

Amdocs Open Ecosystem Accelerator for Open RAN



The innovation of new 5G use cases, agility of network resource deployment and dependency of fewer network OEMs has fueled a new vendor ecosystem embracing an open-standard cloudnative network alternative. Yet for service providers, whose success depends on the ability to monetize the technology, this presents a host of challenges: identifying strategies to beat the competition, meeting unprecedented capacity demands, increasing network coverage, winning customers and reducing churn – all while minimizing impact on capex and opex.

Open radio access networks (Open RAN) technology is a key tool in the service provider's arsenal to address these challenges. It provides **speed** to deploy services fast, **openness** to drive innovation, **intelligence** to efficiently orchestrate a dynamic network and **agility** to capture every revenue opportunity.

Open RAN technology drives cost efficiencies by converging 2G, 3G, 4G and 5G onto a single unified software platform, eliminating the need to maintain siloed legacy networks dedicated to just one G service. Furthermore, it offers the ability to intelligently boost capacity, resulting in capex and opex reductions.

Strategic Analyst

Strategy Analytics modelled the TCO of Open RAN over a five-year period. This model showed 40 percent lower capex and 34 percent lower opex compared to a legacy RAN.

Accenture

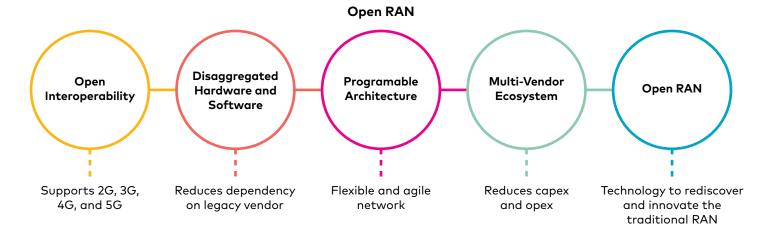
Accenture stated that 5G deployments that used COTS hardware and Open RAN software had seen capex savings of 49% compared to traditional deployment options.

Senza Fili

Senza Fili estimates savings for a cloud RAN deployment to be 37% over five years, compared to a DRAN deployment. Specifically, the study showed a 49% savings in capex in Year 1 and a cumulative 31% savings in opex over the entire five years.

Open RAN: a revolution of the radio access network

Open RAN is an initiative that was launched by the Telecom Infra Project (TIP) industry association to define and build 2G, 3G, 4G and 5G RAN solutions, based on general-purpose, vendor-neutral hardware and software-defined technology.



Rapid changes in both technology and consumer demands make radio network components the most difficult parts of network to disaggregate and unbundle. The next generation Open RAN was designed to address this challenge by reducing the cost of building mobile networks.

The challenge of disaggregated, virtualized solutions

For service providers to thrive in the next-generation economy, adopting disaggregated, virtualized solutions will be key. This is will require adapting their radio access networks to become increasingly software-driven, using a variety of software and hardware from multiple vendors. Yet this too brings challenges. For example, how do you ensure interoperability between the various components?

And how do you optimize deployment scenarios where every service provider's network architecture is unique?

For answers to these questions, we need to look at the supply chain and integration – and most importantly, the role of systems integrators. Indeed, it's these players who bring the capabilities service providers need to accelerate consumption and adoption of Open RAN architectures and unlock the benefits they offer.

Importance of **Partner of Choice Network Integration** Reliability and Experience **Hide Complexity** Lifecycle Management Independency Vendor management Program management Choose best of breed Network expertise with Tier-1 MNOs (roadmap/ Interoperability price model) No vendor lock in Software house for E2E testing **Network services** No conflict of interest automation and **Automation services** (design, build, training analytics and software support) **ORAN** member **TIP-certified**

Amdocs Open Ecosystem Accelerator for Open RAN

Amdocs Open Ecosystem Accelerator for Open RAN provides a comprehensive set of open network solutions and services that minimizes risk during the transition to an Open RAN network. It is the culmination of a careful evaluation of product technologies and hardware & software vendors from the Telcom Infra Project (TIP) community, and the establishment of reseller agreements with various members.

Open Ecosystem Accelerator for Open RAN

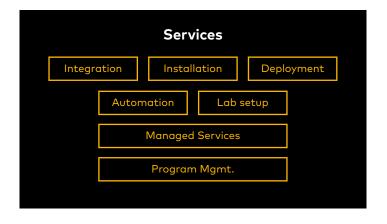
Open network rollout Automate open Lab and network test Open network **Automation** procedures operations Services Software tooling for efficient onboarding of new vendors and lower cost of operations Program Integrator Management Seamless support and maintenance across all Single negotiating Commercial vendors and network point of contact Partner domains Flexible cost models Flexible managed services options

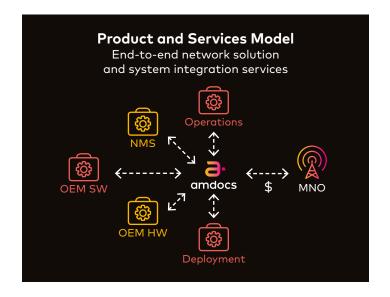
Amdocs Open Ecosystem Accelerator for Open RAN includes:

- System integration services for network operators who are in the process of deploying Open RAN hardware and software
- Choice of best-of-breed partner products to ease process of buying, deploying and supporting new network technology, hardware and software
- · Lab services to test various Open RAN hardware and software combinations for specific use cases

Amdocs' product and services model

End-to-end systems integrator partner for network operators: provides services for third-party network components (ranging from functional testing, automation and hardening to helping customers implement deployments at scale – including greenfield and brownfield deployments) leading to network transformation. Also includes managed services and program management to ensure a successful transition and efficient operations.





Our end-to-end network solution and system integration services includes:

- Hardware and software vendor selection based on predefined criteria
- Test automation depending upon the network of specific geography
- Large-scale deployment and managed services for MNOs to accelerate network innovation with Open RAN

Why Amdocs?

As a preferred partner for tier-1 and tier-2 service providers across the globe, our vast network of rollout and acceptance services provides scalable, fast and reliable network rollouts – enabled by our software-led approach and bolstered by our automation and resource flexibility to support process acceleration. With our Open RAN solution, we deliver flexible solutions that give you the freedom to move rapidly, adapt easily, automate operations and streamline innovation – without being held back by proprietary, monolithic network systems.

Open ecosystem with range of choice: Leveraging our large partner ecosystem of hardware and software vendors, we offer a wide range of choice to network providers. Such options are critical to our customers' ability to provide the increased capacity and availability to meet high data demands, while cost-efficiently enabling market penetration in rural areas.

Member of TIP Exchange: The TIP community is a marketplace for tested products, solutions and configurations that enable MNOs to evaluate technology and partnerships. The community acknowledges the importance of 5G and the associated need to have open architectures, open protocols and interfaces to realize the technology's true benefits. An active member since 2016, Amdocs is a certified solution integrator for telecom infra solution providers, and is actively associated with Facebook, a TIP founding member, in the development of Open RAN solutions.

Network expertise: The processes of deploying new open technologies, new hardware and software components and conducting interoperability tests are time-consuming and high-risk activities, with returns on investment tightly linked to new network services and timely deployment. When deployment is delayed, the result can be revenue loss and increased costs due to delayed service/product launches. Furthermore, when network quality is impaired, it can also lead to high customer churn rates along with a reputation for poor network quality.

For more information, contact Amdocs Network Marketing.

