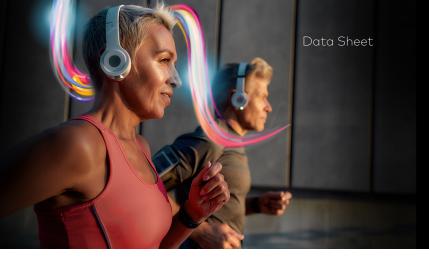
Amdocs Healthcare Solutions

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Network connectivity is one of the most critical aspects of healthcare IT infrastructure. As you introduce new connected medical and IoT devices into your digital environment, a secure and reliable network becomes increasingly crucial for interacting with information quickly, and enabling practitioners to spend more time interacting with patients.

Since devices must constantly communicate with the network, they cannot function properly without consistent and reliable network connectivity. Yet failed or slow connections remain all too common in healthcare environments, placing the ability to provide real-time continuous care across long-term care facilities, ambulatory clinics and hospitals, as well remote care, at risk.

To enable connected devices to support the required level of healthcare, the following network challenges must be addressed:

- **Network security:** Systems must be protected from vulnerabilities that leave them open to data theft. The Health Insurance Portability and Accountability Act (HIPAA) provides strict rules for handling healthcare data. Advancing network technology and the role of IT in HIPAA are crucial in keeping electronic personal healthcare information secure on the network layer.
- **Reliable connectivity:** Healthcare providers are constantly increasing the number of connected devices on the network. Every new device increases the probability of congestion and latency if not scaled properly. The IT department must therefore be kept constantly in the loop to ensure apps and devices are always available and that they have the right network to support the increasing number of devices.

• **Wi-Fi coverage:** Even the most advanced medical facilities can be plagued by blockage of critical signals and areas with weak or no cellular or Wi-Fi connectivity. Older facilities constructed of concrete, as well as those not originally built with wireless access in mind, present especially difficult challenges.

Private LTE/5G networks – more viable than Wi-Fi

While healthcare IT leaders often defer to Wi-Fi for a secure network, a private LTE/5G network can also provide high security with its 3GPP security standards, which are used in modern cellular infrastructure to ensure compliancy with HIPAA requirements. Numerous use cases can be achieved cost-effectively through a secure private LTE/5G network, with the advantage of ensuring lower latency and high reliability. The ability to deploy such networks has significantly improved due to the convergence of several factors:

- **Shared wireless spectrum** via CBRS in the United States (with numerous countries adopting similar models).
- **Proven providers** of network engineering services and solutions with end-to-end "blueprints" and practices for network design, rollout (including integration), testing and operations.
- Reliable, secure yet cost-effective enterprisefocused private LTE/5G network components
- **Expanded open ecosystem** for RAN and core network components, such as Telecom Infra Project (TIP), Open RAN (O-RAN).
- **5G standards/technology** such as network slicing and edge computing.

Even so, private LTE/5G networks raise many challenges and complexities that need to be dealt with across the full lifecycle of tailoring, rolling out and operating a private LTE/5G network.

Partner with Amdocs for this journey

Amdocs Mobile Private Network (MPN) solution enables you to benefit from all the advantages of a private LTE/5G network, including its healthcare applications and use cases. By providing the necessary hardware, software, system integration and network services – combined with our deep expertise in developing and building secure, reliable networks – the solution bridges the worlds of healthcare IT and private wireless networks, enabling you to deliver the highest levels of care.



Amdocs Network & System Integration services

- **Planning services:** leverages Amdocs expertise across industry verticals combined with an understanding of your business goals to determine the appropriate private network solution and technical requirements.
- **Deployment services:** end-to-end engineering services covering planning, design, integration and optimization of components across RAN and core domains, as well as software-powered automation for faster and more efficient rollouts. This includes ensuring all applications, IT environments, security components, network components, devices and management capabilities are connected and working seamlessly together, while ensuring the overall network and service meets technical and business requirements.
- **Management Services:** includes Amdocs Managed Private Network's "single pane of glass" capabilities, which together with its operations services, secure service reliability in accordance with agreed service level agreements.

Experience the benefits of private LTE/5G with Amdocs

Amdocs' mobile private network deployments enable you to realize the following benefits:

- **More reliability:** CBRS-based private LTE/5G networks enable more reliable wireless service as the number of users, devices and services increase.
- Better coverage than Wi-Fi: LTE/5G can handle more dynamic environment changes compared to Wi-Fi. Private LTE with CBRS is ideal for coverage in larger organizations, with higher power specifications and handoff capabilities that enable nodes to deliver service over a longer range.
- Support for current and new applications: Network requirements for use cases and applications must be considered before designing the network. We can help design the right network to support use cases such as reliable voice/data, asset tracking, healthcare IoT devices, applications for patient monitoring, and outdoor connectivity, as well as futureproofing networks for new use cases.
- Affordable cost of ownership: Our end-to-end private network solution spans from design to hardware procurement to deployment and operations with automation. With one vendor managing multiple components within the network, cost savings are passed on to you, resulting in a more affordable total cost of ownership.

Learn more

To learn more about how Amdocs can empower your organization to deliver amazing healthcare services, visit our <u>web page.</u>





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