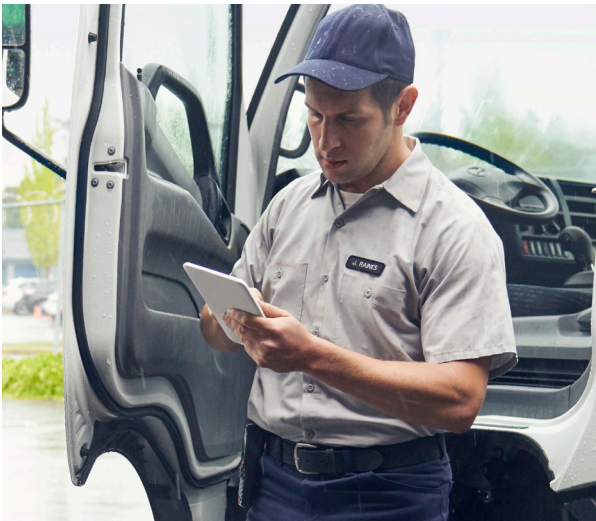


# AT&T has the right experience for your IoT migration from 2G/3G

Prepare for the imminent 2G/3G sunsets now



## The 2G/3G sunset is near.

### Here's what you need to know.

Technology offers new opportunities that can radically change business operations for the better. As technology advances, companies must proactively adopt compelling new services and solutions to keep up, or jeopardize business continuity. AT&T provides customers with solutions designed for simplicity and scale that work together with customers' business goals at the forefront. As your business plans for impending 2G/3G network sunsets, you can rely on AT&T to help you migrate.

This paper examines the points your business must consider as you plan for migration. Without a best-practices approach, migration can be costly, inefficient, and filled with pitfalls. AT&T has the industry experience and insights, devices, and professional services support to ensure a successful, future-ready migration to 4G LTE and (when available) 5G.

### Technology changes everything

In just 12 years, from 2007 to 2019, mobile data traffic on the AT&T national wireless network increased more than 580,000% because of what new technology offered people in their work and in daily life. And today, the world of mobile is in a vastly different place than it was then; the network technology that supported the mobile ecosystem in 2007, 2G and 3G, can no longer keep up with today's demand.

The time to sunset these generations of wireless networks has come, which means companies need to migrate their 2G/3G-supported technology or risk business disruption. By redistributing capacity to newer generations of networks, like 4G LTE and soon 5G, we create opportunities for better user experiences and increased efficiency across the entire network spectrum. The opportunities are endless, but companies must prepare now for these network changes—as well as for device obsolescence. The right migration strategy can help your business not just migrate, but put into place transformative solutions to improve operations, help drive faster business decisions, improve customer service, and more.

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We completed our 2G network sunset migration in 2017, and we're setting course for the sunset of 3G technology in February 2022. It's important for businesses that are still using 2G/3G to plan and implement their migration roadmaps in time for 3G network sunset, before devices go dark. Failure to fully migrate can cause disruptions in your mission-critical functions, which can ultimately affect your operations, customer experience, and reputation. It is urgent that businesses begin now to help ensure business continuity. We can help.

4G LTE/5G will considerably improve your [Internet of Things \(IoT\)](#) applications with more advanced services which can not only enhance business operations, but can enable you to better serve your customers. Don't wait to plan your migration! Companies who go beyond simple migration and employ future-ready strategies can sharpen their competitive advantage.

Today, the right provider can help you migrate advantageously. But how do you choose the provider that fits your business goals?



## Migration success

The migration experience can be intimidating unless you are working with the right provider. AT&T can help you develop and implement a comprehensive action plan to make sure it's business-as-usual when the "off" switch for 3G gets flipped. Our experts can help you choose the right solutions using strategies driven by our broad wireless and IoT expertise and our global network.

### 1. It starts with a thorough audit

Successful migration starts with understanding where and how your existing devices are being used, planning ahead, and identifying sunset dates for your current technology. Many 3G solutions have been in service for years, and developing an exact picture of where they're located can be difficult. Identifying LTE substitutes is key. In addition, there can be uncertainty as to what kind of chain reaction will occur when legacy systems are altered. This uncertainty can make it difficult to assess a budget and your true needs, especially if you are working with an unseasoned provider.

We can help audit your devices and begin consideration for a broad portfolio of solutions for your migration needs and future business goals.

**Business Needs:** Connectivity, devices and expert support.

### 2. Planning the migration strategy and use case mapping

When enterprises are asked what keeps them up at night regarding 2G/3G migration, they often report they fear there is "a lack of experienced personnel!" A strong provider with IoT expertise and versed in network migrations can be the difference between a company's success or failure.

We can help identify resources and professional services to deploy your solutions, whether you need app development, logistics planning, installation, and ongoing support, for example. We consider requirements, resources, sunset timing, risks, and opportunities as we help plan and map your strategy.

AT&T can address key challenges of diverse use cases and give you recommendations of what network technology

choices are best for your business based on your business requirements and goals. We can help streamline device procurement, activation, and the configuration process while giving you access to advanced LTE network technologies. We perform risk analysis and end-to-end planning to make sure you can get the most from your migration investment and ROI, while maintaining continuity of your business.

We have robust experience across industry sectors: Manufacturing, Transportation and Supply Chain, Agriculture, Smart Cities and Grid, Healthcare, Retail, Sports and Entertainment, Government, Education, and Finance.

The most common issue expressed by surveyed enterprises about 2G/3G migration is a 'lack of experienced personnel!'"



**AT&T Professional Services can help determine your company's device locations, establish requirements for replacing devices, and assess the resources necessary to manage a project from planning to implementation and beyond.**



Transportation and Supply Chain Agriculture  
Smart Cities and Grid • Healthcare Retail • Finance  
Sports and Entertainment • Government • Education

### 3. We can help you put the right technology in place

Businesses that have been operating on 2G/3G devices for a long time need to consider the effects the jump in technology could have on their operations. Before migration plans are implemented, personnel will need to understand how devices can change procedures and operations; we can help.

AT&T technologies and expertise help interconnect the features of your digital landscape so you can optimize your business and bottom line. Our edge-to-edge technologies provide virtually seamless integration across endpoints, connectivity, data in the cloud, and cybersecurity. We can help transform your business with next-generation devices and technology that spans a broad portfolio of solutions designed for network optimization.

### 4. Aligning with us simplifies your migration journey

Today, there are more than 60 million 2G and 3G IoT cellular devices in the U.S. According to a recent survey by James Brehm & Associates, 40% of enterprises with 2G or 3G devices have not been notified by their carrier about their network shutdown.<sup>iii</sup> If you haven't taken steps toward migration, it's important to move quickly to get professional advice regarding your IoT solutions or risk device inoperability. You need a provider who can help ensure on-time device migration to minimize service disruption.

Common setbacks companies encounter by not having the right help:

- **Lack of expertise** to develop and deploy the right solutions
- **Insufficient resources** to manage multiple vendors for components of IoT solution
- **Security issues**, unfamiliar logistics, poor process coordination

40% of enterprises with 2G or 3G devices have not been notified by their carrier of their network shutdown.<sup>iv</sup>

AT&T is ready to help you with your migration.

### What customers need to consider in IoT migration:

- A full-service provider with gold-standard expertise in IoT
- Global coverage
- To consolidate multiple carriers and logins
- Go-to-market strategy that is also future-ready
- Network-based security
- Quality and flexibility of eSIM coverage
- Help managing cost of IoT implementation
- A modernized mobile infrastructure

## Why do more companies choose AT&T for IoT?

AT&T is uniquely positioned to provide end-to-end solutions from our network to your hardware to edge-to-edge solutions. We are invested in innovation. Our security allows you to deploy with confidence. We can help you realize the power of IoT and navigate the intricacies of it to quickly build the solution that works for YOUR business or organization.

Anchored by our highly secure, highly reliable global network, leading-edge platforms, our innovative ecosystem, and our award-winning customer service, we have flexible, powerful solutions to meet your specific and unique needs.

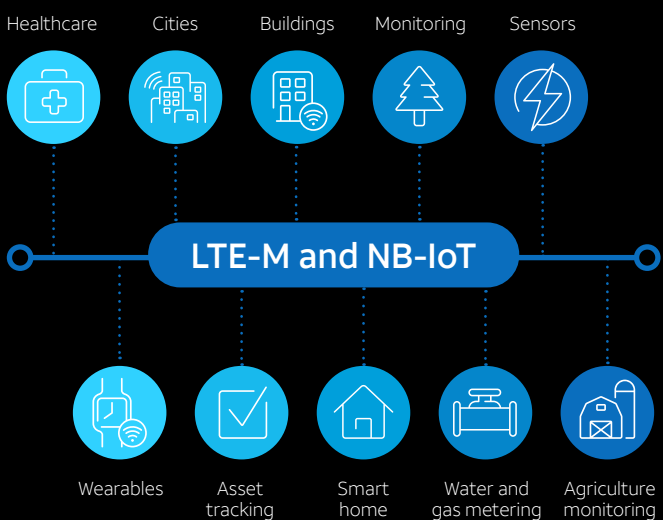
Plus, you get 24/7 support, single billing options, and consulting services to make sure your solutions work to achieve your business goals.

We've had decades of experience helping businesses of all sizes and industries define, design, and launch their projects. Our consultants immerse themselves in critical aspects of your business to create solutions and action plans that can help accelerate your network migration. For example, by the end of 2016, our successful migration of 2G devices represented nearly 60% of customer devices subject to sunset. We have the scale required to assist in replacing your legacy IoT solutions no matter the size of your organization. We can help you develop a 4G LTE migration plan for your existing 2G or 3G devices while getting your infrastructure future-ready for 5G and beyond.

## AT&T delivers the power of possibility to help you build better, run smarter, and dream bigger.

# LTE-M and NB-IoT

Connect devices with a highly secure, cost effective, reliable IoT network. The LPWA (low-power wide-area) networks, LTE-M, and NB-IoT are designed and optimized for IoT connectivity.



Healthcare   Cities   Buildings   Monitoring   Sensors

Wearables   Asset tracking   Smart home   Water and gas metering   Agriculture monitoring

## What sets AT&T apart?

### AT&T Professional Services

[AT&T Professional Services](#) can recommend the right IoT devices, modify your applications, and help with logistical services of installation and deployment. Our range of experts cover the major IoT vertical markets and are specialized in the nuances and business goals of each. Our ability to measure the success of an IoT solution is not about the sum of the parts or just the network, but in creating an IoT solution that supports your needs and goals.

### AT&T Foundry

The AT&T Foundry<sup>®</sup> is a group of state-of-the-art innovation centers where we bring innovation to market faster. We accelerate the launch of new products and services through rapid prototyping. Foundry projects are intended to be short. This allows us to quickly identify what ideas work and which ones do not while gaining valuable feedback from our customers. By doing this, we remove obstacles allowing us to bring new technologies to our customers faster.

## AT&T Certification Lab

We opened our certification lab in 2009 specifically<sup>vi</sup> for developers who are designing wirelessly connected, next-generation devices. Developers can optimize, verify, and validate the operating system and chipset needed to take your IoT solution to market. And we've already successfully tested and certified more than 2,600 devices<sup>vii</sup>.

AT&T has already successfully tested and certified more than 2,600 devices.<sup>viii</sup>












## The AT&T Control Center

With capabilities to provide global connectivity to over 200 countries, we are ready to deploy your solutions virtually no matter where they are located. We have the premier way of enabling your management of connectivity. The [AT&T Control Center](#) is a Connectivity Management Platform (CMP) utilized for IoT Solutions.<sup>ix</sup>

The control center has tools for better self-management of your IoT cellular connections. This capability allows enterprises to control costs, test devices, and harden security. It secures your information, provides the ability to white list IP addresses, lock down access to corporate data, and detect anomalies.

AT&T covers more than 99% of all Americans.<sup>x</sup>

## AT&T IoT Console

Security	Solutions	 Vehicle solutions	 Asset management	 Smart cities	 Fleet
	Platforms	Solutions Development	<ul style="list-style-type: none"> <li>• Analytics as a service</li> <li>• IoT platform (DataFlow)</li> </ul>		<ul style="list-style-type: none"> <li>• Assets management operation center</li> </ul>
		Service Management	<ul style="list-style-type: none"> <li>• Billing management</li> <li>• AT&amp;T control center</li> </ul>		<ul style="list-style-type: none"> <li>• IoT gateway</li> <li>• Multi-network connect</li> </ul>
	Multi-Network Connectivity	 Wireless	 Satellite	 Wired	
SIMs and Devices	 Global SIM	 Gateway	 Agents	 Devices	

Professional Services & Consulting

By 2025, there will be 80 BILLION devices connected via IoT.\* AT&T can help your business take advantage of the exciting technology that will carry out your business into the future.

• [Asset Management](#) • [Vehicle Solutions](#) • [Smart Cities](#) • [Global IoT](#) • [IoT for Good](#) • [Internet of Medical Things](#)

\*IDC: Worldwide Internet of Things Installed Base by Connectivity Forecast, 2017-2021



## 69M IoT connected devices on the AT&T network

### Get the help you need for your 2G/3G transition

2G and 3G network sunsets are unavoidable, but you don't have to manage the migration alone. Having an experienced provider during this critical network transition will ease the stress and uncertainty for your organization. AT&T is here to help you through this transition from the beginning through deployment. We are the right provider to help assess the complexities of your business to get you ready for what's ahead.

<sup>1</sup><https://foundry.att.com/stories/5g-and-edge-computing-innovation/>

<sup>2</sup><https://foundry.att.com/stories/5g-and-edge-computing-innovation/>

<sup>3</sup>James Brehm & Associates "The 2G and 3G Sunset Survey" (2019)00

<sup>4</sup>James Brehm & Associates "The 2G and 3G Sunset Survey" (2019)00

<sup>5</sup><https://foundry.att.com/>

<sup>6</sup><https://iotdevices.att.com/certificationlabs.aspx>

<sup>7</sup><https://www.business.att.com/content/dam/attbusiness/briefs/att-global-device-certification-brief.pdf>

<sup>8</sup><https://www.business.att.com/content/dam/attbusiness/briefs/att-global-device-certification-brief.pdf>

<sup>9</sup><https://www.business.att.com/products/control-center.html>

<sup>10</sup>Based on overall coverage in U.S. licensed areas. Coverage not avail. everywhere.

For more information visit [www.att.com/maketheswitch](http://www.att.com/maketheswitch) or call 844 951-2639