



Amdocs Zero Touch Networks

As consumers and enterprises seek new, innovative services to support their evolving lifestyles and businesses, the capacity for CSP networks to withstand the demand is coming increasingly under threat.

The challenges flow from multiple fronts:

- Customers – whether consumers or businesses – demand agile digital experiences with fast, flexible interactions
- Networks are evolving towards openness, disaggregation and programmability with increased levels of complexity
- While revenues remain mostly flat, network investment is still needed to support growing data consumption and ubiquitous connectivity demands

Yet, with these challenges also comes the strategic opportunity to transform the network to embrace the demands of the digital area.

Harnessing the power of automation & AI

Amdocs Zero Touch Networks combines Amdocs' market-leading service and network automation products with key services that support your automation journey. Leveraging AI-powered closed-loops, we harness intent-driven automation to deliver superior business outcomes for your customers while reducing operational costs – with all the agility associated with vendor neutrality.

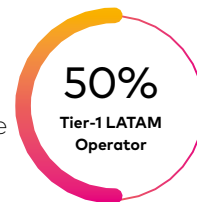
Importantly, in-built automation capabilities allow you to build the highest levels of trust in your system. These include support for domain- and process-specific use cases, such as RAN optimization through xApps and rApps hosted by the RAN Intelligent Controller (RIC), all the way to end-to-end, cross-domain use cases like 5G network slicing management supporting differentiated slice-based services.

Benefits

- **Reduced opex** with our innovative, award-winning end-to-end service and network automation suite
- **Reduced time to market** with a standards-aligned, centralized catalog for services and network model onboarding
- **Reduced TCO** with multi-cloud support and alignment with standards including TM Forum, ETSI, 3GPP, MEF, ONAP and Linux Foundation's CAMARA
- **Reduced risk** with Amdocs domain knowledge, leveraging proven field experience, which provide quantifiable benefits
- **Increased customer satisfaction**, with lower mean time to repair and guaranteed SLAs
- **Avoids vendor lock-in** with flexibility and vendor-neutrality, including out-of-the-box integration with main vendors

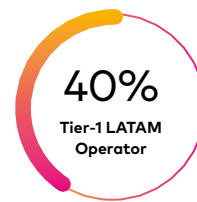
Mean Time To Resolve

High efficiency of Mean Time To Resolve by Amdocs Triage



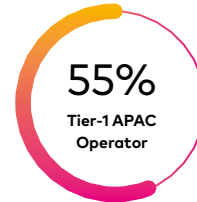
Service Recovery

Amdocs cut Time To Resolve by

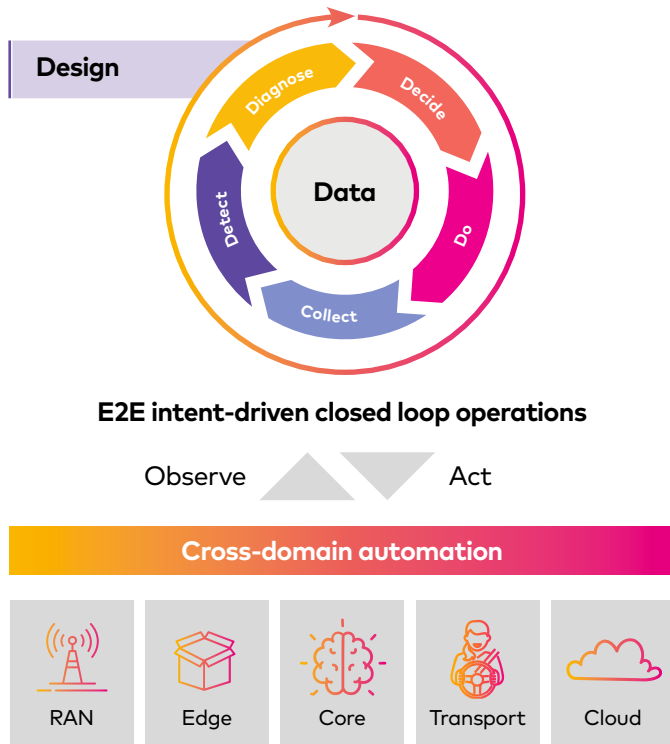


Mean Time To Investigate

(MTII) – Monthly by



Zero Touch Networks Lifecycle

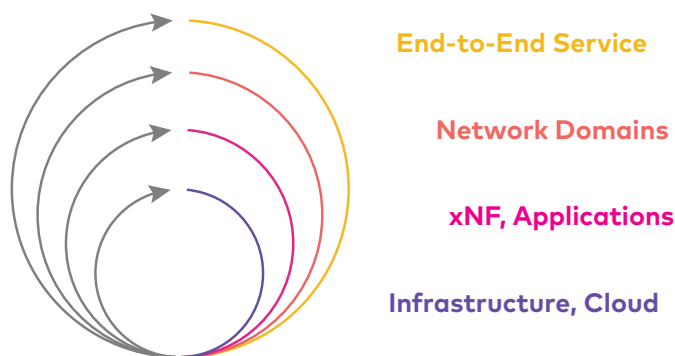


Value-driven automation

Our solution supports a value-driven lifecycle with well-defined steps that help you identify an optimal automation roadmap.

In parallel, by combining our innovative service and network automation products with NetOps and DevOps business-driven methodologies for network operations and CI/CD workflows, it's a strong driver of agility and reliability.

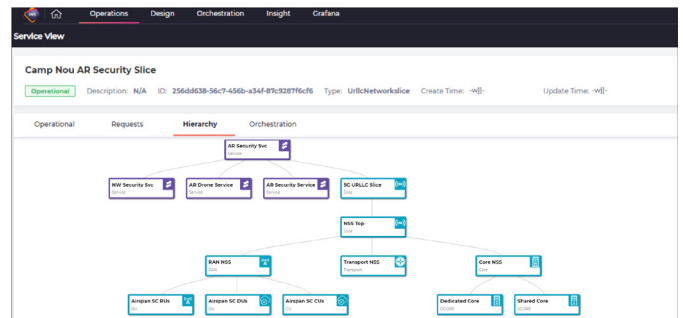
AI/ML too play a crucial role, powering a variety of automation use cases from domain-specific through to end-to-end service, with cross-domain capabilities simplifying operations.



End-to-end service

End-to-End service use cases coordinate between the domains to ensure QoS and SLAs are maintained across the network. Examples include:

- Network slice service maintains the slice across the RAN, core and transport domains
- Mobile service (VoLTE) maintains the service across the RAN, core and IMS domains
- SD-WAN maintains the service across hybrid infrastructure domains



5G uRLLC Slice

Network domains

With today's networks typically comprising numerous network domains, our solution enables the support of multiple domain-specific use cases (e.g., when an SLA is breached).

RAN

- Design & deployment
- UTRAN/ E-UTRAN
- VRAN
- ORAN – optimization using xApps/ wrApps

Transport

- Design & deployment
- xHaul for mobile
- Core backbone

Mobile core

- Design & deployment
- 5G NFs
- Network elements



Mobile Private Network monitoring

xNF, applications

With hybrid networks increasingly the norm, they incorporate virtual, cloud network functions (VNFs, CNFs) as well as applications. These are deployed across network domains, such as ORAN, VRAN, edge, 5G core, transport and cloud, and require lifecycle management as follows:

VNFs

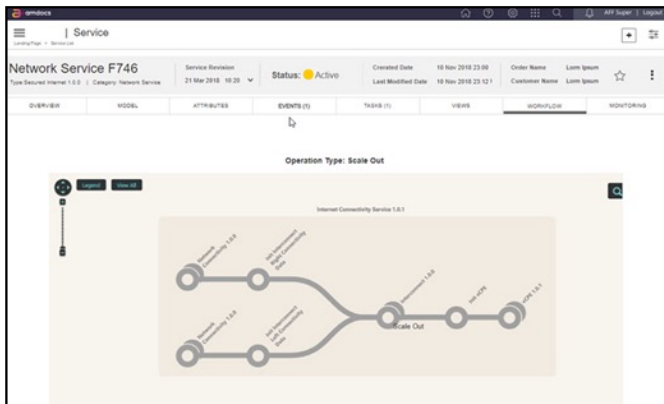
- Modify, terminate, scale in/out, scale up/down, heal, etc.

CNFs

- Update, delete, horizontal scaling, vertical scaling, etc.

Applications

- Update, delete, horizontal scaling, vertical scaling, etc. This is tightly coupled with the vendors' supported operations



Scale out process

Infrastructure, cloud

Following the initial deployment, the infrastructure must be managed from cloud compute, virtual machine (VM) and container management perspectives to meet the increasing demands of end users. For example:

Cloud infrastructure

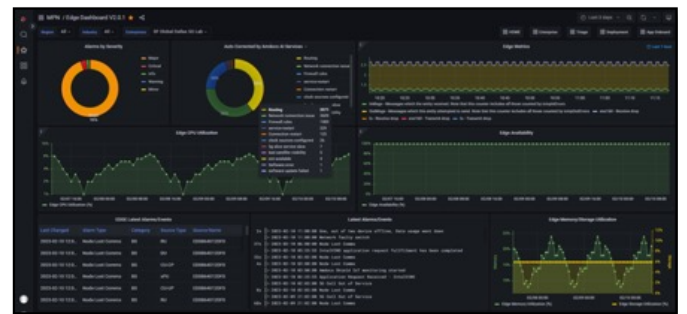
- Add vCPU, memory, storage based on consumption policy

VM management

- Add new VM, update VM, delete VM, suspend VM and so on, based on policy

Container management

- Deploy cluster, add worker node to cluster and so on, based on policy



Edge monitoring

Why Amdocs

Amdocs develops, delivers and operates service and network automation solutions for CSPs across the globe, leveraging deep domain knowledge built over decades of experience.

With our holistic solution approach, which combines software and services, we drive tailored automation journeys that enable you to gradually simplify operations.

This, combined with our vendor-agnostic, open, standards-aligned focus, as well as easy integration with your existing ecosystem, ensures you are empowered with the agility to execute on every business strategy, without the constraints of vendor lock-in.

For more information, visit [Amdocs Networks](https://www.amdocs.com).