

ALCATEL-LUCENT SUREPAY® SUITE

REAL-TIME, CONVERGENT CHARGING SOLUTION

SurePay® is the key component of the Alcatel-Lucent real-time convergent payment offer. It provides real-time convergent rating, charging, reporting and mediation solutions for various traffic types across multiple network technologies, including fixed/mobile, 2G (GSM & CDMA), 3G, IMS and LTE. SurePay, which is deployed worldwide, is known for its industry-leading high availability, scalability and configurability. It readily supports the ever-changing telecommunication business models and tariff innovations of today's mobile markets, including shared data plans for families, enterprises and communities.

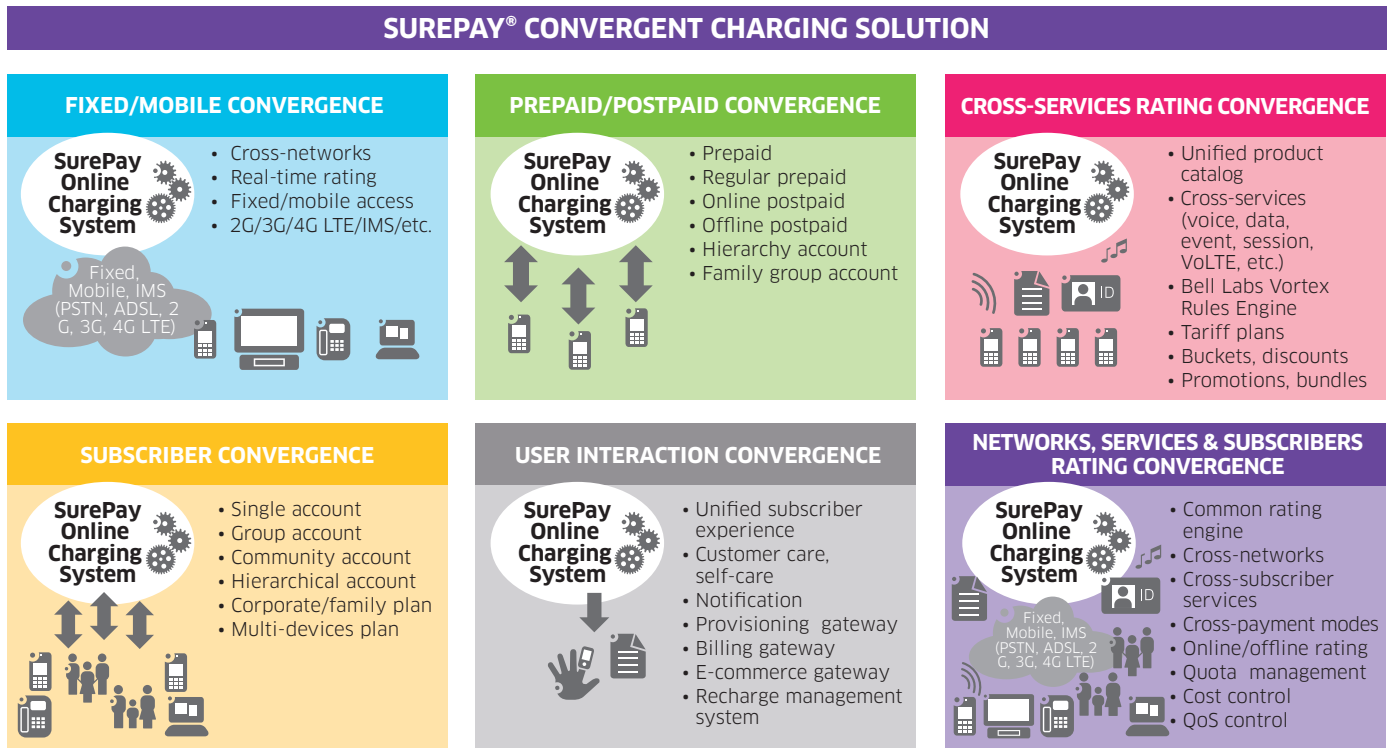


SurePay allows carriers to simultaneously offer prepaid, postpaid and hybrid rating and charging for voice, SMS, MMS, data event and session, video, VoIP, content and commerce services. Additionally, mobile carriers can simplify the customer's experience by offering real-time dashboards for users to proactively manage and upgrade their own mobile plans. With SurePay, carriers can:

- Simplify rate plan implementation using the powerful SurePay "charging and rating rules engine" and the centralized product catalog
 - Provide instant payment options to subscribers for real-time payment transactions
 - Apply spending limit controls on prepaid and postpaid subscribers to reduce bad debts and prevent "bill shock" experiences from overage charges
 - Support group account hierarchies so families, enterprises and communities can enjoy shared allowances
 - Combine rating and charging mechanisms in real time with an external policy control system or geographic zones to better monetize and utilize network bandwidth
- Define customized loyalty offers to reduce churn and increase revenue for targeted subscribers
 - Be ready for the growing LTE/IMS wave with shared data accounts, flow-based charging, quota management, and spending limit controls with differentiated bandwidth as well as VoLTE/IMS charging

The SurePay solution is a complete real-time rating and charging solution. It supports subscribers who are prepaid, postpaid, and a hybrid of both. In addition to individual accounts, SurePay allows service providers to offer innovative tariffs around shared account structures including groups and community accounts. This flexibility allows providers to respond to today's mobile digital lifestyle where the individual, a family household, an enterprise, or a community has adopted multiple mobile devices.

Figure 1. SurePay Convergent Charging Solution capabilities



As the industry transitions from legacy into new network technologies, SurePay provides real-time rating, charging and reporting for voice SS7 and VoLTE, SMS, MMS and IM messaging, data events, session and content across wireline, 2G/CDMA 1X, GSM, GPRS, EDGE, UMTS, HSPA, HSPA+, 3G/EVDO, 4G/LTE and IMS.

In addition to convergent charging and rating, SurePay supports account and balance management, quota management, real-time data usage reporting, bill shock prevention, policy-based data plans with QoS and bandwidth control, shared plan usage, online community and hierarchical accounts, and customer self-care systems that enable subscribers to manage their plans themselves. SurePay can provide real-time notifications, act as a provisioning gateway for subscriber provisioning and service management, a billing gateway for CDR analysis and processing, a scratch card management system for recharge management, and a gateway for e-commerce and value-added services access charging.

SurePay is highly reliable and scalable. It is a proven, deployed solution, currently processing over 2.4 billion euros per month in revenue for its customers. It has been pre-integrated with many network elements worldwide, including most GGSN, AAA, SMSC, MMSC vendors and all the major billing and CRM systems, as well as recent deployments with the integration of various LTE/EPC network elements like PGW, PCEF, PCRF and IMS network elements.

FEATURES

- Prepaid and postpaid convergence
 - Unified solution simultaneously supports real-time rating and charging prepaid/postpaid tariff plans across multiple networks for various traffic types (for example, voice, SMS/MMS, data event and session, VoIP)
- Convergent rating engine
 - Powerful and highly configurable real-time unified rating engine supports various rating modes for traffic types, subscribers and services, and network technologies

- High flexibility and configurability enables service providers to quickly configure new tariff campaigns and promotions; built-in features enable providers to increase customer life-time value and reduce churn
- Powerful rules engine supports flexible tariff plans with multiple criteria
- Centralized product catalog used by the convergent rating and charging engine across networks and payment modes
- Community, online hierarchy and group accounts
 - Flexible account and balance management supports multiple balances and multiple devices per account
 - Powerful community rate plans, such as online hierarchy accounts and group accounts for shared allowances across multiple accounts, enable service providers to target family and corporate segments
- Support for policy-driven charging allows customers to define and enforce restrictions for the use of data services
 - Fair usage plans support with bandwidth throttling/de-throttling
 - Access to control based on service category and other criteria

- Support for various business models encompassing 3G/4G mobile data and services, triple play and quad play (mobile, VoIP, High-speed Internet, video)
- Zone-based charging option using the location of subscriber and key zones, such as, home, office and campus
- Capability to provide end users with the ability to control spending in real-time and to keep their budgets under control
 - Reduces the risk of bill shock and aligns with EU Data Roaming Notification regulations
 - Offers flexibility for data cut-off, bandwidth throttling, overage in pay-per-use with real-time notification
- Unlimited plans and automatic subscription renewal
- Real-time loyalty management
 - Supports creation of new, flexible, segment-based loyalty plans to reduce churn with multiple usage counters and thresholds
- MVNO and MVNE support
- Centralized top-up engine
 - Flexibly manages all sources of top-up and associated advanced bonus programs, including scratch cards, credit cards, ATM and point-of-sale recharge options
- Real-time access and management of user profile/data via multiple channels (IVR, USSD)
- Deployment acceleration with asset of open APIs to smoothly integrate with any billing and customer-care system as well as any third-party IT applications
 - Supports web-based services with a SOA-compliant API for customer provisioning
- Ability to Interoperate with Alcatel-Lucent VAS portfolio for advanced charging
 - Supports a range of charging options including VPN and WPBX advanced charging, ring back tone, video mail, mobile TV, 3G GGSN, LTE PGW and PCRF and IMS Convergent Telephony Server
- Modular architecture
 - Separates call control components such as voice, SMS and data from real-time convergent rating and charging engine
 - Manages feature growth based on operational strategy, including SMS charging, online/offline charging, web-based customer care, over-the-air-recharge/voucher management, USSD call back
- Supports small to the largest networks with high-availability, highly-resiliency in its distributed architecture
- Supports disaster recovery/disaster avoidance deployment options with components that can be distributed geographically

BENEFITS

- A convergent charging solution for simultaneously offering prepaid, postpaid and hybrid real-time rating and charging service packages for voice (circuit and VoIP), data, video, packet, session, events, content and e-commerce
- Enables service providers to rapidly launch and manage new offers with attractive, innovative tariff plans with market segmentations to reduce churn and increase customer lifetime values
- Facilitates integration and accelerates deployment and transactions to revenue
- Includes IMS/LTE charging support with network resources monetization
- Supports multiple wireline and wireless networks including CDMA, GSM/GPRS/EDGE/UMTS/HSPA/HSPA+, 3G, 4G/LTE and IMS
- Enables creation and deployment of innovative commercial offers and attractive tariff schemes to further expand existing revenue streams tailored to individual market segments
- Enables cost controls for prepaid/postpaid subscribers to reduce bad debt
- Supports customized loyalty programs to reduce churn and increase ARPU
- Enables faster time-to-market for new revenue-generating services targeted for multiple networks, markets and domains
- Reduces operational costs by supporting the consolidation of multiple rating and charging engines into a single convergent rating and charging solution

TECHNICAL SPECIFICATIONS

- Voice/TDM integration
 - INAP
 - CAP (1/2 for voice, 3 for SMS)
 - MAP (V2, V3)
 - WIN (IS-826)
- IP data integration
 - CAP 3
 - Diameter (Ro, Gy and Sy)
 - HTTP/XML
 - LDAP
 - RADIUS
 - SOAP
 - SIP (VoIP)
 - SMPP
 - SIGTRAN
- OSS/BSS integration
 - SOAP/web services
 - FTP
 - SNMP
- IT-based hardware and middleware platform
 - Latest ATCA technology HP blade technology

For more information, visit the [SurePay](#) and [Smart Plan](#) web sites.