

**Panamax InfoTech** is pioneering in provision of Next Generation Networks across globe. Our main focus areas to deploy the Core Communication platforms for ITSP, MNO, and ISP. It enables to cater feature rich services like IP Telephony, Long Distance Cards, Call Back Service, INTS, and Value Transfer Services to ever growing subscriber base. Bridge2Call is extremely reliable, well tested and proven in its capabilities and provides very fast fault recovery through redundancy.

**INTS - International Number  
Transfer Service**

•  
**Calling Card**

•  
**Call Back**

•  
**SIP Telephony (VoBB)**

## **NGN & VAS PLATFORM**

**IMS Compatible • Carrier Grade Reliability • Modular Architecture**

### Business Process Management

- Ease of user creation
- Department wise User Group Mgmt.
- Provision for Granting / Revoking Access Rights
- Centralize control over access rights
- Panel wise user authorization and authentication

### Country Management

- Provision for managing country, state and area details
- Facility to map country with state and state with area
- Country profile PIN Validation facility
- Adding means for restricting the access number country or state wise

### Reseller Management

- Reseller Profile Mgmt.
- Policy Base Reseller Billing Generation Facility
- Facility for keeping track record of reseller's bill
- Reseller Payment and discount Mgmt.
- Payment Adjustment Support
- Ease for processing (i.e. activating / deactivating) single as well as multiple card and voucher range(s)

### Carrier and Routing Management

- Facility for carrier/carrier Group (Multiple Carrier(s)) Mgmt.
- Carrier Tariff Plan Management
- Tariff Plan wise Rate uploading facility
- Facility to configure routing type
- Supports for generating Least Cost and Priority Base Routing details
- Multiple carriers – Call tracking facility
- Multiple trunks configuration facility for single carrier

### Product Management

- Provision for defining and managing product as well as subscription plan
- Mapping product with subscription plan facility
- Provision for Automatic inheritance of call matrix, tariff and call feature from subscription plan to product.
- Ease of service configuring such as calling card, call back, INTS (International Number Transfer Service), SIP Account.
- Mapping Carrier and access number group with product facility
- Provision for Automatic call feature(s) detection based on service configuration
- Provision for Applying Call Surcharge such as Connection / Disconnection / Toll free charges ...etc.

### Subscriber Management

- Various types of subscriber support such as Prepaid Cards, SIP, Call Back INTS Users
- PIN Generation Facility
- Ease for Card and Voucher E-purchase
- Provision for batch activation and deactivation
- Denomination setup facility with Face and Top Up Values
- System generated Control Number (Which are in-sequence) to identify the subscriber uniquely.
- Top-up and Recharge through WSDL service for 3rd party subscriber
- Recharge grace period facility to make use full amount, user account balance.
- Provision for setting up shelf life duration to prevent miss usage of stock
- Open Denomination Support for Flexible E-Cards and Voucher creation through API
- Services configuration facility for services such as Hot Line, Black and white list, Speed dial, PIN Less & Favorite number facility

### Tariff / Rate Management

- Call Plan Analysis
- Creation of Call Plan
- Call Plan Wise Rate Upload Facility
- Taxation and Charges Management
- Destination specific Rate Overriding Facility
- Rate Import / Export facility
- Facility for overriding rates using 'Complex Rate Formula'
- Provision for emerging taxation
- Service wise tariff management facility
- Easy ease for Faster access and data manipulation

### Access Number Management

- Ease for Managing Normal and Toll-Free Access Number(s)
- Access Number Provider / Group Mgmt.
- IP-Base Access Number Authentication Facility
- Ease of managing rates for Toll Free Access Number and Payphone also.
- Provision for Restricting Access number either country or state wise
- Access Number Rule Management
- Access Number Individuality Service wise
- Access Number Wise – Language Configuration Facility

### Offer / Discount Management

- Facility to define call & Purchase offer
- Facility for defining / creating
- Free minutes Offer
- Rate Discount Offer
- Purchase Offer
- Promotion Offer
- Magic Number
- Offer tariff Mgmt.
- Provision for Destination wise offer and offer tariff Mgmt.

### Real Time and Advance Billing

- Real-time Billing
- Billing Generation based on Activation of Card
- Billing Generation based on First Usage of Card
- Real-Time credit Mgmt. facility
- Reseller Invoice Mgmt. Facility

### Alert/Notification Management

- Able to identify the import event
- Facility to generate alert and notify the user on regular interval
- Ease to generate active alerts
- Facility for overriding rates
- Provision for emerging taxation

### Dynamic - Interactive Voice Response (IVR)

- Profile base IVR Management
- Subscription Plan, customer support and Access Number wise profile categorization for IVR Management
- Make customer touch point as dynamic as customer requirement
- Easy Ease for changing menu item and prompts
- Ease for changing base call flow to make it user friendly
- Facility to make IVR capable for providing timely, short and meaningful information
- Easy ease for adding promo and holiday special announcement

### Calling Card

- Facility to manage the batch of individual product
- Ease for generating and managing card / voucher batch
- PIN less batch generation facility
- Follow me and Cut Through Dialing Feature Support
- Last Minutes, Balance and Expiry announcement

facility

- Simultaneous Call Support
- Multi language Support
- Real time call disconnection facility for insufficient account balance
- Redial and Speed Dial Facility

### Call Back

- ANI base authentication facility for Registered user(s)
- On First Usage Registration facility for un-registered user(s) through PIN
- Dual Leg Billing Facility
- Call Back – Tariff Management
- Web Call Back Facility

### SIP Telephony

- SIP Registrar, SIP – TLS, SIP Presence and SIP Publish facility
- SIP Soft and IP Phone Support
- IP Base SIP Authentication Facility
- RFC 3261 Compliant
- SRTP – Increase confidentiality RTP
- Message authentication for RTP Packets
- Session Address Protection Facility

### International Number Transfer (INTS)

- Access Number Base Account Mgmt.
- Special Tariff Mgmt – For access Number Billing Generation
- Mapping access number with ANI / any number facility
- Black List /White List Enforcement

### 3rd Party Integration Module

- WSDL (Web Service) support for Integration
- SOAP – XML Support
- Secure Communication using SSL and HTTP
- Report Builder
- Provision for Customer Problem solution using Inquiry Report
- Product, carrier, access number and batch wise Traffic report generation facility
- Financial Report Generation Facility
- Report for analyzing Product and Subscriber life cycle
- Report On Live Call for Monitoring Live call details
- Import observation notification facility
- Customer Relationship Management
- Ease for tracking customer activities
- Permits customer to configure the various services such as Speed Dial, Family and Friend List, Call Detail Record and, configure the setup for PIN less dialing ...etc.

### Customer Care Management

- 24X7 supports for all time zones
- Maintain record for customer technical queries
- Support for configuring services such as ANI Registration, Speed dial, black & white list, Hot list...etc.
- Availability of on-line recharge
- Provision for Refund of call charges
- Maintenance and Migration – Bug fixing or Release upgrade
- Remote Infrastructure Support
- Project Base service support

### Modular Architecture Management

- SIP Session Manager with Load Balancer and Fail over facility
- IVR Session Manager
- Database Mgmt. with Master Slave Support
- Application Server with DNS Load Balancing Facility

## Hardware Requirements

Hardware	Database Server	Application Server	Application Server
<b>Processor</b>	Intel® Quad-core E55XX @ 2.27GHz	Intel® Quad-core E552X @ 2.27GHz	Intel® Quad-core E552X @ 2.27GHz
<b>Memory</b>	8 GB	16 GB	8 GB
<b>Disk Space</b>	73 GB	500 GB	73 GB
<b>RAID</b>	1+0	1+0	1+0
<b>RPM</b>	Dual NIC – 1 GBPS	Dual NIC – 1 GBPS	Dual NIC – 1 GBPS

- Mentioned hardware requirements facilitate 1000 concurrent calls deployed with all loaded features.

## Software Requirements

Server Side Requirement Details		Client Side Requirement Details	
<b>Operating System</b>	Red Hat Linux – 5.4 (64 Bits), Cent - 5.4 (64 Bits)	<b>Operating System</b>	Any
<b>Web Server</b>	Apache	<b>Web Server</b>	Any
<b>Database Server</b>	MySQL Server 5.4		

## Communication Protocol

- Hypertext Transfer Protocol (HTTP)
- Session Initiation Protocol (SIP)
- Hypertext Transfer Protocol Secure (HTTPS)
- SIP – Transport Layer Protocol (TLS)

## Media Protocol

- Real-Time Transport Protocol (RTP)
- Real-time Transport Control Protocol (RTCP)

## Platform Security

- Secure Socket Layer (SSL – cryptographic protocol) base web access
- Firewall At Each Node
- ACL base System Access

## Audio Codec

- g729, g723, Ulaw

## DTMF Support

- RFC 2843