



Positioning Paper

Driving business value through intelligent network assurance

How Amdocs Helix SAS transforms
CSP operations

As communications service providers (CSPs) navigate a landscape of constant innovation, high service expectations and complex operations, they face the dual challenge of modernizing their networks while maintaining seamless service delivery. As a leader in the OSS space, Amdocs empowers these players to meet these challenges head-on with our advanced solutions that leverage cutting-edge technologies. In this paper, we focus on Amdocs Intelligent Networking Suite (INS), with particular emphasis on its key component, the Helix Service Assurance Suite (SAS). This comprehensive solution harnesses intelligent automation and AI-driven analytics to streamline operations and enhance service quality. We'll examine how INS – and Helix SAS in particular – is reshaping the telecom landscape and enabling operators to excel in an increasingly competitive market.

Driving value for CSPs

Amdocs delivers tailored, scalable solutions that integrate advanced technologies, such as AI and automation, to enhance operational efficiency, reduce costs and provide data-driven insights for better decision-making. Complementing these benefits, these solutions drive digital transformation, manage risks and ensure compliance, empowering CSPs to navigate the evolving telecom landscape.

Key contributions include:

- **Tailored solutions for complex needs:** Amdocs INS, including Helix SAS, address specific pain points, helping CSPs meet their operational and business goals.
- **Innovative technology integration:** AI, machine learning, and automation are incorporated to boost network performance, predict and resolve issues proactively, and optimize service delivery.
- **Scalability and flexibility:** Amdocs solutions grow with the network, ensuring CSPs can handle increasing complexity without sacrificing service quality or efficiency, especially as they expand services and adopt new technologies like 5G and IoT.

- **Operational efficiency and cost reduction:** Amdocs' automation and process optimization reduce manual efforts, lower costs and minimize errors, allowing CSPs to focus on strategic growth instead of day-to-day operational challenges.
- **Data-driven insights and decision support:** Advanced analytics from Amdocs provide real-time insights, empowering CSPs to make informed decisions and optimize resource allocation.
- **Support for digital transformation:** Amdocs assists CSPs in adopting new business models, improving customer engagement and driving innovation.
- **Risk management and compliance:** Amdocs solutions ensure secure, resilient networks that comply with industry standards, reducing the risk of penalties and enhancing network reliability.

As shown in Figure 1, Helix SAS offers flexible "levers" or problem resolution processes-ranging from manual to fully automated closed-loop systems-allowing CSPs to choose the level of automation that best fits their operational needs. These processes leverage Amdocs' patented machine-learning technologies to forecast and resolve issues before they escalate.

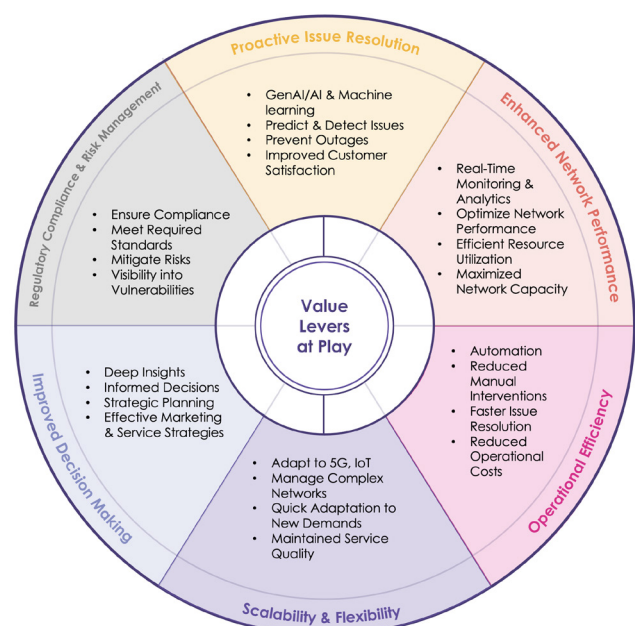


Figure 1: Driving value for CSPs

Optimizing network management

Helix SAS addresses CSPs' challenges by delivering significant value through focused strategies, including AI-driven proactive issue resolution, enhanced network performance and improved operational efficiency – ensuring scalability, flexibility and data-driven decision-making for optimal network management.

The solution delivers business intent-driven closed-loop network automation, integrating critical components such as the customer portal, orchestration, inventory, activation, third-party trouble ticketing and assurance. With these capabilities, CSPs become well-positioned to streamline network operations, automate key processes, and align every aspect of the network lifecycle with business objectives, enhancing service quality and efficiency.

Figure 2 illustrates the closed-loop automation process, where real-time data triggers automated actions that align with business objectives, ensuring network resilience and service quality.

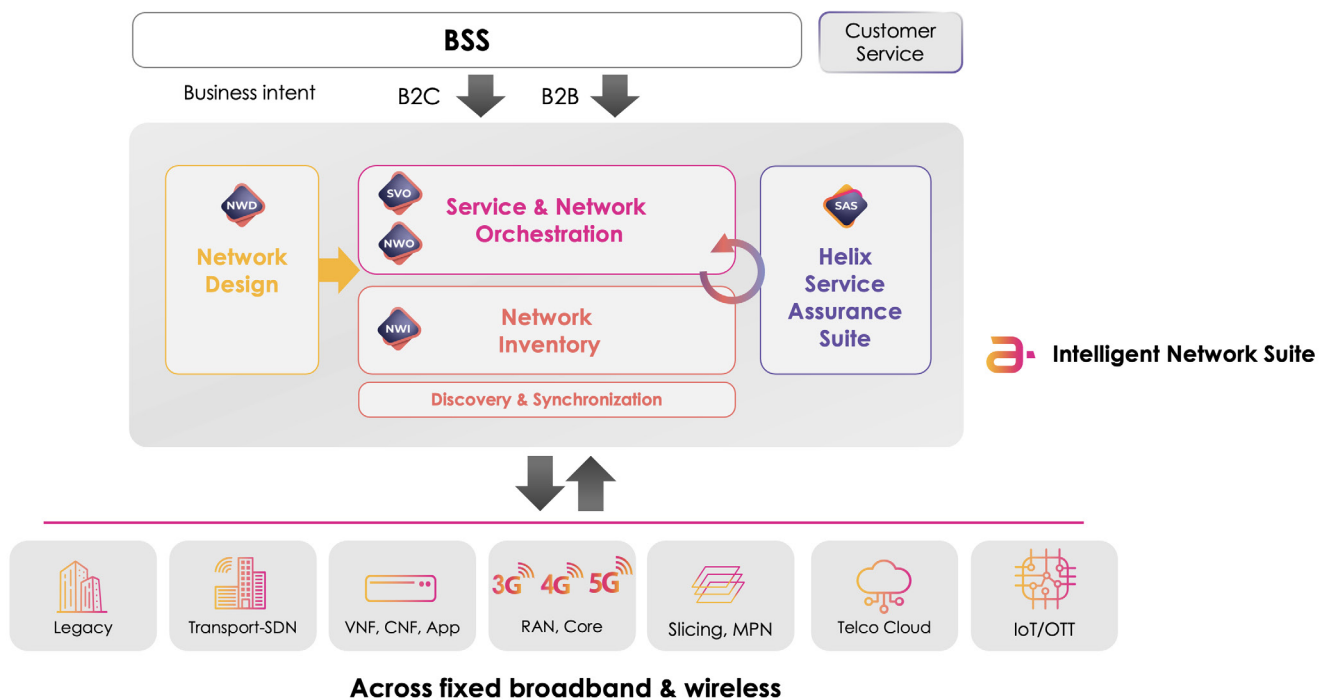


Figure 2: Business-intent-driven closed-loop network automation

Helix SAS supports advancements like virtualization, cloudification, and disaggregation, enabling CSPs to launch new services with agility. By integrating these technologies, CSPs can manage complex networks efficiently, ensuring high service quality even as they adopt SDN, 5G, and IoT. Furthermore, its modular architecture allows CSPs to select features and functionalities that can be deployed incrementally to meet evolving needs.

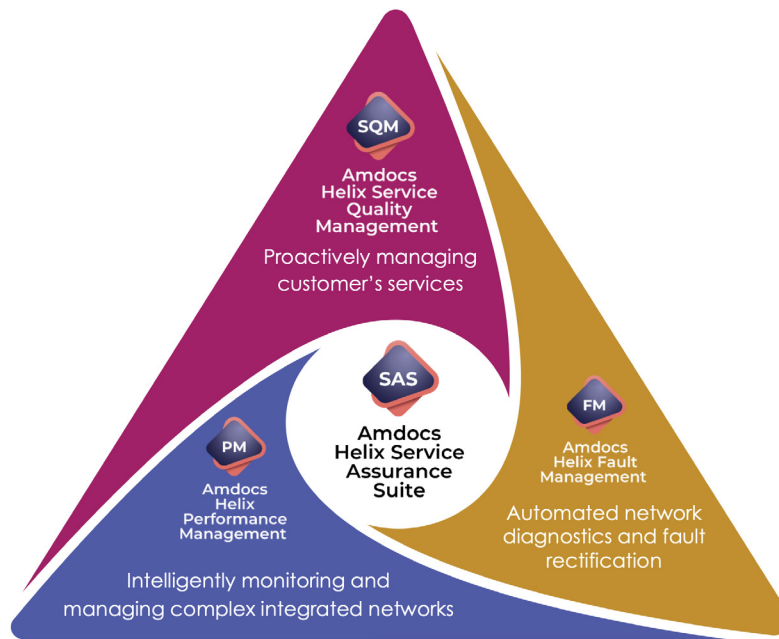


Figure 3: Amdocs Helix Service Assurance Suite

Furthermore, leveraging advanced automation and analytical capabilities, Amdocs' patented machine-learning and forecasting technologies empower Helix SAS to provide proactive problem resolution through manual, semi-manual or fully automated closed-loop processes.

Highlighted customer cases and engagement initiatives



PLDT-Smart

PLDT Inc. (PLDT), a leading telecommunications and digital service provider in the Philippines, has selected Amdocs' next-generation operational support systems (OSS) platform to modernize, unify, orchestrate and automate its network operations on public cloud to drive growth, agility and enhanced customer experience. Under this agreement Amdocs will deliver its market-leading Intelligent Networking Suite, operating on the public cloud, featuring unified network inventory, service and network orchestration, and business process automation capabilities.

PLDT-Smart serves approximately 65 million subscribers with a range of fixed broadband and wireless services for both B2C and B2B markets.



Cell C

This South African communications service provider, has deployed the Amdocs cloud-native Helix Service Assurance Suite to modernize its service assurance. This collaboration marks a significant step in transforming CellC's fault and performance management, driving streamlined assurance processes with the power of machine learning (AI/ML).

With the Amdocs Helix Service Assurance Suite CellC will be able to enhance customer satisfaction through improved service quality. The cloud-native solution, which follows Amdocs' acquisition of TEOCO's service assurance business last year, will empower CellC to improve root cause analysis (RCA) with AI/ML-powered fault management, monitor real-time network performance and notably reduce the Mean-Time-To-Repair (MTTR) for service-impacting issues.

By meeting customer SLA commitments more effectively, CellC is positioned to deliver an elevated customer experience, fostering increased satisfaction and loyalty.

CellC serves approximately 8.5 million subscribers, delivering a comprehensive range of connectivity solutions for both B2C and B2B markets.

Tier 1 Global Service Provider – European-based

Amdocs partnered with a satellite global service provider to enhance service and network operations using Amdocs INS, including Helix SAS. This collaboration leverages advanced automation, AI, and machine learning to optimize service orchestration and assurance across the CSP's hybrid network infrastructure. The partnership aims to streamline operations, reduce downtime and improve service quality – leading to the ability to deliver innovative, cloud-based services more efficiently.



Business Needs

- Cloud-First Transition: A cloud-first business, deployment on Microsoft Azure.
- Service Innovation: Accelerate service innovation and reduce TTM for new services.
- Automation and Standardization: Automation to streamline operations and standardize processes across its diverse systems.
- Flexible Connectivity: Provide flexible, scalable connectivity that can support low-latency performance.
- Integration and Consolidation: Integrate and consolidate its systems to manage network services over multiple clouds and network resources effectively.



Next-gen OSS Solution

- **Amdocs Intelligent Networking Suite, including Helix Service Assurance Suite**
 - Amdocs Service Orchestration covering end-to-end process orchestration, from qualification through fulfillment to customer acceptance testing.
 - Amdocs Network Inventory, Service Assurance Suite and partner's discovery solution for multi-vendor Layer 2 and Layer 3 networks.
 - Open and extensible solution that reduces the complexity and cost associated with integrating and deploying services across multiple vendors, technologies and network domains.
- Cloud deployment on Microsoft Azure.



The IDAN Phase IV TM Forum Catalyst Project

The IDAN Phase IV TM Forum Catalyst project focused on intent-driven slice management within autonomous networks. The project enhanced existing standard APIs, utilizing machine learning to refine network slicing and dynamic orchestration. Building on previous iterations, this phase introduced new methods for CSPs to autonomously provision, operate and maintain network slices. This included effectively translating customer intent into actionable system operations, ultimately leading to improved customer experiences and stronger business outcomes. Amdocs INS and Helix SAS successfully delivered the comprehensive End-to-End Service Orchestration and Assurance solution for this project.

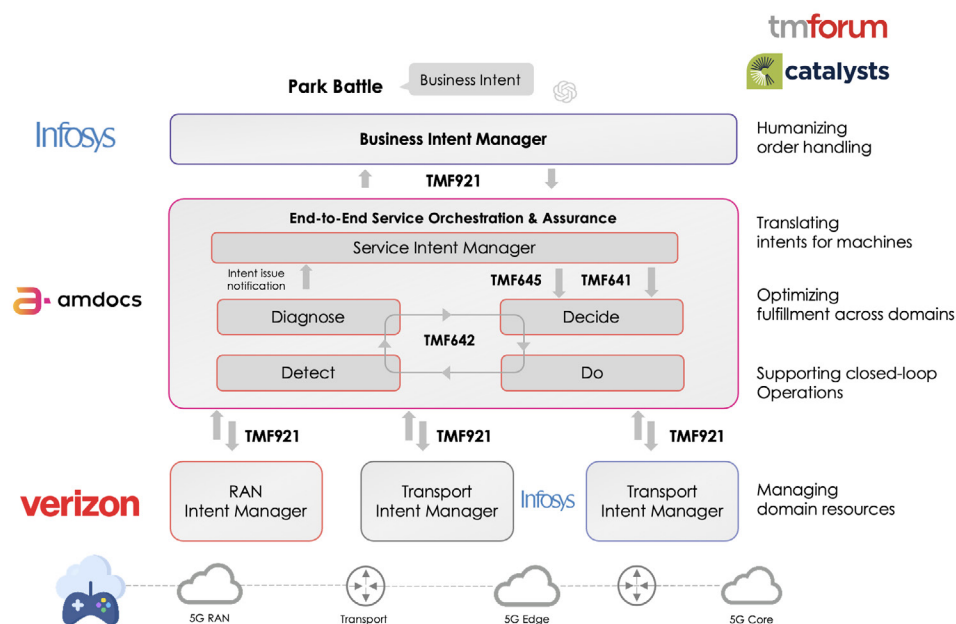


Figure 4: IDAN Phase IV Catalyst - High-Level Architecture

GenAI and Amdocs amAlz platform

Amdocs' amAlz platform, a unique telco-grade GenAI platform, further elevates Amdocs INS and Helix SAS by introducing advanced GenAI capabilities. Key benefits include enhanced automation, deeper data analysis, proactive issue resolution and personalized customer experiences.

Key integration points include:

- **Enhanced automation:** GenAI automates complex tasks and processes, significantly reducing manual intervention and increasing operational efficiency.
- **Advanced analytics:** GenAI performs deeper data analysis, providing more accurate and actionable insights to improve decision-making.
- **Proactive issue resolution:** By predicting and addressing network issues more effectively, GenAI minimizes downtime and enhances overall service quality.
- **Improved customer experience:** GenAI enables the personalization of interactions and services, leading to increased customer satisfaction and engagement.

Elevating Network Assurance with Helix SAS

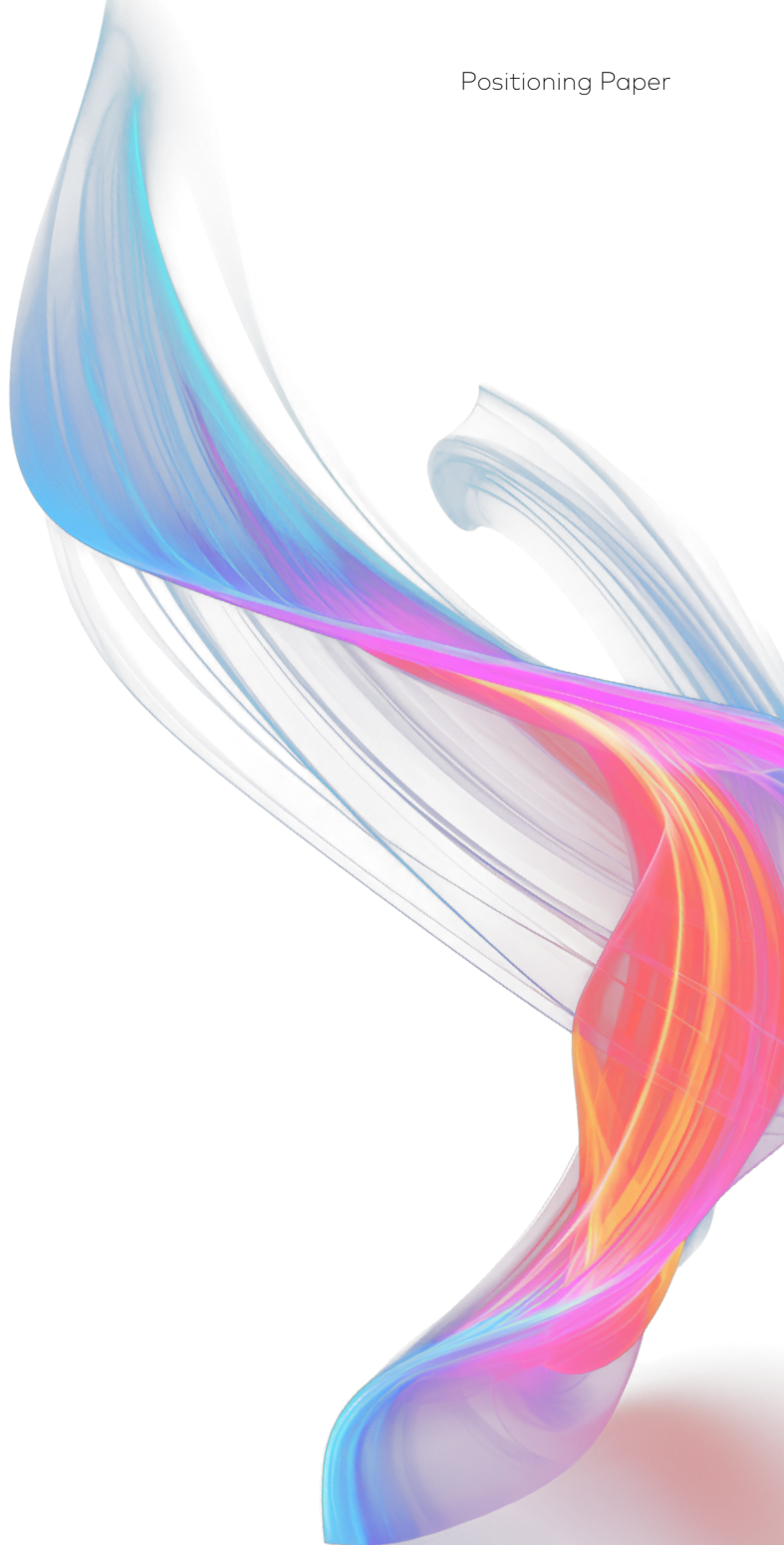
Helix Service Assurance Suite (SAS), a key component of Amdocs Intelligent Networking Suite (INS), represents a significant advancement in network automation and service assurance, addressing the complexities of modern telecom networks through AI-driven tools and closed-loop automation.

By implementing Helix SAS, CSPs can streamline operations, reduce costs and enhance service quality. Its modular architecture and integration capabilities enable rapid adaptation to new technologies and market demands, turning network complexity into a competitive advantage.

As demonstrated by PLDT-Smart, Cell C, and other global operators, Helix SAS, working in tandem with other Amdocs INS components, delivers tangible benefits across diverse markets. With the addition of GenAI capabilities, Amdocs continues to innovate, ensuring CSPs are well-positioned to meet current challenges and capitalize on future opportunities.

To learn more about Amdocs Intelligent Networking Suite, [click here](#).

To learn more about Amdocs Helix Service Assurance Suite, [click here](#).





Amdocs helps those who build the future to make it amazing. With our market-leading portfolio of software products and services, we unlock our customers' innovative potential, empowering them to provide next-generation communication and media experiences for both the individual end user and large enterprise customers. Our approximately 29,000 employees around the globe are here to accelerate service providers' migration to the cloud, enable them to differentiate in the 5G era, and digitalize and automate their operations.

Listed on the NASDAQ Global Select Market, Amdocs had revenue of \$4.89 billion in fiscal 2023.

For more information, visit Amdocs at www.amdocs.com.