

Amdocs Policy

Beyond enhanced broadband and fixed-wireless access, 5G and emerging 6G will deliver massive improvements in terms of differentiated revenue-streams that have long been sought by even the most innovative of service providers. These will be derived from improvements to: latency, speed, coverage, capacity and density – combined with the benefits of AI.

5G is enabling a greater variety of more powerful devices that are capable of handling more advanced applications. Those devices need to be identified and empowered by service providers “out of the box”. Some devices are powered by 4G and 5G simultaneously working on the same device but on dedicated service “slices” which adds to the challenges of efficiently providing optimal experiences to users. Amdocs Policy is the next generation of Policy Manager and a fundamental enabler for advanced 5G environments.

Amdocs Policy is the “network brain” that manages and controls essential service characteristics of the 5G network. It enables service providers to control, manage and monetize the enhanced characteristics of the 5G network and open up new markets. This places the service providers center stage in the 5G value chain, as they can now develop offers where 5G network features (latency, quality of service, etc.) are central elements of the 5G offer and customer experience.

Amdocs Policy plays a critical role in a more flexible and rapid launch of services in the 5G environment and the enablement of differentiated services.

A richer set of 5G use cases include but are not limited to: gating controls, QoS, usage monitoring, application detection, application-based traffic steering, roaming controls, service area restrictions, presence reporting, “slice” enablement, satellite service access and combinational services. Greater visibility and service control than ever before is more easily enabled by Amdocs Policy.

The result is more powerful segmentation and monetization potential for segments including first responders and enterprises in particular as B2B2X opportunities continue to expand. Now further benefiting from Amdocs strength in AI: aOS the agentic operating system for telco.

Benefits

As can be seen in Figure 1, Amdocs Policy is backward compatible and ensures 3G/4G PCRF features such as subscriber tracing and overload protection remain intact. This ensures support for hybrid 5G/4G/3G networks as well as standalone 5G. Deployments in a microservices-capable environment is assured and embedded via an Amdocs toolkit for 5G microservices deployment. It ensures optimal use of existing resources as service providers migrate more flexibly to whatever 5G roll-out is right for them – as well as being future-proof for 6G.

Critically however, Amdocs Policy is a new generation of Policy Manager and a foundational function for unleashing more powerful 5G use cases in an evolving 5G environment. FWA (Fixed-Wireless Access), eMBB (enhanced Mobile Broadband) and URLLC (Ultra Reliable Low Latency Control) use cases will form the key strands of future services for consumers as well as enterprises. Combinations of these benefits will unleash yet-to-be-imagined services that can provide massive benefits if service providers are first to market.

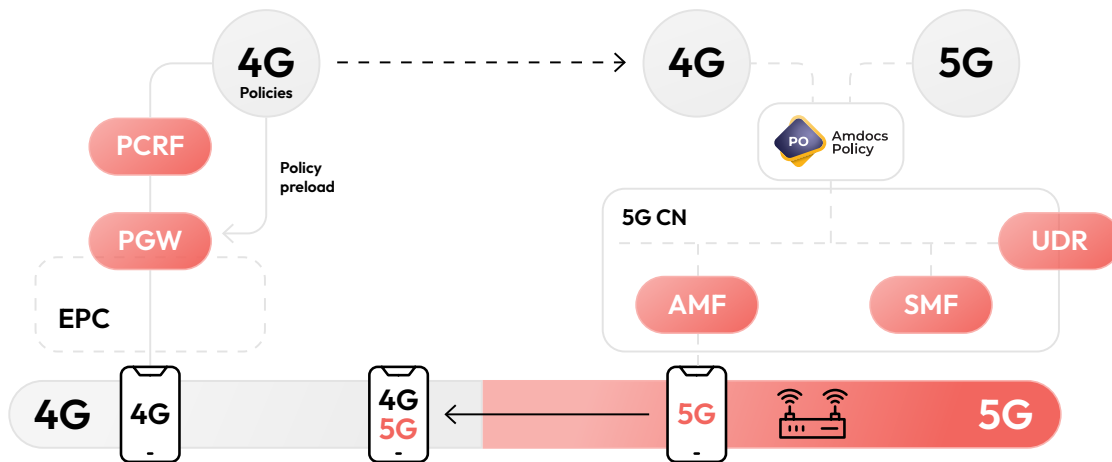


Figure 1: Catering for 4G & 5G

Features

Through the use of 'blueprints' Amdocs Policy enables service providers to launch and refine new services in minutes. Integration with Amdocs Charging enables service providers to apply different rating and charging rules for different slices, thus enabling value and experience-based charging.

The combination of connectivity with advanced network features means that Amdocs Policy is now at the heart of this evolved opportunity in 5G/6G. It plays a critical role in an enhanced network ecosystem (Figure 2). It enables more testing of services and service chains more often, as well as real-time reporting of cleanly controlled differentiation. It enables service providers to be at the heart of new service trends, not a mere enabler.

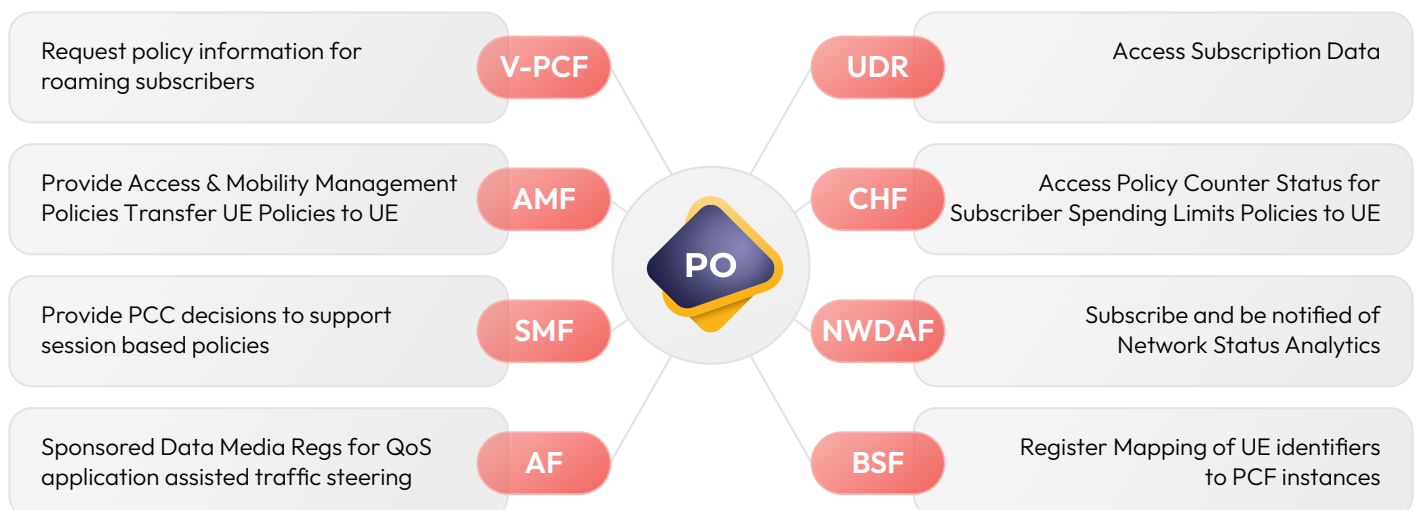


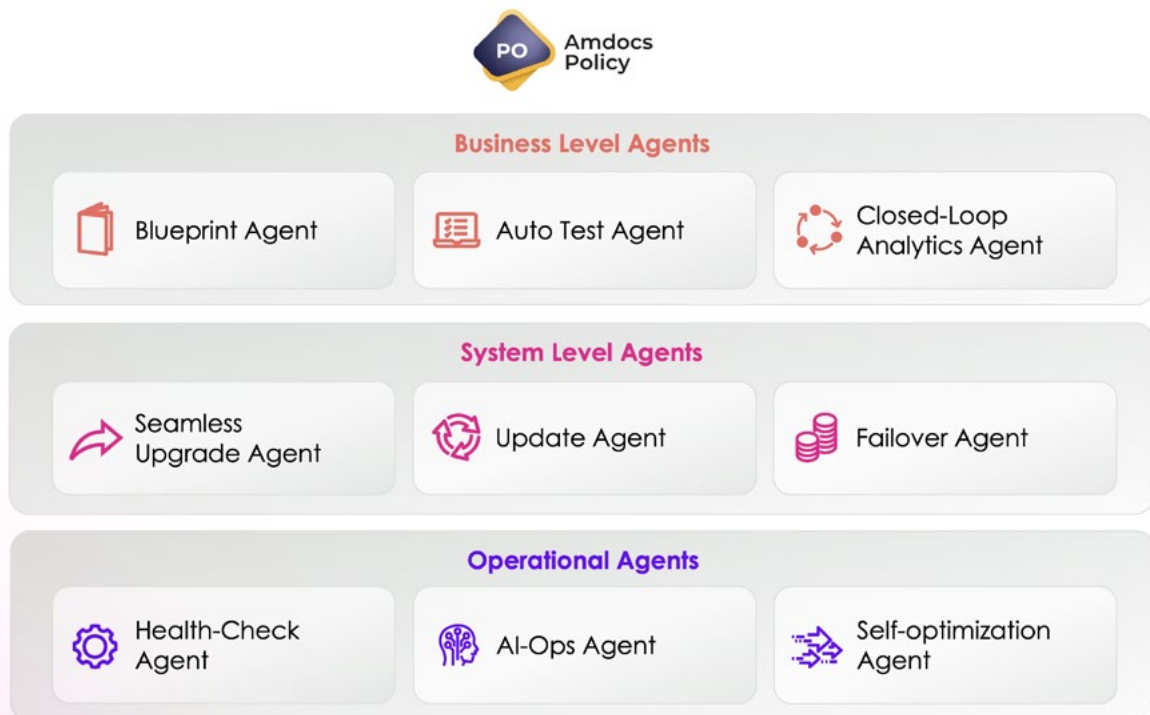
Figure 2: The Central Role of Amdocs Policy in 5G

Summary of Key Features of Amdocs Policy:

- Cloud-native rapid deployment: runs in any public, private, hybrid and multi-cloud environment including; AWS, Microsoft Azure, Google, Rancher, Openshift, Canonical
- Backward-compatible for 4G/5G hybrid scenarios
- Updates (not upgrades) via microservices; zero downtime
- Extreme usability, self-service and reporting
- Greater flexibility enabled by increasing arrays of open interfaces
- Deployment distributed to the edge to enable more 5G use cases such as URLLC
- Rapid testing of services/service-slices more often and true differentiation
- Access to Amdocs Tier1 DevOps experience where required

The key features of Amdocs Policy are now supported by Amdocs aOS – the agentic operating system for telco.

AI-Enhanced Policy



Key Amdocs Policy Features

Increasingly supported by the above Amdocs Policy agents and Amdocs aOS:

Usability	• Single UI providing a rich and intuitive UX • “Blueprints” – Out of box fully working set of functionality that can be deployed “as is” or customized as necessary to fulfil operator needs • Auto testability • Designed to be highly observable – monitoring capabilities
Operability	• Subscriber tracing dashboard • Unified logging and alarming dashboards
Cloud Native	• 5G PCF, PCF+PCRF supports HTTP/2 based communication • Built using microservice design patterns • All microservices are stateless by design, only introducing stateful services where necessary • Independently deployable as Docker containers • Manage service upgrades and updates
4G to 5G Interworking	• PCF & PCF+PCRF support migration options • Deployable using the same CI/CD and software base • Operational software base which delivers additional operational efficiencies
Offer Catalog	• Simplified/Integrated into PCRF UI to manage entitlements + offers • Automatic offer catalog recommendation logic processing and exception handling within microservices
Testability & Automation	• Continuous integration and continuous development platform • Platform for enabling innovation and partnerships
Integration	• Interactions via published open APIs • Extensive 3rd party platform integration • Confidence of wider Amdocs portfolio (especially Policy), IT and B/OSS portfolio
Upgradability	• True in-service updates (no more heavy upgrades) due to microservices, while a site carries traffic. No site failover needed • Elastic scaling is available on all stateless microservices • Backwards compatibility
Updatability	• Activates new features and toggles capabilities safely • Applies security settings and policy-layer fixes • Executes lightweight, in-place updates with no service impact
5G Partnerships	• Close partnerships to provide alignment of roadmaps and feature set • Integration labs to introduce a complete end to end architecture
API Driven	• Ability to script and automate Policy configuration • All Interactions are via a published API
Legacy Migrations	• An ability to import policies from the existing EPC and providing an equivalent policy in the 5G PCF • Restful API to import legacy policy data and configuration + PCRF
Overload Protection / Robustness	• Excessive latency • Overload conditions
Security	• CVEs (Common Vulnerabilities and Exposures) as needed for mission critical services • Latest security best practices

Why We're Different

Amdocs is the market leader in 5G and emergent 6G policy. Amdocs Policy has been selected to manage and control the networks of many of the world's most innovative service providers to enable them to build new network-centric use cases and enter new markets.

By working with leading service providers Amdocs recognizes that there are many different starting points for evolution. Different service providers will have different plans for rollout and use case prioritization. Amdocs Policy is designed to rapidly ease this transition while making best use of existing resources. Amdocs Policy is supported by the latest in AI capabilities and can import legacy policy configurations to create a corresponding configuration that is robust in a future proof 5G/6G environment.

With Amdocs Policy we have extensive lessons learned from multiple customer trials and live deployments. This includes understanding that certain open service mesh technologies are not telco grade. Testing has shown over 30% and as much as 50% overhead in using pure open source mesh vs the Amdocs developed version.

Regardless of additional complexities and challenges as well as opportunities that 5G and 6G represent, a fundamental objective of Amdocs has always been to reduce complexity and this continues with Amdocs Policy. Amdocs provides industry-leading experience and expertise: cloud-based software (not hardware), network agnosticism, microservices – these have been part of Amdocs DNA since before 5G was conceived. They are now fundamental to a successful 5G environment and are further enhanced by AI efficiencies from Amdocs aOS – the agentic operating system for telco. Amdocs Policy is enabling service providers to control and manage the network from a primary location. It provides the foundation for network monetization and the opening up of new 5G-enabled opportunities.

Amdocs Policy leverages the expertise, scale and solutions of Amdocs to provide our world leading product stand-alone or as part of a wider multi-product solution.