



CSG SINGLEVIEW COMMERCE ENGINE

THE POWER OF NOW: BRINGING
YOU TOMORROW—TODAY



EVERYONE WANTS IT YESTERDAY

The world is growing increasingly real time, with telecommunications at the forefront. Consumers need everything now (if not before) and they want it newer and better and faster. Prepay is the dominant global payment method, but prepaid charging traditionally was more straightforward than the sophisticated and varied new services, and value-driven charging algorithms, required today. And critically, alerts, sales and loyalty opportunities, and service messages must be delivered in real time or not at all.

Increasingly, too, you need to maintain your competitive edge by offering convergent services like pre- and postpaid accounts and combination products. Not to mention avoiding the increased complexity and cost you incur from separate solutions for prepaid and postpaid customers and accounts.

Ever-increasing data volumes, generated by a plethora of devices, mean that 'Now' also has to come at a low price, and be scalable to meet future demands.

YOU NEEDED IT YESTERDAY

You want a single system to handle your complete customer base—offering both online and offline charging, so that real-time credit management can

apply across the board, enabling real-time spend notifications and spend control for any customer and any service. You want to maintain a single product catalog, single rating engine and single customer database, so you can offer the same products and services to all subscribers. This means you save time, money and risk, but more importantly you have the innovation capability within reach to bring new products and services universally to your ever-demanding customer base. You want support for network evolution to 4G and beyond. With Singleview you can have it all!

BRINGING YOU TOMORROW

Singleview intrinsically supports real-time transactions. The Singleview suite uses a common rating engine, product catalog and business rules. Commerce Engine extends the Singleview footprint towards the network, adding real-time account and balance management—Singleview's 3GPP-compliant Online Charging System.

Commerce Engine determines if an event can take place based on the subscriber's balance, which means real-time credit management irrespective of how the customer pays.



For a prepaid subscriber the balance cannot drop below zero, and for a postpaid subscriber this cannot exceed their credit limit. Hybrid scenarios are supported, where sometimes the subscriber pays in prepaid mode, sometimes postpaid, and sometimes pay-now. Family-charging type scenarios allow a child to always call a parent, regardless of the child's available prepaid balance, as this event is charged to the parent's postpaid account. Corporate-type scenarios are enabled, such that bundled entitlements can be shared across a group of employees during working hours only.

In short, Commerce Engine provides real-time authorization and credit control for voice, data, content and commerce services, creating a common, flexible, transaction charging framework across any network or service platform—performing the Online Charging Function.

Commerce Engine provides a common framework for Service Control Platforms, mobile data gateways, content providers, m-Commerce servers, and other applications. It can also interact with a PCRF (Policy and Charging Rules Function)—either CSG's or an alternative—should this be in place.

CSG understands that small steps may have to be taken to get to tomorrow. Singleview can be deployed alongside an existing IN as an adjunct component or be part of a distributed charging architecture—evolving to be the single system handling all customers and offline and online charging.

COMMERCE ENGINE BENEFITS

Proven & Trusted: Commerce Engine is by design a convergent real-time rating, charging and policy solution. With the longest and most successful production record of any comparable solution, Commerce Engine offers peace of mind to CSPs

seeking to take commercial advantage of 'any-pay' convergence. Existing Singleview customers use Commerce Engine for both 3G and 4G services.

Open—Supports Network Evolution: Commerce Engine is platform and protocol agnostic and can operate in conjunction with any network environment. It can evolve as your business and networks change.

Innovative—Supports New Business Models: Singleview flexibility of customer and product models supports the creation of innovative convergent pricing offers including for enterprise customers. Rating handles multiple currency and non-currency tariffs and can generate multiple charges for the same event against different wallets.

Scalable—Supports Exploding Transaction Volumes: Singleview scales both horizontally and vertically with near linear scalability benchmarked. Servers can be added to support data volume growth. Processes and business rules can be tuned for optimization to support growth—without outages.

Always On—Highly Available: Commerce Engine supports high availability five nines configurations. System availability is maximized by eliminating single points of failure in the hardware, application, operating environment, network and database.





COMMERCE ENGINE FEATURES

Commerce Engine includes the following features, grouped by TM Forum Application Framework (TAM) Domain:

Customer Management

- A highly scalable transaction charging framework for all types of accounts—prepaid, postpaid or hybrid—managed in the same way: the account’s policy drives whether a service is restricted, giving complete control over how to market services
- Account balance and revenue assurance updates in real time
- Account reservations ensure sufficient funds are available prior to the use of a service. Reverse rating calculates the monetary amount reserved using details such as event information, customer preferences, rate plan and available balance
- Flexible policy management, performing service information based credit control in real time
- Interactive and real-time service authorization, authentication, and accounting (AAA) to limit fraud and other revenue loss
- Automated spend control notifications and usage meters keep the customer in touch and satisfied
- Concurrent usage accounting, allowing multiple devices and services to draw on the same account, shared device plans to make the customer’s life easy and increase stickiness

- Dynamic account selection, enabling subscribers to add charges to an account of their choice
- Customer-controlled policies, where subscribers specify service and account-specific spending limits and notification preferences
- ‘Advice of charge’ advising subscribers the price of an item or service, before they incur the cost
- Real-time rating and bundle aggregation, supporting charging and pricing plans such as free minutes, tiered charging, and budget control at rating time
- Support for real time promotions and bonuses giving you the tools to drive revenue generation
- 3GPP online charging compliance

Integration Infrastructure

- Integration with external balance managers; to provide real-time rating capability to an existing IN

Cross Domain

- No single point of failure when installed in a high availability configuration—a carrier grade solution