

# Residential VoIP

## CRESTEL's 4C Advantage for Residential VoIP

### Customer:

- Flexibility in change of plans between prepaid & postpaid
- No Single Vendor lock in for CPE
- Calling card activation/recharge support
- Multiple Calling Options- Soft Phone, IP Phone
- Multi-mode recharge interfaces viz.ivr,sms,ussd
- Single Bill for multiple services
- Customer Web-self-care for easy recharge and change plan & Online payments

### Competition:

- Easy implementation of complex VOIP product offering in Flexible Product catalog management
- Faster Rollout of products and services
- Next Generation Network Support for future deployments
- Integration with upstream OSS/BSS systems
- Module architecture utilize existing infrastructure by easy interface
- Access Network Agnostic
- Single platform for Prepaid and Postpaid reduces Opex
- Multi-Vendor Support eliminates vendor lock-in

### Channel/Content Partner:

- Supports Multi-party billing
- Reseller WSC for easy purchase and selling of recharge coupons
- Reseller and distributor commission, discount and credit configuration
- Termination partner Support
- Flexible payment facility
- Credit control

## CRESTEL Solutions Overview

CRESTEL is the carrier-grade billing, customer care, mediation and provisioning platform that enable next generation data, voice and video services over wireline and wireless networks. CRESTEL's integrated approach to the 4Cs of the convergent market place - customers, competition, content and channel partners enhances service providers' competitive strengths.

## Industry Scenario & Business Requirements

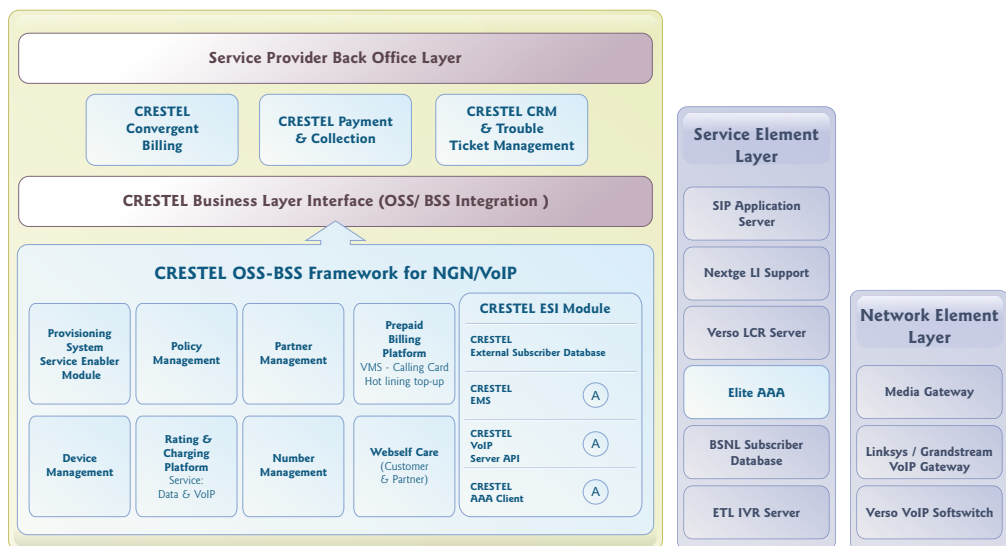
Residential Voice over Internet Protocol has become popular with the residential consumers around the world replacing the traditional PSTN line telephony services, fast becoming the preferred means of long-distance communication because of its cost effectiveness, simplified billing and a wide array of user-friendly features. It is estimated that out of 20.2 million household subscriber lines deployed for internet access, roughly 14.8 million lines host Residential VoIP applications.

For the service providers it is important to provide affordable telephony packages compared to the existing traditional services, for which they require the right business models and systems to succeed in this highly competitive market, which makes a robust billing system a critical component of the business model. The billing system should be capable of launching new services quickly, at the same time upgrade old legacy system to offer NGN/VoIP service. The billing system's rating and charging module should be able to create complex bundle of services and customer centric charging that enables convergent service bundles for efficient communication over an IP network.

## CRESTEL for Residential VoIP

CRESTEL's Residential Voice over Internet Protocol (VoIP) solution allows service providers to deliver converged voice, data, and on-demand video services to residential customers over asymmetric digital subscriber line (ADSL), cable, or WiMAX Services can be delivered over primary or secondary lines.

The solution delivers a number of features historically only available on public switched telephone network (PSTN) networks, including carrier pre-selection, alternate call routing, least-cost routing, calling line presentation/restriction, call barring, white list/black list, and emergency calls. In addition, it offers great flexibility, allowing service providers to deploy just the CRESTEL Voucher Management System Module for Calling card business model or the complete CRESTEL Convergent Billing Solution.



## CRESTEL Modules

- EliteAAA with active Mediation
- Real-time Provisioning
- Policy Management
- Voucher Management System (VMS)
- Number Management
- Convergent Rating & Charging
- Product catalogue Management
- Web self Care (Customer, Reseller & partner)
- Account management
- Prepaid Billing Platform
- Convergent Billing

## Residential VoIP Features

### Crestel Platform Standard Features :

- Single Billing Platform for voice & data services on NGN/VOIP
- Real-time Rating & Charging
- Websellcare for Customer, Reseller & Partners
- Multi-language IVR support
- Multi Currency support
- Multi-mode recharge & balance transfer
- Open API for easy integration with other OSS/BSS modules
- Trouble Ticket Management
- Multiple Authentication methods and devices
- Customized Reports
- Carrier grade AAA & Policy Management integrated with Rating

### Residential Class 5 Services supported:

- Caller ID
- Call Return
- Customer Originated Trace
- Call Waiting
- Call ID Block
- Selective Caller ID Blocking/ Unblocking
- Speed Dial
- Three Way Calling
- Call Transfer (conditional/unconditional)
- Message waiting indicator
- Call Back
- Block Anonymous calls
- Block Last call
- Do not Disturb
- Automatic Call Back
- Unattended call transfer
- Hotline
- Call hold
- Call Waiting
- Find Me and follow me services

## Technical Specification

- 100% Java Built -EJB Architecture, Servlets, JSP, XML, RMI, JAVA 2.0, JNDI, JNI
- Hardware Independent Architecture Platform-LINUX, SUN SOLARIS, HP UNIX, IBM AIX
- RDBMS-ORACLE 10g with RAC Support
- Web Services Compatible / EAI Support-Support for HTTP/XML & SOAP
- Unix Cluster Support- Redhat HA server, Veritas Cluster V3.0
- Directory Servers -Open LDAP, iPlanet, Openwave LDAP
- Application Server Support -Oracle 10g AS, JBOSS, Tomcat

## CRESTEL Platforms Interoperability

CRESTEL has a wide range of interoperability for its Residential VoIP service for PC Softphone Clients ( eg Countepath, and any other SIP compliant clients), Terminal Adapters (eg 42Networks,D-Link,Linksys,SX Design, Tilgin, ZyXEL), SIP Phone ( Snom, Cisco), PSTN Gateways ( Cisco, OIS,PGW, Vegastream) and Session Border Controllers ( Ingate, Acme).Multiple Soft Switches viz. - Verso, Nexge, Veraz & Quintum

### Class 4 soft switch services supported:

- Off net to on net calls ( calls originate on PSTN and terminate on the IP voice network)
- On net to On net calls ( calls originate and terminate on the IP voice network)
- On net to on Off net calls ( Calls originate on IP voice and terminate on PSTN)
- Management of dial plans (inter-area code, international and intercarrier)

### CRESTEL Residential VOIP Solution feature:

- Open Architecture, standard SIP, H.323 & MGCP control of media gateway
- H.323 and SIP interconnect to remote softswitch
- ANI, DNIS Support in EliteAAA
- Authentication for data and voice usage
- Least-cost routing
- Self provisioning & Pre provisioning of CPEs & Numbers
- Rating by Source & Destination based, Policy based on any combination of attributes in CDR
- Complex pricing plans- Flat rate and usage based plans, Differential pulse based rating, Peak/Off Peak, Bundled usage/ Free Minutes, Rollover of free minutes
- Calling card model supports the reseller & dealer management
- Customized report generation
- Charging by CPE Rentals, VAS (Class V, IV) & Voice Mail
- Post call surcharge support
- Recharge Package Support
- Partner Termination support in rating

## About Elitecore Technologies Ltd.

Elitecore Technologies Limited is the global provider of CRESTEL Convergent Billing Solution, a convergent billing solution that meets the voice, data, video billing, and customer care requirements of Tier-1 to Tier 3 service providers. Elitecore serves customers in Asia, South East Asia, Middle East and Africa. For more information, visit Elitecore Technologies Ltd. at [www.elitecore.com](http://www.elitecore.com)



### Corporate Office

Elitecore Technologies Ltd.  
904, Silicon Tower, Off. C.G. Road, Ahmedabad - 380 006.  
INDIA.Tel: +91-79-66065606, Fax: +91-79-26407640

© Copyright 2009 Elitecore Technologies Limited. All Rights Reserved.

### Sales & marketing

Mumbai Tel: +91-22-66951280 / 1380 Fax: +91-22-66923363  
Delhi Tel: +91-11-41589761/62 Fax: +91-11-41589760  
Bangalore Tel: +91-80-41517880 / 81 Fax:+91-80-41517883  
USA New Jersey Tel: 201-422-9200 Fax: 201-735-5888

