



Seamlessly incorporate newly-acquired companies thanks to flexible AT&T SD-WAN

- **Business needs** – TT Electronics' ambitious growth strategy required a global network that could more easily accommodate new locations
- **Networking solution** – AT&T Software-Defined Wide Area Network (SD-WAN) moves network traffic management from hardware and on-premises equipment to next generation software in the cloud
- **Business value** – The ability to integrate new locations in days rather than months, enhances ability for staff to work remotely. This has proven to be a huge boon during the pandemic, allowing TT's employees to work from home without missing a beat.
- **Industry focus** – Engineered electronics
- **Size** – 29 global locations

About TT Electronics

TT Electronics (TT) is a global provider of engineered electronics for performance-critical applications. With around 5,000 employees operating from 29 key locations around the world, TT designs and manufactures a wide range of electronics for sensing, power management, and connectivity primarily for applications in the industrial, medical, aerospace, and defense sectors.

The situation

TT has grown rapidly, due in part to an ambitious merger and acquisition strategy. While its MPLS-based network offered excellent performance, scalability, and disaster-recovery capabilities, it did not easily accommodate new locations. TT needed a network that would be easy to deploy to acquired companies and provide centralized control and management.

Solution

AT&T Software-Defined Wide Area Network (SD-WAN) makes it easy for TT to expand its network to incorporate newly acquired businesses. The network delivers intelligent and dynamic routing, optimized cloud connectivity, and visibility into TT's applications and performance. This level of control allows for optimal application performance, flexible deployment options, and improved total cost of ownership.

Simplifying complexity

TT Electronics believes technology is shaping the future of humanity. The company works to simplify the development of the complex electronics on which its customers rely. It provides a range of mission-critical electronics solutions—from design, engineering, and manufacture of components to complete electronics systems for sensing, power management, and connectivity.

Its offerings include innovative technologies like advanced flight controls, smart surgical tools, intelligent vehicle charging, and seamless automation. “We do everything from building individual components by the thousands and tens of thousands to building custom solutions for our customers,” said CIO Derek Winskill.

Jaye Tillson, TT Electronics Head of Architecture, said he appreciates the company's principles and sense of social responsibility. “It's a nice place to work,” he said. “Although it's quite a large company, it's still got a family feel to it.” He attributes much of TT's success to a culture that values individuals as well as community and teamwork. The company's 5,000 employees work from 29 locations in Europe, Asia, Africa, and North America.

Empowering staff to do their jobs

Information technology is a strategic enabler of TT's commitment to its employees. “IT is there to support all our users and employees across the business. We don't do IT for the sake of doing IT,” Winskill said.

“AT&T listens to our requirements and comes up with solutions that meet our needs. They're not just trying to sell us bigger network bandwidth pipes.”

Derek Winskill
CIO, TT Electronics, PLC

An architecture team led by Tillson vets new technologies and an enterprise resource planning (ERP) team handles the business process management software solutions. An application team focuses on running and maintaining existing assets.

The company's IT professionals work in the field, fixing issues as they arise. “The whole focus is about making it as easy for our end users as possible,” Winskill said. “It's a fine balance, because you need IT controls and a level of IT security, but we're trying to do it unobtrusively. My goal as an IT leader is to empower our users and make it easier for them to do their jobs.”

Growth strategy extends reach

The architecture and IT teams also support TT's bold merger and acquisition strategy. Since its founding in 1988, the company has grown organically and through frequent acquisitions. These acquisitions have extended TT's capabilities in its core markets of aerospace, defense, and medicine/healthcare. TT drives value for shareholders by investing in complementary and targeted acquisitions while focusing on business expansion, research and development, and operational capabilities.

"TT is a highly acquisitional company with global reach," Tillson said. "When I joined the company 10 years ago, they'd done lots of acquisitions but had never totally integrated them. The strategy at this time was to keep each new acquisition operationally independent, so no attempts were made to incorporate the new sites onto the company's network."

Tillson's first task when he joined the company was to create a global MPLS network that connected all company locations with a centralized IT function. "The first project I ever worked on for TT was with AT&T," he said. "We created a single IT support center and a global network with global systems. We were able to give all employees a company email address, which is very important, along with file services and financial platforms."

A network to support strategic priorities

Incorporating acquired companies onto TT's MPLS network is not a simple matter. "I've done a lot of integrations with TT," Tillson said. "Generally it's three, six, nine months to wait for an MPLS circuit to go in.

We would find ourselves ordering circuits very early, before we even were 100% sure we were going to acquire a business, to get the circuit installed in time."

Winskill said the delays in adding acquired companies to TT's network were the company's biggest IT challenge. "We needed to address the speed of the integrations," he said.

Although the company's MPLS network delivered a high level of security, it didn't provide the bandwidth required for the cloud-based applications the company planned to deploy. TT looked to make an infrastructure investment that would support its strategic priorities and promote operational excellence.

The value of easy integrations

TT researched several options and chose AT&T SD-WAN. The company was able to integrate it virtually seamlessly with the existing MPLS network. The hybrid infrastructure gives TT visibility into the network. It also enhances security. Additionally, a higher level of control makes it easy to add new locations and allows for optimal application performance.

"AT&T SD-WAN gives us much better bandwidth, more control, and more security for a very similar price," Tillson said.

It also makes it quicker and easier for Tillson's team to integrate new acquisitions. "When we bought a business in California earlier this year," he said, "we were able to complete the purchase on a weekend, and on Monday morning we had our own Wi-Fi and many of our services available on that site."

AT&T SD-WAN will make future acquisitions just as straightforward, Tillson said. “I can see us easily doing more acquisitions. The value that we get out of doing integrations really quickly is phenomenal.”

More than a network provider

The AT&T Business solution has increased the speed and capacity of TT’s network performance for about the same price. “We get greater capacity,” Tillson said. “We’ve actually managed to multiply the bandwidth of some of our lines by 10 and pay a similar cost.”

The company uses AT&T SD-WAN Over the Top Service, which overlays TT’s MPLS network, encrypting its application traffic with an IPsec tunnel. “The SD-WAN terminates into the MPLS network, so that we can have sites on MPLS or SD-WAN or a mix of both,” Tillson said.

“We don’t look at AT&T as just a network provider. We buy other services through AT&T, including cloud security, email protection, and a number of other services, so it’s more of a collaboration.”

Jaye Tillson
Head of Architecture, TT Electronics, PLC

“Using another SD-WAN provider would have required all new circuits and a cumbersome weekend cutover,” Tillson added. “With the AT&T Business version, we can

do one site at a time and still leave our data center on MPLS. Or we can leave some core sites with MPLS and SD-WAN, and then some of the smaller sites can just be SD-WAN. We have that flexibility. That was really the standout.”

“We don’t look at AT&T as just a network provider,” Tillson said. “We buy other services through AT&T, including cloud security, email protection, and a number of other services, so it’s more of a collaboration,” he said. The company is currently working to deploy cloud-based web security and remote access solutions from AT&T Business.

Connecting from anywhere during the pandemic

The strength of its networks made it a simple matter for TT to protect its employees from COVID-19. The company faced the pandemic much earlier than many because of its presence in China. “Our users could carry on doing their job from anywhere,” Winskill said. “They didn’t require a TT laptop or PC, so we had minimal disruption to our work force.”

Weeks into the pandemic, Winskill remembers seeing a post from another company—a photo of dozens of laptops it was shipping to enable employees to start working from home. “We never stopped working,” Winskill said. “We just carried on.”

Tillson said he and his team were prepared to support people working from home before business leaders had made the decision to send people home. “We saw what was coming in China, and we dealt with it in China,” he said. This enabled TT to be ready when the virus spread across the globe.

TT was able to easily replicate in the U.K. and the U.S. the lessons it learned in China.

“We have a flexible approach across our business,” Winskill said. “We can adapt to different regulations in different territories as needed. But at all times we were able to keep the majority of our business open.”

Company executives and other staff have been pleased with the IT staff’s work during the pandemic. “We’ve had a huge amount of positive feedback from the business and a number of internal awards for staff going above and beyond during that time,” Winskill said. “We also got feedback from end users on how easy it was for them to do their jobs during the pandemic because they could connect from anywhere, any time.”

Solutions that meet the company’s needs

TT’s IT and Architecture teams appreciate the relationship they have built with AT&T Business. “I think AT&T listens to our requirements and comes up with solutions that meet our needs,” Winskill said. “They’re not just trying to sell us bigger network bandwidth pipes.”

Winskill added: “They listen to the drivers about what our business needs in terms of flexibility and being prepared for growth, and they come up with solutions that meet that, rather than just being somebody who does wholesale internet circuits and just wants to shift the numbers.”

Tillson views AT&T Business as an extension of TT’s IT teams. “They know the network well,” he said. “They understand us as a business and understand what our problems have been over the years. So, when it came to renewal and talking about the next situation at the network, they suggested not just a network but a solution that fit what we needed as a business.”

Tillson expects that AT&T will support TT as the business continues to grow. “We’re looking at how we can grow into new markets and looking at other businesses that we can partner with and acquire,” he said. “I’m sure as we now have a flexible solution from AT&T Business they will be able to help us as we demonstrate faster integrations of businesses as we acquire them.”

The relationship with AT&T Business helps keep TT staff apprised of new technologies. “IT is not stagnant,” Tillson said. “It’s constantly changing. It’s my role and my team’s role to constantly look at new technologies and what can help the business.” He appreciates suggestions from AT&T, which he says are always well informed.

“TT has quite a small, lean IT team, so any help we can get from any of the third parties we partner with in regard to new technologies, is fantastic,” Tillson said. “And the better they know our business, the easier it is for people to recommend.”