

Amdocs Charging

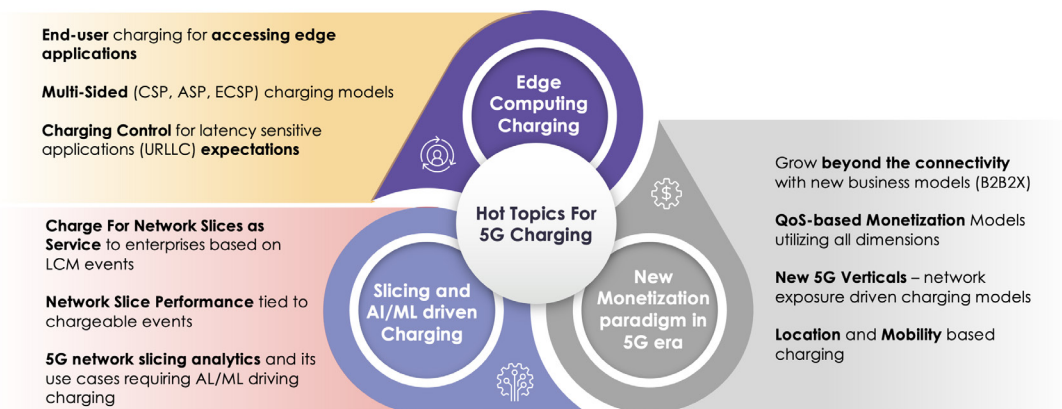


Amdocs Charging

As we rapidly move to a new phase of service diversity driven by innovative and emerging business demands and customer expectations – a convergent, effective, and future proof charging solution is required. Amdocs Charging delivers a consolidated, fully flexible charging system built to handle the current rapidly evolving environment as well as future business demands. 3GPP defines the 5G CHF/CCS as essential to 5G value generation, but beyond 5G functional compliance, Amdocs Charging consolidates decades of experience in both fixed and mobile evolutions, across consumer and enterprise segments – adding uniquely differentiating value to optimize the monetization potential of future services.

Amdocs Charging combines various capabilities previously built for specific business silos such as prepaid and post-paid, consumer and enterprise and fixed and mobile (across all G's). It is microservices-based, fully cloud-native, and available on public, private or hybrid cloud – aligning fully to the deployment methodology / cloud journey service providers choose – ready to support the scale and diversity of future services to come. Amdocs Charging realises the full use of open APIs and can support modernization of existing legacy charging environments in managed phases – regardless of whatever vendor combinations or complexity are currently in place. It is kept up to date for emerging services and provides the flexibility required to compose charging orchestration flows involving new 5G functions and an ever-expanding set of service partners.

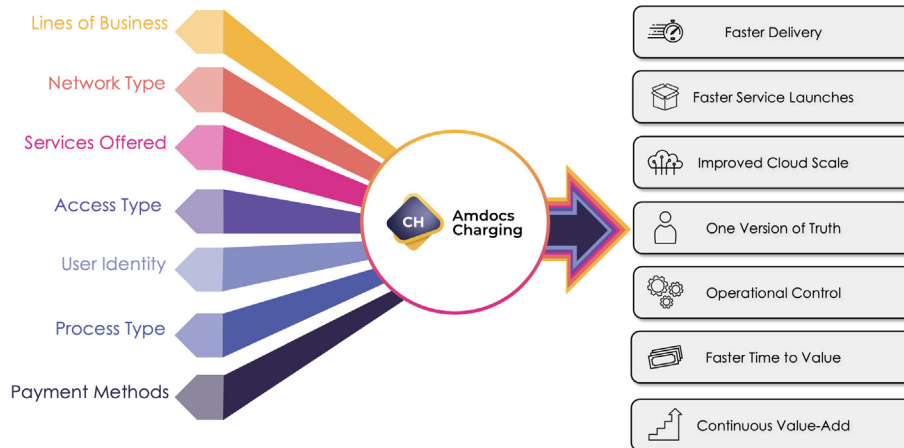
Industry-driven charging evolution



In the charging domain, Amdocs has already been rated by leading analysts and service providers as the world's most advanced and comprehensive, real-time charging provider. Amdocs Charging also combines the best of Openet's market-leading strengths in real-time charging, 5G and cloud. Together with Amdocs' monetisation capabilities, microservices platform and IT strengths – the newly combined "Amdocs Charging" solution provides a best-in-class capability realising the best of both worlds. It allows service providers to rapidly test and manage emerging rating and charging

requirements. It allows true convergence and scale in addition to self-service for non-technical personnel and the introduction of new business models that the wider 5G ecosystem is enabling. It is increasingly being seen as the "treasury" focal point and "single source of truth" for service creation and monetisation.

It is supercharged and ready for what's next.



"Amdocs's offerings are designed to help customers to meet the operational challenges related to rolling out 5G. Amdocs's 5G value plane cloud-native solution includes a 5G-native monetization suite, along with policy and charging control integrated with Amdocs's Catalog, NWDAF, NEF and end-to-end orchestration functions".

– John Abraham, Analysys Mason

Benefits

Faster Time to Market

Amdocs provides a self-service, catalog-based configuration approach that is key to per-service OPEX reduction. It allows a service provider to configure offers faster, reducing time-to-market for advanced services. The Amdocs approach to developing microservices-based solutions takes advantage of the composability, independent deployability and updatability of microservices. This is to facilitate the deployment of new features without having to wait for the next "forklift upgrade". Cadence is rapid. Charging capability is kept up to date and works seamlessly with all other functions.

Deployment Ease and flexibility

Wherever CSPs are on their deployment journey (public/private cloud, hybrid, on-prem, etc.) Amdocs Charging supports various flexible deployment models that further improve time-to-market and time-to-value. Examples include:

- Providing a set of microservices to meet specific requirements, interworking with current systems
- Supporting an evolutionary migration of existing systems with a number of microservices addressing an adjunct charging capability as well as encompassing existing requirements
- A fully integrated, microservices based, Policy and Charging (PCC)
- Deployment of functionality closer to the network edge to cater for emerging use cases

Reducing Costs and Delivering Performance by Leveraging the Best of Open Source

Amdocs Charging leverages the best in cloud-native components to take advantage of the most effective toolsets available today. These include open software such as Docker, Kubernetes, Elasticsearch and Kafka. This approach allows to match the right tools to the right task effectively, without being wedded to a specific technology – promoting choice and reducing implementation risk. Amdocs has also evolved its own service mesh to ensure telco-grade efficiencies and reliability – providing optimal effectiveness.

Adapt to Market Needs with Self-Service and Usability

Amdocs values self-service and usability needs of its customers and has invested heavily in the continuing evolution of configuration capability. Leveraging the usability of Amdocs Charging, customers can quickly build and configure offers, products and business rules themselves, thus further speeding up time-to-market for new services and delivering with additional agility. Furthermore, to maintain the security of allowed access, the solution supports standards-based authentication mechanisms as well as role-based access controls (RBAC) to all user interfaces, and the APIs that serve them.

Key Features

Usability	<ul style="list-style-type: none"> • Single, intuitive UI with ability for business teams to auto-test new services • Out-of-the box functionality • Highly observable • Ease of setup for new services and lines of business
Lines of Business	<ul style="list-style-type: none"> • Use different and new bases for charging new services e.g. intermittent charging; per-device; activity-based; user and device types • Cater for new segments within IoT and Enterprise
Previous G's	<ul style="list-style-type: none"> • Migration options for 4G Diameter to 5G REST • Using same software base and CI/CD capability
Microservices	<ul style="list-style-type: none"> • Ability to add and update new capabilities • As-needed capability and portability
Cloud	<ul style="list-style-type: none"> • Extensive hybrid and multi-cloud experience • Best in open-source tooling
Integration	<ul style="list-style-type: none"> • Interactions via published open APIs and TMF compliance • Extensive 3rd party platform integration • Confidence of wider Amdocs Value Plane (especially Policy), IT and B/OSS portfolio
Observability & Operability	<ul style="list-style-type: none"> • Monitoring dashboards • Subscriber tracing dashboard • Unified logging and alarming dashboards • Support on-boarding and lifecycle management with ONAP
Catalog	<ul style="list-style-type: none"> • The "astonishingly clever mind" to the Amdocs Charging "Treasury" • Enables a consolidated, rapid concept to configuration and then to deployment approach
Testability	<ul style="list-style-type: none"> • Continuous integration and continuous development platform • Platform for developing innovation and partnerships
Updatability	<ul style="list-style-type: none"> • In-service updates (no more "upgrades") • Elastic scaling is available on all stateless microservices • Compliance with latest 3GPP spec releases • Continuous enhancement which ensures end-to-end uptime is intact
Partnership	<ul style="list-style-type: none"> • Close partnerships to provide alignment of roadmaps and feature set • Integration labs to introduce a complete end-to-end architecture • Exposure-led charging via Amdocs NEF as 5G becomes an API-led exposure platform

Why We're Different

Amdocs has deployed containerized charging with the world's largest and most innovative service providers and has a long history of evolving charging to meet and surpass requirements. Extensive lessons have been learned and deep service expertise gained from these live deployments. This includes understanding that certain open-source service mesh technologies are not telco-grade. Amdocs has taken the practical approach to telco-grade microservices implementations rather than following purist microservice development patterns. This allows us to deliver on the business benefits of using microservices without compromising the network grade performance and latencies expected from every service provider.

Amdocs recognizes that cloud systems can be complex – Amazon, Microsoft, Google, own-cloud or hybrid. We work with leading container management providers to deliver a truly agnostic approach to microservices and the application of infrastructure choice criteria on behalf of service providers. Whether the focus is on 4G, 5G or hybrid environments, backward-compatibility is catered for. Amdocs is continuously evolving with new features and functions to ensure our customers have the most advanced 5G charging system in the world.

Amdocs is the most credible and proven vendor focused on real-time monetisation and PCC (Policy and Charging Control) for 5G, and is deeply experienced in best practice delivery, including DevOps, massive data migration and the extreme requirements to support the world's leading service providers. Amdocs can leverage the expertise, scale and solutions of its wider portfolio to provide our world-leading products stand-alone or as part of a wider multi-product solution and across IT as well as network.

Some Charging References



Please also visit our website to find out more about [Amdocs Charging](https://www.amdocs.com)