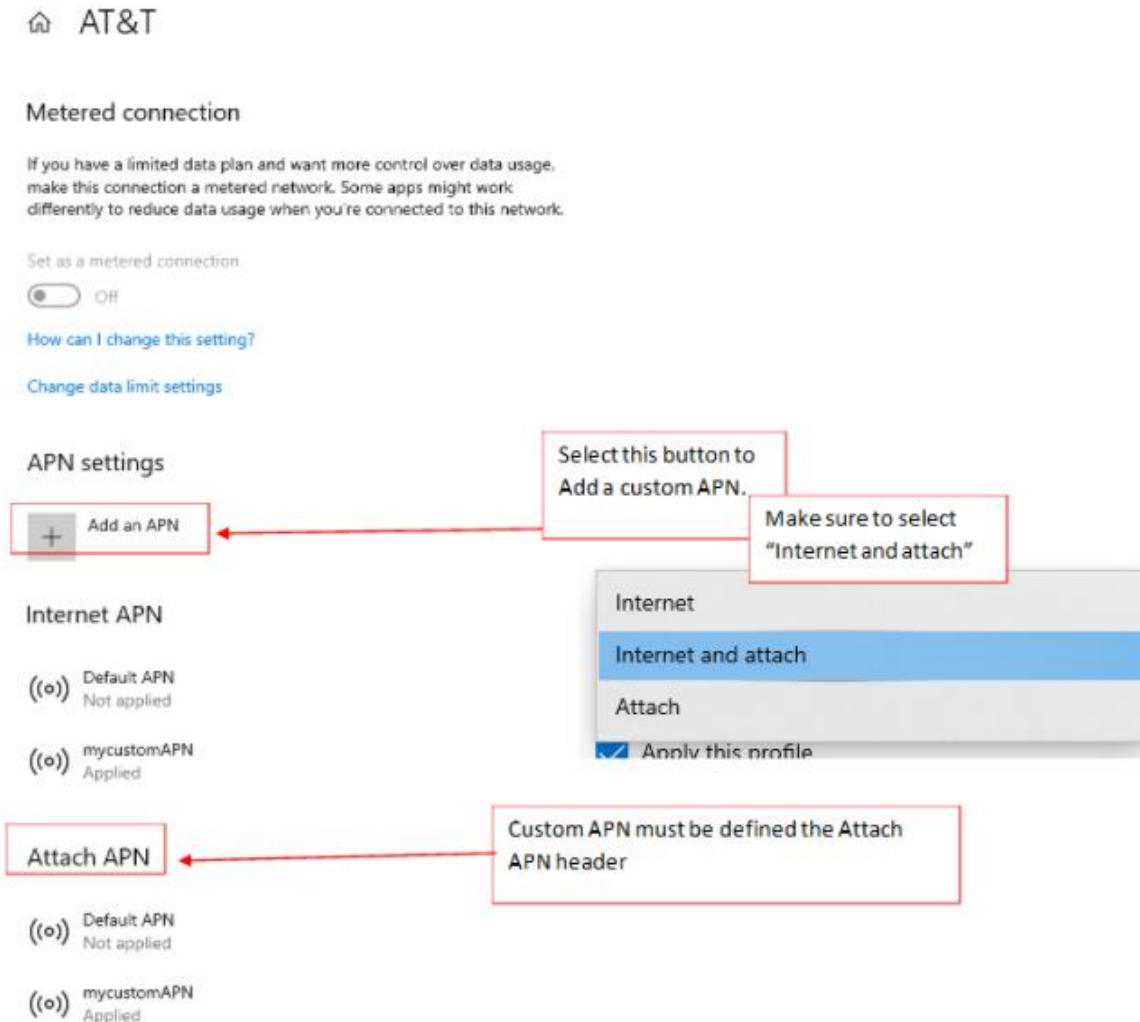We value you as a customer and appreciate your business!

Regards,

AT&T Business

Appendix A

Windows 10 Implementation Details

Navigate to: Settings> Network & Internet> Cellular> Advanced Options
What to look for: Make sure that the custom APN is loaded as both Internet and Attach

⌂ AT&T

Metered connection

If you have a limited data plan and want more control over data usage,
make this connection a metered network. Some apps might work
differently to reduce data usage when you're connected to this network.

Set as a metered connection
⊙ Off
How can I change this setting?
Change data limit settings

APN settings

+ Add an APN ◄────────── Select this button to Add a custom APN.

Make sure to select "Internet and attach"

Internet
Internet and attach
Attach
☑ Apply this profile

Internet APN

((o)) Default APN
       Not applied

((o)) mycustomAPN
       Applied

Attach APN ◄────────── Custom APN must be defined the Attach APN header

((o)) Default APN
       Not applied

((o)) mycustomAPN
       Applied

Appendix B

Questions & Answers to address customer device configuration APN issues

Q: My devices are working fine. Why am I receiving this? Is there a problem?

A: We believe that after attempting to connect to the current AT&T network and failing, your devices may be defaulting back to connections which, while they may work in the near term, will not work in the future. Specifically, your device may be trying multiple Access Point Names (APNs) until one is accepted by the network and, by doing so, making a connection even though the device isn't accessing the network correctly.

Q: But I am seeing my devices in an LTE session. How can that be?

A: The device may be falling back to outdated network configurations, connecting (albeit incorrectly) and then being "uplifted" (through capabilities known as Inter-Radio Access Technologies - iRAT) from one technology generation to another. The connection will continue on the 4G airlink, appearing to have been connected to LTE the whole time, when the connection actually was incorrectly achieved.

Q: Well, what do I need to do to avoid this?

A: The best solution is to work with your device/module manufacturer to ensure devices are properly configured. Ensure the device APN (Access Point Name) matches the APN that is provisioned on the account to allow it to be selected first (device APN slot 1) to successfully connect to the AT&T wireless network.

Q: But my firmware already shows the AT&T APN (Access Point Name) name in it. Where are these other APN names on this list coming from?

A: They may be coming from the cellular module's firmware, or they may be left over in the device firmware from testing. Some devices also have a list of "known" APN names that the device may attempt based on the IMSI (International Mobile Subscriber Identity) range of the SIM (Subscriber Identification Modules) to assist in call setup. While this works well if you have a common use APN (like the Broadband APN), we have also seen instances where the device is trying APN names from other carrier networks as the default.

Q: Is this Access Point Name (APN) mismatch an AT&T-only problem?

A: This could occur with other network operators; if the APN provided by the device is not allowed by the carrier, the connection may fail.