10K Proxy Calls
in Single Server

Switch Integrated
with Real-Time Billing

Rate Plan
Normalization

Most Advanced Fraud
Detection System
in the Industry

Absolute Prepaid
with Traditional
Postpaid Platform

WebRTC to SIP
Conversion

Great Price
Quality Ratio

REVE SBC

Session Border Controller
& Beyond

REVE Systems
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CORE FEATURES

Dynamic Scalability

1+1 Hot Standby

Real Time Performance Monitoring

Distributed Control & Media Architecture

Industry Standard all Routing Tools

Local Number Portability (LNP) Multiple

Protocol Supported Media Transcoding

Integration with Cloud Management Solutions

Topology Hiding

NEXTGEN FEATURES

RATE PLAN NORMALIZATION

• Conversion of any termination client's rate plan format to native format
• Easy uploading of rate plans and conversion into respective templates
• Auto conversion of all templates into native rate plan format

NEVER GO NEGATIVE

• Restricts users account balance from going negative
• Real-time monitoring of running calls to check low or zero user balance
• Automatic call drop before user account balance turns negative

WEBRTC SIP GATEWAY

WebRTC

• Complete inter compatibility between WebRTC and SIP Gateway
• Enables users to initiate & receive VoIP calls over WebRTC without any plugins
• Click-to-call, video call, video conferencing, webchat, screen sharing, & file
   transfer supported

CALL & ROUTE STIMULATOR

• Route checking facility for selected clients & the dialed destination
• Routing sequence & its status checking facility
• Data display based on current capacity & route status
• Call from any specific carrier of any level to check rate, route & balance issue
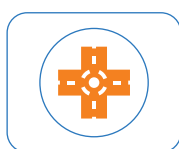
REVE SBC

MAJOR FUNCTIONALITIES

GROUP ROUTING

• Different route setting under a single route group
• Easy assigning of specific group to clients with similar preferences
• Minimum and Maximum digits for each destination can be set
• Save enormous time & hassle of assigning routes to clients individually & repeatedly

ADVANCED ROUTING

• Source & Destination Based Routing
• Loss Less Routing (LLR) & Least Cost Routing (LCR)
• Percentage (%) Based Routing
• Quality Based (ACD/ASR/PDD) Routing & Quality Based LCR Routing
• Time Based Routing
• LRN and MNP Dip based Routing
• Overflow & Route Capacity based Routing
• Specific Prefix based Rate plan & Route Tagging to maximize Profit

CLI MODIFICATION

• Dial Number Translation
• Caller ID Modification
• Caller ID Allow/Block
• Dialed Number Length Verification & Blocking

CLIENT MANAGEMENT

• Supports 3 types of clients (Originating, Terminating and Both)
• Manages CPS for Originating Client & Call Limit for Terminating Client individually
• Supports both Prepaid and Postpaid Payment
• Add & Strip Prefix to adjust Termination Call
• Client authentication by IP & Prefix

RATE PLAN MANAGEMENT

• Prefix wise multiple rate plan
• Supports Peak & Off-Peak based rate management
• Easy modification of rate plan by changing (% value) in the existing plan
• Future date wise scheduled rate management
• Destination wise TAX activation
• Fast upload & easy to download rate plan in CSV file format

LCR

• Base rate plan can be managed
• Multiple offers can be managed (gold, silver, bronze, etc.)
• Rate Analysis of multiple termination carrier
• Create offer rate for Originating carrier
• Compare carrier rate with offer date (rate increase, decrease & no change view facility)
• Direct mail to carrier group

RECONCILATION MODULE

• Admin can select time slot and time zone for doing this operation
• Can create different CDR format for different terminating client CDR
• Can set threshold to minimize time difference with termination
• Can download reconcile report to find for which call duration is not matching with termination

USER BEHAVIOR BASED REPORTING

• Shortcut links suggestion for user in the login page based on user behavior
• Multiple time selection of monitoring report options

MAJOR FUNCTIONALITIES

ANALYSIS & REPORTING

- Dashboard monitoring
- Real-time report on active call, live call flow & SIP log trace
- Custom report generation using time zone based on user's demand
- Detailed report (Successful, Failed & Authentication Failed)
- Summary report (Hourly, Daily, Monthly) Specific Search (Callee & Called Number, Duration based, Disconnect Cause Code)
- Gateway wise ACD/ASR/PDD report with details breakdown
- Comprehensive Monitoring reports as graphs (Time wise, Client wise, Hourly, Daily & Monthly)
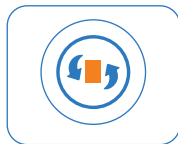
NET-OFF/BILATERAL ACCOUNT MANAGEMENT

- Summary report generation to check & compare call amount, recharge amount, profit & remaining balance

REPROCESS CDR

- Admin can Re-Rate CDR based on current or new rate plan during a defined time slot
- All clients or specific clients can be selected
- Reprocessing applies for the changed rate of specific calling destination with specific prefix

INVOICE MANAGEMENT

- Supports auto & manual Invoicing with client-to-client invoice customization
- Invoice generation in both CSV and PDF format
- Notification of invoice via both Mail & SMS
- Invoice configuration:
  Daily or weekly or monthly | Specific Date & Time Zone wise | Due Date Management
- Single invoice facility for multiple services (Voice, SMS etc.)
- Payment posting facility and tagging against each invoice

# ADDITIONAL FEATURES

SALES PERSON WISE ACCOUNT MANAGEMENT

• Sales person wise individual reports generation
  to check no. of handled clients,
  profit/loss status, call volume and more

ONLINE & BANK PAYMENT SUPPORT

• Supports Online Payment Gateway & Debit/Credit Card
• Currency conversion and balance adjustment
• Clients can make payments at Bank & upload
  information in System for the admin
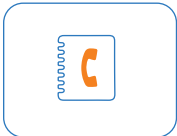
ACTIVITY LOG

• Highest security level for checking billing
  modifications for modules like Client Add/Delete,
  Rate Plan Add/Delete, Rate Change Information etc.
• Facility to track billing activities by selecting specific
  date, time & user worked at which time from
  which login IP etc.

LOGIN SECURITY

• Software/Email based 2FA security
• Active user and client login monitoring
• Country restriction for user login
• User wise IP restriction for login
• Auto IP backlisting on multiple invalid login try

REAL-TIME BILLING

• Mid-Call Re-authorization after every set time
  interval for True Prepay.
• Safe Amount/Percentage Margin/Credit Limit
  based Call Snapping
• Pre-pay & Post-pay Billing
• Real-time CDR Processing
• Multi-currency Support
• Blocking/Unblocking of destinations
• Online Payment Gateway integration
• Periodic and Instant Invoice generation in
  PDF & Excel format
• Customized Billing Cycle

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FRAUD & SECURITY MANAGEMENT

MULTILAYER SECURITY

- FAS detection
- Media Analytical ability
  (No media, One way media & delayed media)
- Premium routes call detection and ability
  to take actions
- After business Hour call fraud detection
- Robocallers detection
- 2FA for login, recharge and IP client addition
- IP based firewall in switch for call authentication
- Encrypted password for database
- Role based access control
- Auto expire (After 1st use, after 30 days & configurable)
- Billing activity log trace
- DoS/DDOS attack blocking at H/W

INTELLIGENT ALERT SYSTEM

- System alert for unusual disk, CPU, memory usage
  & route down
- Performance alert for unusual ASR, ACD & average PDD
- Each route wise separate alert for unusual ASR, ACD &
  average PDD
- Behavioral alert for unusual no. of calls and termination
  gateway down
- Alert for unwanted recharge, low balance and
  unauthorized user access
- Performance alert for unusual ASR, ACD & Average PDD

- Each Client wise separate alert for unusual ASR, ACD &
  average PDD

SOLUTION ARCHITECTURE
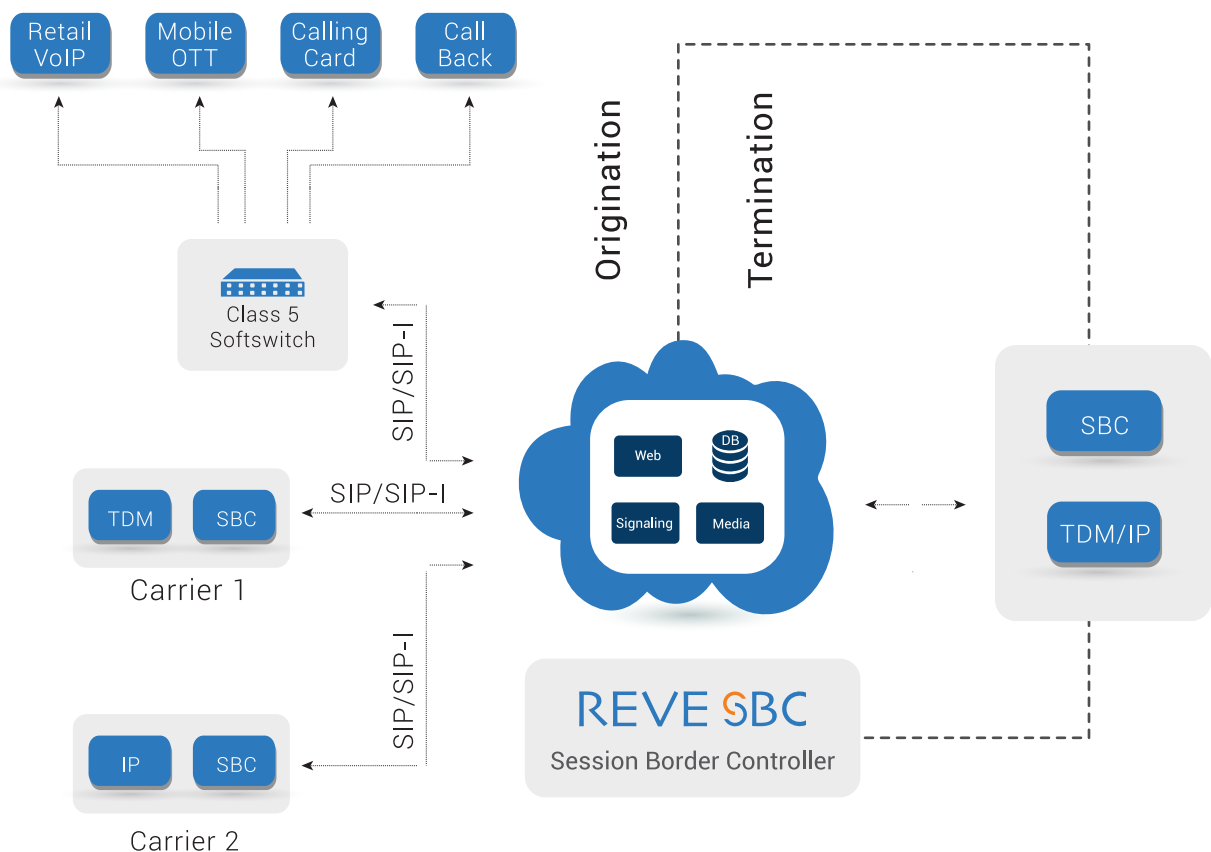
TECHNICAL SPECIFICATIONS

SUPPORTED PROTOCOLS & SESSION CONTROL

- SIP v.2.0 (RFC 3261, RFC 4566), SIP-I
- SIP REDIRECT
- RADIUS
- RFC 3863, 3428, 3903, 3515 and new RFC
- Caller-Carrier PTIME isolation
- Media Monitor
- RAW IPDRs / Rated CDRs posted to Mediation Server / Local Memory
- SIP Header Manipulation/Topology Hiding
- Error Code Adaptation
- Support for Proxy and Non Proxy

SYSTEM ARCHITECTURE

- 1+1 Hot Standby
- Supports Distributed Architecture for Robust deployment
- Real-time Data Backup
- Web Server: Jakarta, Apache Tomcat

TONES & MEDIA FUNCTIONS

- All standard Codec in Transparent Mode: G.711, G.723.1, G.726, G.729a, G.729b, G.729ab, iLBC, G.722, AMR-NB, AMRWB, GSM Codec Support etc.
- Codec Transcoding based on Voice Codec (OPUS,G711,G729)
- Auto In band / Out band DTMF over IP (INFO, RFC 2833)
- Media: RTP, RTCP
- T.38 Fax Relay Protocol

WEBRTC FUNCTIONALITY

- Compatible with any client that complies with WebRTC standards.
- SIP over Secure WebSocks
- ICE/STUN
- SIP Internet working

INSTALLATION PLATFORMS

- Supports Unix/Linux Based Platform

SYSTEM PERFORMANCE TEST

Server Specifications

CPU (s)	: 6 Cores (12 core by hyper thread)
Processor Model	: Intel(R) Xeon(R) CPU E5-2430 0 @ 2.20GHz
Cache size	: 262144KB
Total Memory	: 32 GB (DDR3, Speed: 1600 MHz)
HDD	: 4 X 500 GB (RADID 5, 7.2 K RPM SATA)
NIC Card Speed	: 2 x 1000 Mb/s

Result

Concurrent Call Capacity
- Proxy mode : 10,000
- Non-Proxy Mode: 20,000
- Transcoding Mode: 6,000
- CPS Value: 2,000
- BHCA: 72,00,000

ADDITIONAL SERVICES

LOCAL NUMBER PORTABILITY (LNP)/(LRN)

Facilitates to change service provider without changing the phone number. A centralized database keeps records of all service providers with phone number.

- Easy to manage destination wise routing
- Portability number based rate management
- Detailed reporting
- Connectivity with portability database

SUPPORT PORTAL WITH TROUBLE TICKET

- Manages support history (Admin, Agent, Supervisor)
- Role based access control
- Detailed reporting on closed and live ticket with various status
- Agent performance management reporting
- Carrier/vendor can also keep a track of their support requests
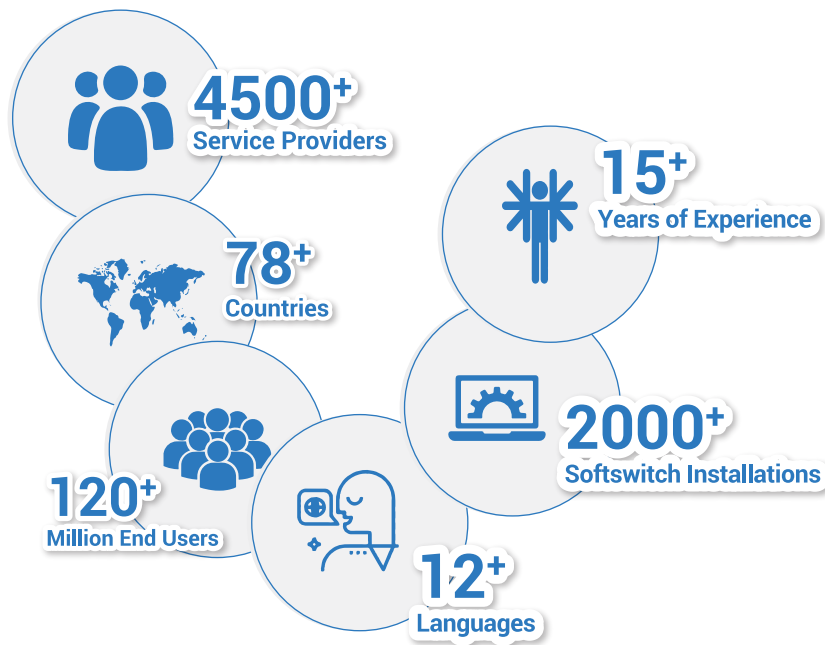
CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

- Customer contact information management Identify, add and categorize new leads easily & quickly
- Improved business relationship with customers & partners
- Offer better & personalized customer service to differentiate from competitors
- Improved product, service and profitability

DATA BACKUP

- Real-time data backup from both main & replication server on a schedule basis
- Complete backup of main database and CDR backup of successful calls which can be downloaded
- Data backup in case of Hard drive crash, theft, accidental deletion, malware attack or any kind of natural calamities
- Immediate email notification in case of any urgency

REVE SBC

KEY STATISTICS

4500+
Service Providers

15+
Years of Experience

78+
Countries

2000+
Softswitch Installations

120+
Million End Users

12+
Languages

NOTABLE CLIENTS

Airtel
(India)

CountryCom
(Russia)

Anwarnet
(Algeria)

Babilon-Mobile
(Tajikistan)

Bright Telecom LLC
(USA)

DollarPhone
(USA/Canada)

IDT Telecom
(USA)

Tigo
(Venezuela)

Telecom Oman
(Oman)

ICT
(Bangladesh)

21CTL
United Kingdom

TELEPORT
United Kingdom

And More...

RECOGNITION

Recognized Leader in
Mobile VoIP Solutions
and Best Softswitch &
Billing Solutions Provider

REVE Systems wins
Recognized Leader in Best
Softswitch & Billing
Solutions Provider

REVE Systems wins
Red Herring's
Top 100
Global Award

iTel Switch receives NGN
Leadership Award for
being a Global
Technology Leader

Unified Communications
Excellence
Award for
Outstanding Innovation

ABOUT REVE SYSTEMS

A RED Herring's 2012 Top 100 Global Winner, REVE Systems is a prominent leader in IP based Communication solutions established in the year 2003 with a focused approach to serve the communication industry. As a Telecommunication & Software Solution provider, REVE Systems holds a leadership position in Enterprise Communication, Data & Telecom Billing, Automation, Information Security (Antivirus, 2FA), Live Chat, Cloud Based Communication, Deep Packet Inspection (DPI), Secure Printing and Softswitch with Integrated Billing & Bandwidth Optimization solutions.

Other Products

REVE Chat   iTel Switch   Web RTC   KLOUDTALK

REVE secure   REVE OTT   telbilling
Carrier grade billing system

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