

Frequently Asked Questions



Q: Why are you shutting down your 3G network?

A: Mobile internet usage has exploded over the last decade. Mobile data traffic on our national wireless network increased more than 730,000% since 2007. The AT&T global network carries approximately 464 petabytes of data traffic on an average business day. Reallocating capacity to our more advanced wireless networks will help more of our customers have a better experience.

Q: The network turn down is not until 2022. Why did you announce it in 2019?

A: We believe it's important for us to be transparent about our plans for the 3G network. Our network optimization efforts have already begun and will continue. We're taking advantage of the time to work proactively with customers who are using our 3G network today to manage their migration to the more advanced networks.

Q: Some carriers have announced later sunset dates or have extended their previously communicated dates. Why is AT&T not extending its 3G sunset date?

A: We want to focus on providing our customers with the benefits of better technology as soon as possible. Businesses' needs are growing and becoming more

complex. Business customers need a network that can help to facilitate this. AT&T is investing in technologies that best address evolving business needs, the future of networking, and the move to next-generation technologies and services.

Currently, less than 1% of our mobile data traffic is on 3G services. By redeploying underutilized and less efficient 3G spectrum, we are supporting the soaring demand of next-generation technologies and services. Future wireless growth will increasingly depend on our ability to offer innovative data services on a wireless network that has sufficient spectrum and capacity to support these innovations. The sunset of our 3G network will allow us to reallocate capacity to our more advanced wireless networks and help our customers have a better experience.

We are working with our customers to ensure they upgrade their technologies before our sunset date.

Q: Why are customers being encouraged to upgrade to AT&T 4G LTE and LTE-M networks?

A: AT&T 4G LTE and LTE-M networks are more advanced and offer advantages and greater capabilities. The AT&T LTE networks provide the quickest connection with the least latency compared

to the 3G network. The LTE-M network was built for IoT devices and is a licensed LPWAN (low-power wide-area network) that enhances indoor and subterranean coverage, as well as extended battery life, at lower costs for lower bandwidth requirements.

Q: How will customers be alerted of the transition, and how will you ensure it's a smooth process?

A: We're committed to working closely with customers to make this process as easy as possible. In cases where we perform spectrum balancing activities that could potentially impact coverage of some devices on AT&T-owned and operated 3G network sites, we'll continue to communicate specific details in advance of making the network changes. Discontinuance of 3G service on AT&T roaming partner networks is independent of the AT&T 3G network sunset.

Q: Are your U.S. roaming partners also moving to 4G LTE?

A: Service provided by roaming carrier networks may be reduced or terminated with or without prior notice, and AT&T makes no commitments with respect to the present or continuing availability of roaming service. Roaming partners make their own business decisions about when to adopt newer technology. However, as more AT&T customers adopt newer technologies, we expect that our roaming partners will also adopt such technology capabilities for their networks in order to be able to better serve customers. But, again, technology decisions, including timing to upgrade networks, are business decisions for our roaming partners to make.

Q. Will carriers like T-Mobile be allowed to roam on AT&T after the 3G Sunset? [Only answer question if pressed, combine with above.]

A: As of now, T-Mobile will not be available for customers to roam on after 3G Sunset.

Q: Will impacted customers see their bills increase as a result of this transition?

A: Although we don't expect any pricing increases at this time, there could be adjustments to pricing in the future. We'll inform our customers in advance of any such pricing changes.

Q: Why can't AT&T allocate a small portion of its spectrum to accommodate subscribers who don't want to transition?

A: Keeping our 3G network to serve a small number of customers wouldn't be an efficient use of our spectrum, which can be better used to support our 4G LTE and next-generation networks. IoT customers should be able to significantly improve their applications/solutions because of the higher speeds of the upgraded network, allowing them to better serve their customers and employees. These enhancements are not possible on the 3G network.

Q: So do you have plans to turn down your 4G LTE network to put spectrum that's currently used for 4G LTE to next-generation network services?

A: We have not currently announced a turn down date for our 4G LTE network and are focusing on the future of network services.

Q: Will customers experience issues with the network during this transition?

A: We anticipate a smooth transition, and we'll work hard to help ensure they continue to receive a network experience that meets expectations and evolving business needs.

Q: For customers who do transition to a more advanced 4G LTE device, will their coverage be comparable to what they have on the 3G network today?

A: We anticipate coverage will be comparable to the coverage they received from our 3G network. The overall AT&T network covers more than 99% of Americans and our 4G LTE network currently covers nearly 400 million people in North America.

Q: Why is AT&T shutting down its 3G network so early?

A: Adding spectrum and managing our existing spectrum for its most efficient use provides customers with the best wireless experience. This is a top priority for AT&T.

Q: Where exactly does AT&T have 4G LTE and LTE-M Coverage?

A: Customers can access coverage maps via <https://www.att.com/maps/wireless-coverage.html>

Q: How do I know if my users are using 3G devices and how many they have?

A: Customers can use existing reporting tools to

identify the technology type of specific devices. If further assistance is required, a customer's AT&T account team can be a valuable resource.

Q: How will AT&T help Connected Device and IoT customers adapt to a post-3G world?

A: AT&T is committed to providing clear, advance notice and communications about our 3G migration and to working closely with our customers to manage the transition. Ultimately, customers are responsible for planning hardware upgrades in a reasonable timeframe prior to planned network shut downs. AT&T has developed programs, such as our IoT Accelerator program, to promote adoption of newer 4G LTE technologies.

For additional information, please access the following websites:

- **AT&T IoT:** [IoT Solutions and Platform as a Service at AT&T Business](#)
- **IoT devices:** [Learn the Basics - AT&T IoT Devices](#)
- **IoT Accelerator Program:** [IoT-Accelerator\(att.com\)](http://IoT-Accelerator(att.com))

Q: Will AT&T continue to certify 3G modules and devices?

A: As of December 31, 2016, no new 3G modules were permitted to enter the AT&T process for approval. As of July 1, 2017, no new 3G devices were permitted to be certified.

Q: How does this affect my in-building solution?

A: Service for in-building solutions that are 3G-based will be discontinued with this technology sunset.

Q: Who will bear the cost of upgrades? Is AT&T prepared to support customer transition?

A: Customers deploying network technology need to plan for network evolutions and the hardware upgrades that support these changes. For this reason, we counsel our customers to make the decisions that best fit their long-term plans within the scope of the evolution of the network. AT&T has developed initiatives, such as our IoT Accelerator program, to promote adoption of newer 4G LTE and LTE-M technologies.

Q: When will AT&T mandate that 3G resellers and IoT customers stop activating 3G devices?

A: 3G resellers and IoT customers should have already stopped activating or reactivating SIMs that use 3G technology. If your agreement with AT&T currently allows 3G activations or reactivations and lists a 3G stop activation date, you must stop on that date. If no date is listed, you were required to stop by February 21, 2020.

Q: Will AT&T help me with the development cost of my business' migration?

A: Customers are responsible for planning hardware upgrades in a reasonable timeframe prior to planned network shut downs, but AT&T has developed initiatives, such as our [IoT Accelerator program](#), to promote adoption of newer 4G LTE technologies.

Q: How does this affect my company's service agreement? Will early termination fees (ETFs) apply if I cancel service due to the 3G migration?

A: A new business mobility contract is not required; however, if you upgrade your individual lines of service — now or at a later date — you may need to make a new line commitment term and may be subject to an early termination fee per the conditions in your business mobility agreement.

Q: How will enterprise customers headquartered in one market be notified about the sunset of their 3G subscribers in another market?

A: AT&T has strong relationships with our roaming partners, but we acknowledge that service provided by roaming carrier networks may be reduced or terminated with or without prior notice, and AT&T makes no commitments with respect to the present or continuing availability of roaming service.

Roaming partners make their own business decisions about when to adopt newer technology. However, as more AT&T customers adopt newer technologies, we expect that our roaming partners will also adopt such technology capabilities for their networks in order to be able to better serve customers. But, again, technology decisions, including timing to upgrade networks, are business decisions for our roaming partners to make.

Q: What can I do about foreign employees who visit the U.S. with 3G devices?

A: Customers with international lines will receive notification of the shutdown. Customers who come to the U.S. with 3G devices need to be made aware of

the 3G sunset plans and that their service will be impacted.

Q: Will 3G devices work outside of the U.S.? Should I plan on upgrading my 3G devices outside the U.S.?

A: Whether a 3G device works outside of the U.S. depends on the type of device and the wireless network of the international location. Devices can be checked here: www.wireless.att.com/travelguide

For many locations outside the U.S., AT&T has service agreements with roaming partners to support 3G service. If 3G service is provided by another carrier outside the U.S., customers should reach out directly to them.

Q: I require voice service over LTE (VoLTE). How do I ensure a smooth transition when upgrading my IoT devices from 3G to LTE if voice service is required?

A: If voice is required for 4G LTE, customers must ensure they have a VoLTE-capable device with firmware that supports VoLTE, a UICC-G SIM and a VoLTE rate plan and appropriate AT&T IoT review and approval. Customers should reach out to their Account Team who can provide specific details on what needs to be done to help ensure a smooth transition from 3G to 4G LTE if voice service is required.

Q: Where can I find additional information on LTE-M?

A: For additional information on LTE-M including FAQs, please visit LTE-M Network

Q: As I plan my upgrades to 4G LTE and LTE-M, how do I know how many devices I have that are not 4G LTE and LTE-M?

A: Customers can use existing reporting tools to identify the technology type of specific devices. If further assistance is required, customers' AT&T account team can be a valuable resource.

Q: Where can I find information about IoT devices to help with my upgrade?

A: For more information about IoT devices to help with your upgrade, go to <http://iotdevices.att.com/>

Q: How will AT&T help IoT customers manage their upgrades to 4G LTE and LTE-M?

A: AT&T is committed to providing information to our customers to help manage their upgrade to 4G LTE and LTE-M. Ultimately, customers are responsible for planning their own hardware upgrades. AT&T has developed programs, such as our IoT Accelerator

Program, to promote adoption of newer 4G LTE technologies.

For additional information and resources, please access the following websites:

- **AT&T IoT:** www.att.com/LTEupgrade
- **IoT devices:** <https://iotdevices.att.com/>
- **IoT Accelerator Program:** www.att.com/iotaccelerator

Q: Once I upgrade to 4G LTE or LTE-M, will AT&T pay for the collection and disposal of my company's old devices?

A: No. To help ensure the success of the migration effort and to improve network performance, it's critical that devices are disposed of properly and not reappear on our network. Customers may research and choose an external vendor such as e-Cycle, CelTek Wireless, or WeRecycle (as long as they do not refurbish devices for local use).

Q: What is LPWA?

A: LPWA stands for Low-Power Wide-Area and refers to networks that play an important role in serving the IoT market because of lower cost module hardware, reduced service costs, smaller form factors, improved battery life, and coverage enhancements. LPWA networks use less power consumption and cover a wide geographic area. The networks can be delivered over licensed dedicated spectrum using 3GPP standards or via unlicensed spectrum using open or proprietary standards.

Q: What is LTE-M?

A: LTE-M is a licensed LPWA network that is a 3GPP standards-based technology evolution of LTE specifically built for IoT devices. LTE-M offers greater indoor penetration, subterranean coverage, and extended device battery life at lower costs while leveraging the existing AT&T LTE RAN infrastructure and existing licensed spectrum. LTE-M is also known as LTE CAT-M, CAT-M, or CAT-M1.

Q: How is LTE-M different from other LPWAs?

A: All LPWA technologies can offer long battery life, coverage benefits, and lower costs. However, with LTE-M being an evolution of LTE, it offers many advantages over unlicensed technology vendors. They include:

- **Carrier-grade security:** LTE-M has the advantage of SIM security and is managed to avoid interference from other wireless networks and devices.
- **Scalability: LTE-M has nationwide coverage at launch:** unlicensed vendors have to deploy market by market, building new network infrastructure.
- **FOTA/SOTA:** LTE-M has the bandwidth to allow for over-the-air updates of a module firmware or applications on the device.

Q: What are the best use cases for LTE-M?

A: LTE-M could be used for a number of use cases across several industries. Long battery life is ideal for devices expected to be in use for a long time. Better coverage helps devices that are behind thick walls, deep in basements, or subterranean. Lower cost of modules helps enable large deployments of devices. Licensed spectrum and SIM cards help provide carrier-grade security. Mobility allows for cell tower handoff. Additionally, LTE-M's higher data bandwidth allows it the ability to support FOTA/SOTA, which is extremely important when enterprises are introducing new technology and solutions for the very first time. Metering (Smart Cities), Smart Buildings, Asset Tracking, Asset Monitoring, Retail, Healthcare, Wearables, Home Appliances, Agriculture are all use cases that can benefit from LTE-M.

Q: When will the AT&T LTE-M network be available?

A: In the U.S., the nationwide launch was on 5/18/2017 covering over 300M POPs. We deployed LTE-M in Mexico in the fourth quarter of 2017.

Q: Is AT&T introducing new LPWA / LTE-M data plans to coincide with the introduction of LTE-M network?

A: Modules will initially be much lower cost compared to other cellular options lowering the initial cost of deployment. From a service standpoint, new yearly plans were introduced at discounted rates. Contact your account manager for detailed pricing.

Q: How much can we expect modules to cost?

A: AT&T IoT Accelerator program offers LTE-M modules as low as \$7.50 each including SIM card and applicable essential intellectual property rights (eIPR).

Q: When and what modules are certified by AT&T for LTE-M use at launch?

A: We're working with several manufacturers on certification as part of the IoT Accelerator program and have several certified with more coming. Please visit <http://iotdevices.att.com/modules.aspx> for the most recent list.

Q: Will the IoT Starter Kit support LTE-M?

A: The existing IoT Start Kit supports LTE-M with a firmware update. A new LTE-M IoT Starter Kit that supports LTE-M out of the box is under development. Please visit <https://marketplace.att.com/iot-starter-kits> for more information and to order IoT Starter Kits.

Q: What speeds can you get on LTE-M?

A: LTE-M runs at half duplex mode with data throughout peaking at 375kbps.

Q: What are the LTE bands and what's the channel size for AT&T LTE-M?

A: AT&T LTE Bands 2, 4, and 12; 1.4MHz Channel.

Q: What are our LTE-M global plans?

A: Due to the licensed nature of LTE-M, a global LTE-M deployment requires roaming agreements. However, a global group of leading established network vendors are supporting the GSMA standard, including AT&T, Verizon, Orange, Telefonica, Bell Canada, Telstra, KPN, NTT DoCoMo, and other leading global MNOs. In addition, we have a global strategy at AT&T and can help put together a global solution for your devices.

Q: What is the SIM IMSI range? Will LTE-M work in AT&T Control Center and AT&T Enterprise on Demand (EOD) platforms?

A: LTE-M will be on available on both 310-410 and 310-170 IMSIs and can be utilized in both EOD and Control Center for applicable SIMs.

Q: Over what spectrum are you delivering 4G LTE?

A: We're delivering 4G LTE over 700 MHz spectrum in our markets, with a limited number of markets using 2100 MHz, 850 MHz, and 1900 MHz.

Q: What does 4G LTE allow users to do that they can't accomplish with 3G or HSPA+?

A: The potential benefits of 4G LTE in comparison to 3G or HSPA+ are:

- **Faster speeds:** LTE technology is capable of delivering speeds faster than many other current commercially deployed mobile internet technologies.
- **Faster response time:** LTE technology offers lower latency, which is the processing time it takes to move data through a network. Lower latency helps to improve services like two-way video calling and telemedicine.
- **More efficient use of spectrum:** Wireless spectrum is a finite resource. LTE uses spectrum more efficiently than other technologies, creating more space to carry data traffic and services and to deliver a better network experience.

Q: In upgrading to a more advanced 4G LTE or LTE-M device, will customers' coverage be comparable to what they have on the 3G network today?

A: We anticipate coverage will be comparable to the coverage they received from our 3G network. The overall AT&T network covers more than 99% of Americans, and our 4G LTE network currently covers nearly 400 million people and businesses in North America.

Q: How can I find out where 4G LTE and LTE-M is available?

A: Visit www.att.com/network for coverage maps. For Mexico, you can access: www.att.com.mx/servicios/att-cobertura.html

Q: How fast can I expect 4G LTE to be?

A: We expect that in most markets, our 4G LTE download speeds will range from 5-12 Mbps, with significantly higher average speeds in many markets, and upload speeds in the 2-5 Mbps range.

Q: What is Voice over LTE?

A: Voice over Long Term Evolution (VoLTE) technology is an all-Internet Protocol (IP) technology that supports voice calls over an LTE network. LTE uses IP packets for all communications.

Q: I require voice service over LTE (VoLTE). How do I ensure a smooth transition when upgrading my IoT devices from 3G to LTE if voice service is required?

A: If voice is required for LTE, customers must ensure they have a VoLTE-capable device with firmware that supports VoLTE, a UICC-G SIM, a VoLTE rate plan, and appropriate AT&T IoT review and approval. Customers should contact their Account Team who can provide specific details on what needs to be done to help ensure a smooth transition from 3G to LTE if voice service is required.

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