



CSG INTERMEDIATE

LAUNCH NEW REVENUE GENERATING
SERVICES FASTER AND REDUCE COSTS
WITH ACTIVE MEDIATION MANAGER



CHARGING CONTROL FOR 2020 NEEDS A RE-THINK

Services to 2020 and beyond will demand a new approach to charging control. New services like VoLTE are based on IMS and are forecast to generate up to eight times the current charging volumes. The first generation charging systems deployed for 2G and 3G were not architected for such throughput levels and even without new services need bloated hardware platforms to cope with growing transaction rates.

THE NEED FOR GREATER SERVICE AGILITY

Across the globe, regulators are licensing spectrum for deploying new network evolutions (LTE, LTE-Advanced and eventually 5G), and operators are quickly launching innovative new services, like VoLTE and IoT services, for ever more connected devices (smart watches/wearables, connected and driverless cars, and more). Aggressive competition for the commercial launch of such services means charging and billing departments are coming under increased pressure to roll out new products quickly and rapidly integrate new networks. And there is an opportunity for fast moving operators to beat the competition to market and win early market share.

EXAMPLE 1: ENABLING DATA CHARGING OFFLOAD

Enormous growth in mobile data volumes is having a costly impact on legacy prepaid and Online Charging Systems (OCS). On the Gy reference interface in many architectures, every new data session can require real-time rating and an update to a subscriber's balance. This impacts the costs of running balance management and rating databases, as more hardware and expensive databases licenses are needed to scale the solution.

And this increase in platform costs doesn't have a corresponding increase in revenue, as many mobile data events are zero-rated, or included in a data allowance. However, a high granularity of charging transactions is required for revenue assurance and credit management purposes, and to provide such information to subscribers.

One solution is to deploy Active Mediation for Gy Charging Offload, to act as a shield to the rating and balance management systems. Here the solution aggregates usage for each subscriber and reduces the frequency with which credit requests are made to charging systems. It responds to low-level, real-time responses from the network to ensure that granular information is kept on usage and that credit limits for subscribers are not exceeded.



Charging Offload delivers a strong return on investment. For a mobile operator with 10 million subscribers, deploying CSG's solution to save 20 percent of OCS charging capacity, results in a return on investment of 2.2 million over three years and payback in months.

EXAMPLE 2: CHARGING FAILURE TREATMENT

With LTE, subscribers are using ever more mobile data. As data services are a growing proportion of operator revenues, any downtime for online charging has a major impact. Despite support for carrier grade availability there are times when real-time charging systems are not available (due to unforeseen outages, issues with failover nodes and also planned/scheduled upgrades).

For operators experiencing expensive OCS outages, CSG Online Charging Failure Gateway intelligently manages real-time requests for credit authorizations and ensures that no revenue is lost. Unlike many systems, the CSG solution doesn't need expensive hardware or licenses to provide high availability. This means no revenue is lost during online charging outages and there is no impact to customer experience. It also gives operators the option of deploying OCS in configurations that are less highly available. This can save significant capex in hardware and reduce the number of IT staff needed to operate large, complex systems on a 24-hour basis, seven days a week.

INTRODUCING ACTIVE MEDIATION MANAGER

Active Mediation Manager is an optional Intermediate module for online mediation and next generation charging control. Highly flexible and configurable, it is built with the future in mind. It helps operators roll out next generation services, controlling in-session interactions between any service delivery network and business systems.

OPERATOR CASE STUDY

CSG PROVIDED AN OPERATOR WITH ACTIVE MEDIATION MANAGER, ALLOWING THEM TO REMOVE COMPLEXITY AND PROVIDE A COMMON, SIMPLE INTERFACE TO THEIR OCS.

Intermediate is renowned for cost-effective processing of vast and growing volumes. Active Mediation Manager continues this heritage redefining the total cost of ownership (TCO) for online mediation, offering:

- **Online mediation for any kind of service**—respond in real-time to user requests for any service, from multimedia and premium content to micro-transactions, and provide financial authentication and authorization for service delivery
- **Superior application performance**—proven to minimize hardware system resources needed to process growing transaction volumes, benchmarked to support tens of thousands of transactions per second per server with low latency
- **Unique configuration tools**—user-friendly GUI incorporates drag-and-drop service logic and allows users to quickly change business rules or add new session workflows
- **Strong security and auditing features**—supports secure integration with real-time financial systems, such as pre-paid IN platforms with its role-based security model and auditing of all transactions
- **Rapidly deployable**—can be deployed quickly to enable fast rollout of innovative new services



PLATFORM FOR GREATER PRODUCTIVITY

Operators will be amazed at the superior ease-of-use Intermediate offers over other platforms. Active Mediation Manager supports for all the core features users value in Intermediate, including:

→ **Seamless plug-in integration**—easily configure real-time Active Mediation Portals and use library of off-the-shelf plug-ins for real-time network elements and billing systems

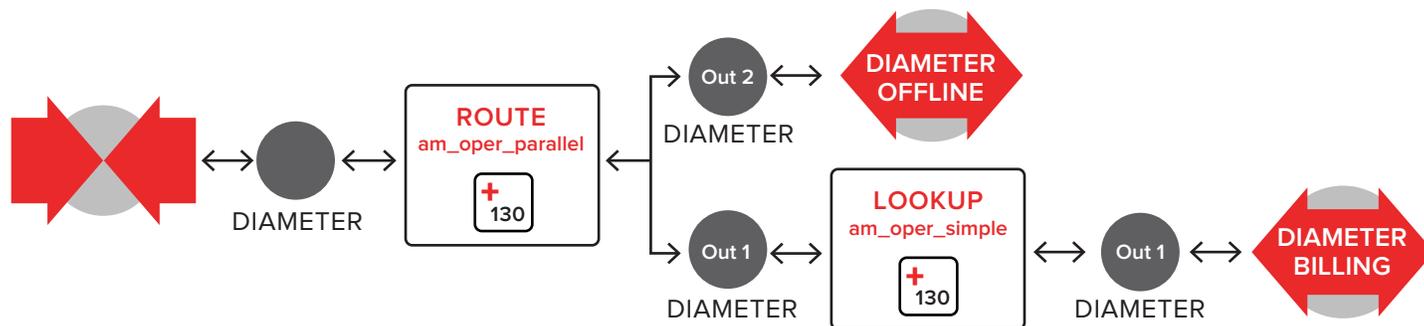
→ **Continuous horizontal scalability**—scale real-time active mediation processes across highly reliable, distributed architecture

→ **Fast configuration**—drag and drop Plan Manager for configuring new session workflows

→ **Flexible business logic**—quickly implement service logic and business rules for transaction validation, filtering and routing with Intermediate’s powerful scripting

→ **Centralized operations**—manage and monitor distributed mediation nodes in a single application

The diagram below will be easily recognizable to Intermediate users as the drag-and-drop Plan Manager. Here, it is illustrated with Active Mediation Portals for real-time event processing and Active Mediation operations for defining online processing business logic.





TOGETHER, YOU WIN.



Active Mediation Manager further enhances the value of Intermediate to operators: managing active mediation directly within Intermediate simplifies operations, and Intermediate's familiar configuration tools will help users to reduce the time to launch new services.

TALK TO US, OR BETTER TO OUR CUSTOMERS

CSG has improved the service agility and delivered impressive return on investments for operators deploying Intermediate.

When one operator decided to overhaul their entire business the BSS IT infrastructure was a critical part. As part of the transformation, CSG Intermediate and the Active Mediation Manager (AMM) perform intelligent routing of requests between the network and real-time charging systems. This approach not only simplifies their architecture, but also reduces OCS integration costs, adds charging intelligence between the network and business systems and ensures faster time-to-market for new networks and services—all delivered in just seven months.

ABOUT CSG

CSG simplifies the complexity of business transformation in the digital age for the most respected communications, media and entertainment service providers worldwide. With over 35 years of experience, CSG delivers revenue management, customer experience and digital monetization solutions for every stage of the customer lifecycle. The company is the trusted partner driving digital transformation for leading global brands, including Arrow, AT&T, Bharti Airtel, Charter Communications, Comcast, DISH, Eastlink, iFlix, MTN, TalkTalk, Telefonica, Telstra and Verizon.

At CSG, we have one vision: flexible, seamless, limitless communications, information and content services for everyone. For more information, visit our website at csgi.com and follow us on [LinkedIn](#), [Twitter](#) and [Facebook](#).