

Embrace the Digital Revolution with AT&T 5G and VMware SD-WAN



“Better intelligence means better outcomes for businesses. SD-WAN and 5G individually have the power to significantly transform a business. But when you put them both together, you open the door to insight on an entirely different level. With that comes new capabilities and opportunities that can help businesses innovate faster in the next phase of their transformation.”

ROMAN PACEWICZ
CHIEF PRODUCT OFFICER
AT&T BUSINESS

IMPACT OF 5G NETWORKING

- One study predicts 1.5 billion new 5G mobile subscriptions by 2024.¹
- 5G infrastructure spending is poised to increase from \$528 million last year to \$26 billion in 2022.²
- Customer demand for new features as 5G becomes more widespread is only expected to grow.

With VMware SD-WAN™ by VeloCloud® earning a well-deserved status as an industry leader, many companies, including AT&T, choose the solution to successfully bridge their nascent 5G networks and SD-WAN.

The emergence of 5G mobile technology over the next few years stands to bring transformational impacts to a variety of industries. 5G's fast download speeds rival those of fiber, offering near gigabit throughput. Additionally, vastly improved latency makes real-time interactivity possible over wide distances, allowing the IoT to truly achieve its promise.

Still, companies that add 5G network capabilities to their existing communications infrastructure need to consider any complexities introduced by this expansion. Simplifying network management is one of the main reasons businesses turn to SD-WAN to handle an expanding network footprint.

Let's take a closer look at a few of the major benefits of 5G technology, and how this partnership between AT&T and VMware helps organizations get the most out of their investment in SD-WAN and 5G.

AT&T Uses VMware SD-WAN to help business customers embrace 5G

5G is poised to become a big part of AT&T's wireless broadband offering. In fact, the company is striving to bring 5G technology and its numerous advantages to business customers. Companies already leveraging SD-WAN and AT&T's current 4G mobile network only need to swap out a modem to take full advantage of 5G once it's available.

Ultimately, it's an approach that makes upgrading any business's wireless communications a simple process. The enhanced network management offered by SD-WAN helps these organizations prioritize traffic based on need, ensuring mission critical applications get the bandwidth they need for superior performance. Adding 5G wireless networking to the equation brings that simplified management to the cellular transport.

SD-WAN AND 5G USE CASE

Consider the scenario of a manufacturing plant. Critical equipment connected to the IoT needs the ultra-low latency provided by 5G. SD-WAN lets the company segregate its traffic so any time-sensitive devices leverage the 5G network, while employees accessing the internet are able to use regular broadband transport. It's even possible to isolate slices of the network on a more granular level based on business need.

Using 5G wireless without the extra management capabilities of SD-WAN is almost like flying blind when it comes to managing an organization's network infrastructure. Without this application awareness, manual intervention is likely required to ensure traffic gets properly routed to boost overall performance. VMware SD-WAN performs a similar function in an automated fashion, allowing network engineers to focus on other areas.

Emerging 5G market predicted to explode in growth

5G networking is poised to make a massive impact on the business world and beyond. Companies need to strike quickly to embrace 5G as part of their network or risk being left in the dust.

SD-WAN gives providers like AT&T the ability to quickly meet this demand while also developing new products to better serve their business clients. The days of traditional hardware-based network architectures are rapidly coming to an end.

Businesses making an investment in their network infrastructure benefit from the additional cost savings provided by leveraging SD-WAN's superior management capabilities with their existing mobile network, albeit 4G today, with 5G arriving in the near future.

AT&T and VMware's trusted partnership offers the best of both worlds. The fast speeds and low latency of mobile 5G truly shine when combined with the superior management capabilities offered by VMware SD-WAN.

Advantages of using AT&T 5G with VMware SD-WAN

The pairing of VMware's SD-WAN networking solution with AT&T's emerging 5G network offers a myriad of advantages to the modern business. As the AT&T 5G network expands across the country, expect additional synergies with the VMware SD-WAN offering.

Enhanced Control: AT&T Dynamic Traffic Management, which is currently being ported to the 5G networks being installed across the country, offers unlimited mobile data over 5G, while letting businesses easily manage data traffic, prioritizing specific applications as necessary.

Increased Flexibility: An API allows the sharing of provisioning, monitoring, and troubleshooting data between the 5G network and the SD-WAN. This functionality, combined with a new 5G network slicing feature, provides organizations with the superior management capabilities of software-defined networking with the low latency and fast throughput of 5G.

Application Intelligence: VMware's best-of-breed SD-WAN brings its own high-end functionality to this pairing. Using it enables businesses to prioritize app performance based on a set of pre-defined policies. When a critical application needs extremely low latency, simply route the traffic to its own secure 5G channel, providing the necessary performance boost.

High-end Data Security: In the current technology world, information security remains a critical goal for nearly all businesses. VMware SD-WAN offers the intrinsic security that modern organizations need by using always-on data encryption. This same high-end data security is now also available over the open radio of the AT&T 5G network.

Real-time Measurement of Transport Quality: VMware SD-WAN provides important real-time telemetry, analyzing traffic and the overall quality of all network transports. The intelligent system is able to steer traffic as necessary, helping to prevent bottlenecks and keeping performance at its highest. Network engineers enjoy access to a variety of system reports to help them make the right decisions to keep everything running smoothly.

“AT&T and VMware SD-WAN are a natural fit, with a long history of working together to bring next-generation, enterprise-grade solutions to customers. We’re working together to connect the intelligent edge and prepare small business and enterprise customers to be in a position to capture the advantages of 5G, using underlay intelligence to deliver the next application-level wide area network.”

SANJAY UPPAL
VICE PRESIDENT AND GENERAL MANAGER
VELOCLOUD BUSINESS UNIT, VMWARE

Powering the modern business with SD-WAN and 5G

Using SD-WAN alone makes businesses more agile, while also providing cost savings and enhanced application performance. Upgrading the business cellular network to 5G takes things to another level. With 5G, companies are able to manage apps and traffic at the edge of their network by executing policies defining which transport to use for optimal efficiency.

In short, getting the most out of 5G networking becomes easier when paired with an SD-WAN approach.

Ultimately, the partnership between AT&T and VMware offers businesses the best means to take full advantage of both 5G and SD-WAN. The low latency offered by 5G lets companies fully leverage the connectivity of the IoT, along with fast speeds previously enjoyed only when using expensive fiber networks.

SD-WAN management is the final piece of this puzzle, giving businesses state-of-the-art capabilities to manage networks and route traffic, while ensuring the superior performance of mission critical applications. AT&T and VMware remain the right call for the modern business’s network infrastructure.

For more information about VMware SD-WAN, visit [velocloud.com](https://www.vmware.com/velocity).

¹ <https://www.ericsson.com/en/press-releases/2018/11/5g-estimated-to-reach-1.5-billion-subscriptions-in-2024--ericsson-mobility-report>

² <https://www.idc.com/getdoc.jsp?containerId=prUS44432518>