

DATA SHEET





Built for 4G/5G Network and Service Control H1 2021



"Openet Policy Controller (OPC) plays a critical role in a more flexible and rapid launch of services in the 5G environment and the enablement of differentiated services"

INTRODUCTION

Beyond enhanced broadband and fixed-wireless access, 5G 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.

5G will enable 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 will be powered by 4G and 5G simultaneously working on the same device but on dedicated service "slices" (Figure 1) which adds to the challenges of efficiently providing optimal experiences to users. Openet Policy Controller (OPC) is the next generation of Policy Manager and a fundamental enabler for advanced 5G environments.



Figure 1: OPC & Network Slicing

OPC is the "network brain" that manages and controls essential service characteristics of the 5G network. It enables service providers to control, manage and monetise the enhanced characteristics of the 5G network and open up new markets. This places the service providers centre 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.

OPC 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 includes but is not limited to: gating controls, QoS, usage monitoring, application detection, roaming controls, traffic steering, "slice" enablement and combinational services. Greater visibility and service control than ever before is more easily enabled by OPC.



BENEFITS

As can be seen in Figure 2, OPC 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 Forge - Openet's toolkit for 5G deployment. It ensures optimal use of existing resources as service providers migrate more flexibly to whatever 5G roll-out is right for them.

Critically however, OPC 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.









FEATURES

Through the use of 'blueprints' OPC enables service providers to launch and refine new services in minutes. Figure 1 above shows a sample of the types of slices that can be supported. Intregration with Openet 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 service-slice potential has been around for some time. OPC is now at the heart of this evolved slicing potential in 5G. It plays a critical role in the 5G network ecosystem (Figure 3). 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.

Key Features of OPC include the following:

- Cloud-native rapid deployment: runs on AWS, Microsoft Azure and Google Cloud public and hybrid, as well as multi-cloud environments
- Backward-compatible for 4G/5G hybrid scenarios
- Updates (not upgrades) via microservices
- 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 Openet Tier1 DevOps experience where required



Figure 3 : The Central Role of OPC in 5G



KEY OPC FEATURES

"Openet is continuously investing in developing new features and functions in OPC to ensure that Openet's 5G policy function continues to lead the market."

Usability	 Single UI providing a rich and intuitive UX "Blueprints" - Out of the box fully working set of funtionality that can be deployed "as is" or customised as necessary to fulfil operator needs Auto testability Designed to be highly observable - monitoring capabilities 	Operability	 Monitoring dashboards subscriber tracing dashboard Subscriber tracing dashboard Unified Logging and Alarming dashboards ONAP Support on-boarding and lifecycle management with ONAP
Cloud native	 5G PCF, PCF+PCRF Supports HTTP/2 based communication All NF's are built using micro service design patterns All micro services are stateless by design, only introducing stateful services where necessary independently deployable as Docker containers Manage service upgrades and updates 	4G to 5G interworking	 Openet PCF & PCF+PCRF support migration options Deployable using the same CI/CD and software base Operational software base which delivers additonal operational efficiencies
Rules engine	 Blueprints and decision tables converted to runtime rules engine representation via CI:CD Flow platform UI to allow operator to extend the stages with third-party supplied services (joint development/ integrators) 	Offer catalog	 Simplified / Integrated into PCRF UI to manage entitlements + offers Automatic offer catalogue recommendation logic processing and exception handling within micro services
Testability & automation	 Continuous integration and continuous development platform Platform for enabling innovation and partnerships 	5G partnerships	 Close partnerships to provide alignment of roadmaps and feature set Integration labs to introduce a complete end to end architecture
Upgradability	 In-service updates (no more "upgrades" due to microservices) is paramount emphasis Elastic scaling is available on all stateless micro services Backwards compatibility 	API Driven - Ability to script & 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

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WHY WE'RE DIFFERENT

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

By working with leading service providers Openet recognsies that there are many different starting points for 5G. Different service providers will have different plans for rollout and use case prioritisation. OPC is designed to rapidly ease this transition while making best use of existing resources. OPC can be bundled with tools to import legacy policy configurations and create a corresponding configuration that is robust in a 5G environment.

With OPC we have extensive lessons learned from 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 Openet developed version.

Whether the focus is on 4G, 5G or hybrid environments, backward compatibility is catered for via Openet's Data Bridge microservice facilitating conversion from 4G to 5G, and the reverse if needed.

Regardless of additional complexities and challenges as well as opportunities that 5G represents, a fundamental objective of Openet has always been to reduce complexity and this continues with OPC. Openet provides industry-leading experience and expertise: cloud-based software (not hardware), network agnosticism, microservices - these have been part of Openet's DNA since before 5G was conceived. They are now fundamental to a successful 5G environment.

Openet policy is enabling service providers to control and manage the 5G network from a primary location. It provides the foundation for 5G network monetisation and the opening up of new 5G-enabled opportunities.

As part of Amdocs, Openet can leverage the expertise, scale and solutions of Amdocs to provide our world leading products stand-alone or as part of a wider multi-product solutions.



WHY WE'RE DIFFERENT

For 5G our products support a range of use cases and applications. A sample of these are highlighted in Figure 4.

Figure 4 : Sample of 5G use cases enabled by Amdocs and Openet products



Together with Amdocs we have combined products that provide a real-time and dynamic bridge between telco IT and the 5G network. At the core of the 5G Value Plane are the Openet 5G data management, charging and policy products and the Amdocs Service Catalog - CatalogONE. Openet's products provide the integration point to the 5G network and Amdocs CatalogONE provides the integration point to the business / IT universe. Having this foundation for 5G management and monetisation also opens up new opportunities to update adjacent solutions - such as digital customer experience management on the business side and network optimisation on the network side. This opens up the opportunity to monetise the 5G network by enabling higher value, 5G network driven use cases and offers that realise the potential of 5G.



7



ABOUT OPENET:

Openet, an Amdocs company, is a leading software and services provider to communications companies. Our deep domain expertise & understanding of complex systems, underpinned by the tenacity and determination of our people, enable us to radically transform how our customers do business, providing best in class digital and 5G business support systems.

In an industry where the only constant is change, our open and innovative technology is built for change. For the last 20 years we have helped the world's most innovative communications companies manage and monetise their business and evolve from communications companies to digital service providers. This gives our customers the power to enter new markets, open new revenue streams and increase profitability.

AMDOCS & OPENET:

Amdocs (with Openet as an important part of the engine) has evolved to be the best vendor-partner to drive the enablement of 5G innovation to become commercial reality and help change the industry. We combine agile, cloud-native IT with the power of the 5G network to enable new opportunities for service providers, open new markets and develop new business models. Beyond the vision for software products, Amdocs has expanded its delivery, support and operations models that are most suitable for our customers' needs. 5G is driving change in our societies and economies, and offers huge opportunities for our customers.

Together Openet and Amdocs are Built for Change.

OPENET

BUILT FOR CHANGE

OPENET PRODUCTS:

Openet Charging:

Real-time convergent charging for digital and 5G services

Openet Policy:

Network policy control for next gen fixed, mobile and converged networks

Openet Data:

Data management, data processing and data governance solution designed to collect and manage data at 5G volumes in real-time

Openet Digital Platform:

End to end Digital BSS/OSS stack containing Openet & our partners' products

Openet Forge:

The digital enablement toolkit which contains Openet's library of microservices, upon which all Openet products are built

DELIVERING BUSINESS VALUE:

40%

Reduction in time to market for new offer creation

28%

Uplift in offer uptake

11%

Increase in mobile data ARPU

41% Increase in mobile data revenues

OPENET PRODUCT PORTFOLIO



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