ALCATEL-LUCENT INSTANT CONVERGENT CHARGING SUITE

CONVERGENT RATING & CHARGING SOLUTIONS

The Alcatel-Lucent Instant Convergent Charging (ICC) Suite is the key component of the Alcatel-Lucent payment & charging portfolio. It provides convergent rating and charging solutions for various traffic types across across various fixed/mobile network technologies (PSTN, GSM, CDMA, GPRS, 3G/UMTS, LTE and IMS). The ICC is deployed by over 180 service providers serving an estimated 400 million subscribers. The scalable solution is both highly available and highly configurable.

The ICC Suite enables flexible and configurable centralized real-time rating, charging and mediation for multiple networks and services so fixed, mobile and converged network operators can quickly create innovative tariffs and process real-time revenue streams. Mobile Network Operators (MNOs) can simultaneously offer prepaid, postpaid and hybrid rating and charging for voice, SMS, MMS, data events and sessions, video, content and commerce services. Additionally, MNOs can simplify the customer experience by offering real-time dashboards for users to proactively manage and upgrade their mobile plans themselves.

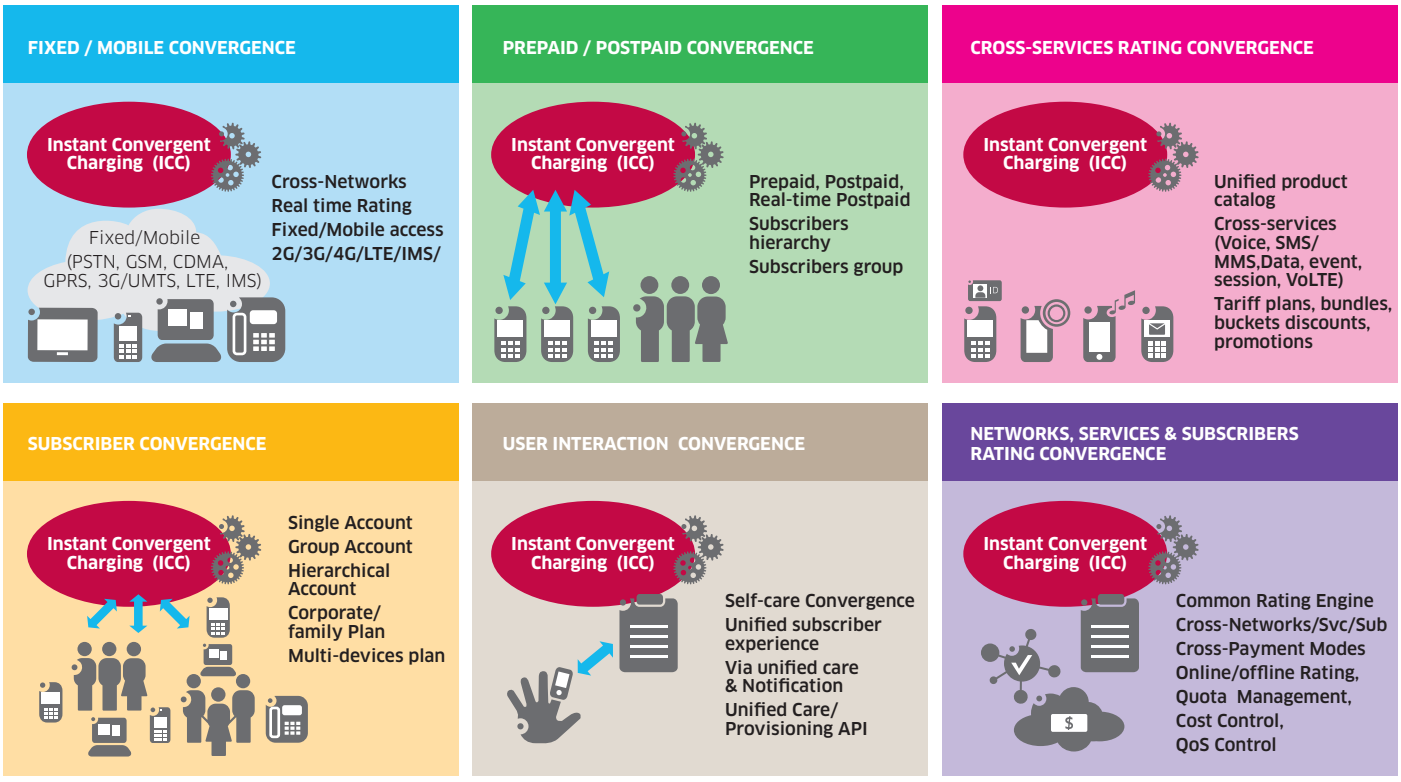
With the Alcatel-Lucent ICC Suite, MNOs can:

- Simplify tariff creation and implementation using the "design-tree" GUI, centralized product catalog and community rating features
- Provide instant payment options for users
- Apply cost controls on prepaid and post-paid subscribers to reduce the potential for accumulating bad debt and to prevent unanticipated spikes in bills due to data usage
- Couple charging with a policy control system with the Alcatel-Lucent 5780 Dynamic Service Controller (PCRF) or with the Alcatel-Lucent Instant Zone (IZO) for dynamic pricing to monetize network bandwidth
- Define customized loyalty offers to reduce churn and increase average revenue per user
- Be ready for the anticipated surge in traffic volume with LTE/IMS

FEATURES

- Prepaid and postpaid convergence
  - ¬ Unified solution simultaneously supports real-time rating and charging of prepaid/postpaid tariff plans across multiple networks for various traffic types (for example, voice, SMS/MMS, data event and session and VoIP)
- Convergent rating engine
  - ¬ Design-tree GUI supports drag-and-drop for multiple tariff plans, and includes the ability to mix-and-match voice and data tariffs to support hyper-market flexibility based on time of day or week, usage, discount, promotions, sessions, event and content
  - ¬ Pricing center's user-friendly GUI simplifies management of product catalog and commercial offers, allowing access to entire product catalog through a graphical display of entities with copy-and-paste, drag-and-drop, and import/export offer facilities; also provides a better view of commercial offers prior to launching them, thanks to version control
- Centralized product catalog used by the Convergent Rating Engine across networks and payment modes
- Recognition of communities
  - ¬ Enables "friends and family" and/or enterprise-based community rating programs
  - ¬ Enables shared corporate/family plans

Figure 1. ICC Convergent Charging Solution: A Comprehensive View – 360° Convergence



- Support for policy-driven charging to allow customers to define and enforce restrictions on the use of data services
  - ¬ Supports fair usage plans with bandwidth throttling/de-throttling
- Support for various business models for 3G/4G mobile data and services, triple play and quad play (mobile, VoIP, High-speed Internet, video)
- Zone-based charging option according to the location of the subscriber and key zones, such as, home zones, office zones, campus and yield zones
- Capability to allow subscribers to control spending in real-time and keep their budgets under control
  - ¬ Avoids bill shock and supports EU-regulation
  - ¬ Provides 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
  - ¬ Allows multiple usage counters and thresholds to create new, flexible, segment-based loyalty plans to reduce churn
- Mobile virtual network operator (MVNO) and mobile virtual network enabler (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, web self care)
- 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
  - ¬ Relies on high-level business processes for customer provisioning
- Ability to interoperate with Alcatel-Lucent Value-Added Service portfolio for advanced charging
  - ¬ Interoperates with VPN and WPBX advanced charging, ring back tone, video mail, mobile TV, 3G GGSN, LTE PGW and PCRF and IMS Convergent Telephony Server (CTS), for example
- Modular architecture
  - ¬ Separates call control components such as voice, SMS, data, IMS from real-time convergent rating and charging engine
  - ¬ Manages feature growth based on operational strategy, including SMS charging, online/offline charging, web customer care/web self-care, over-the-air-recharge/voucher management, USSD call back
  - ¬ Offers high-availability, highly resilient product with distributed architecture to support the smallest to the largest networks
  - ¬ Can be distributed geographically to support disaster recovery/disaster avoidance deployment options
  - ¬ Uses high-level business processes for customer provisioning
  - ¬ Relies on Java™ and web services technologies

BENEFITS

- Convergent charging solution enables MNOs to simultaneously offer 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
- Ability to rapidly launch and manage new offers with attractive, innovative tariff plans with market segmentations helps reduce churn and increase customer lifetime values
- Modular and flexible design facilitates integration and accelerates deployment and transactions, speeding time to revenue
- Includes IMS/LTE charging support with network resources monetization
- Supports multiple wireline and wireless networks including PSTN, GSM, CDMA, GPRS, 3G/UMTS, LTE, IMS
- Enables creation and deployment of innovative commercial offers and attractive tariff schemes to expand existing revenue streams tailored to individual market segments
- Helps control costs for prepaid/postpaid subscribers, which reduces bad debt
- Enables customized loyalty programs to reduce churn and increase average revenue per user
- Expedites time-to-market for new revenue-generating services targeted for multiple networks, markets and domains
- Helps MNOs reduce 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
  - ¬ SOAP
  - ¬ SIP (VoIP)
  - ¬ SMPP
  - ¬ SIGTRAN
- OSS/BSS integration
  - ¬ SOAP/WEB services
  - ¬ FTP
  - ¬ SNMP
- IT-based hardware and middleware platform
  - ¬ Latest HP Linux™ server technology
  - ¬ Oracle™ database

Visit the **Instant Convergent Charging Suite web page** for more information.

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