

A world map composed of numerous small orange dots, centered behind the title text. The map shows the outlines of the continents in a pixelated, dot-matrix style.

# Terminus Customer Care and Billing System

## Terminus Technologies

Terminus Technologies private limited is a registered company in Lahore, Pakistan. Terminus Technologies is also registered in Canada in name of Terminus Technologies Inc.

Terminus Technologies is a software development company which has huge experience in Software Development, Software Deployment and software support, VoIP Solutions etc. We are offering on customized solutions related to CRM, Inventory Management, University Management, Network Integrations and Mediations, Database Support Services etc

## Clients

Cybernet Pakistan. <http://www.cyber.net.pk/>

Tornet Telecom Iraq. <http://tornetcom.com>

AlsardFiber Iraq. <http://alsardfiber.com/>

Redtone Telecommunications <http://www.redtone.com.pk>

UMW E-Technologies [www.uet.com.my](http://www.uet.com.my)

Multinet <http://multinet.com.pk/>

4B Four Brothers Group <http://www.4bgroup.com/>

Etisalcom Bahrain W.L.L <http://www.etisalcom.com>

Levant Telecom Palestine. <http://www.levant-telecom.com>

## Terminus Technologies CCB Overview

Terminus Customer Care & Billing (TerminusCCB) Solution is a true converged Telecom Billing Solutions for Voice, Data, Video, Content and Utilities Services. It have internal CRM, Inventory and limited financial management systems

- Developed for Next Generation Telecom/Utility Applications
- Able to Charge Any kind of Subscriber for Any kind of Service at Any kind of Network at Any point of Time.
- One platform for retail, corporate and interconnect billing.

## Class 5 Voice Services

GSM, CDMA, Fixed Line, SIP Services  
Residential & Corporate Voice Services (Prepaid & Postpaid)  
Prepaid Calling Cards Services  
ANI (Auto Number Identification)  
Call Shop & Call Center Services  
IP Centrex services Toll free (800), Premier (900) services  
Audio/Video Call Conference

## Class 4 Voice Services

Wholesale Minute Exchange (Termination, Origination, Transit)  
Carrier Interconnect Integration (Distance/Destinations)

## SMS/GPRS Services

## Data Services

Dialup/DSL  
Wi-Fi/Wi-Max  
Corporate Leased Line, Fiber  
Data Center, Web Hosting,  
Domain Name, Email Hosting  
Satellite Services  
Security  
E-Commerce  
Value Added Services Gaming, Content etc

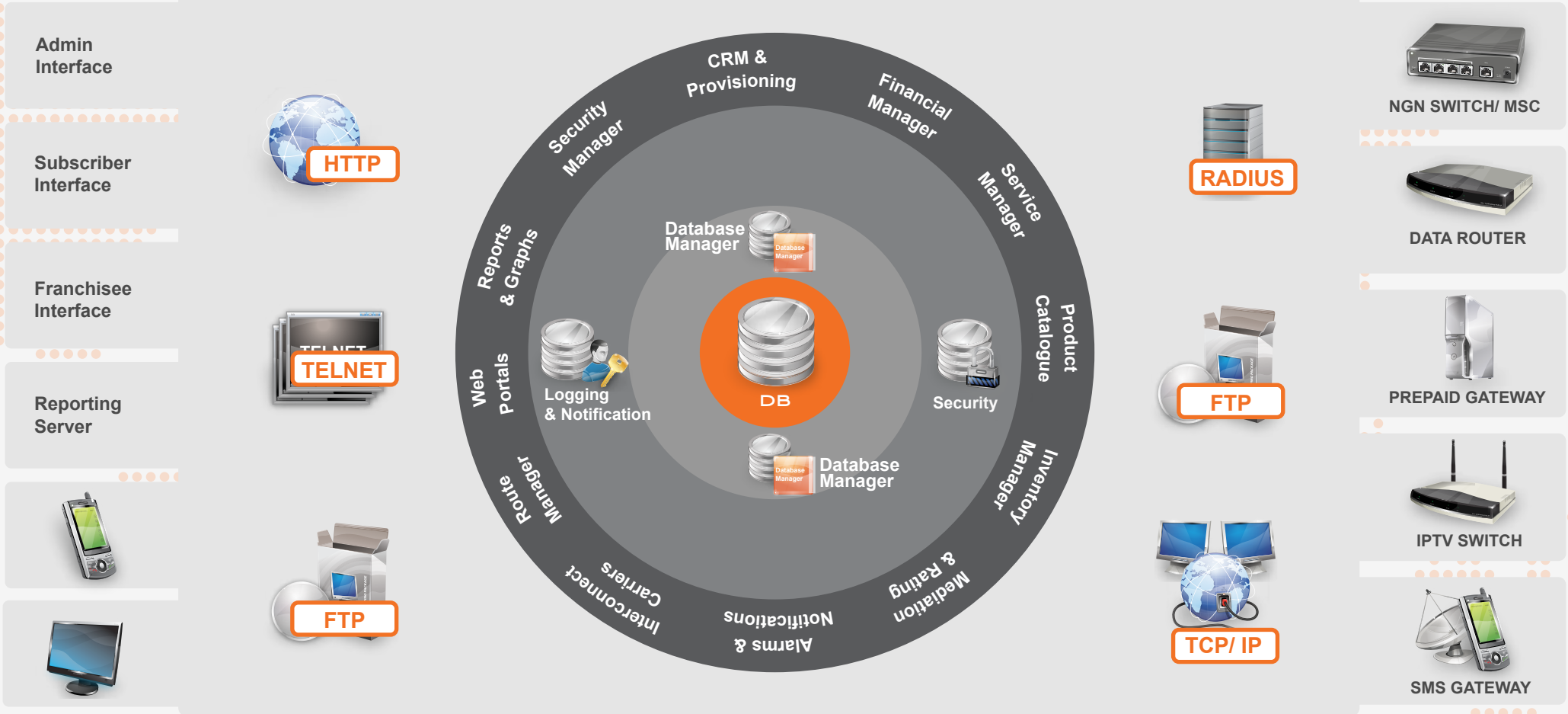
## Video Services

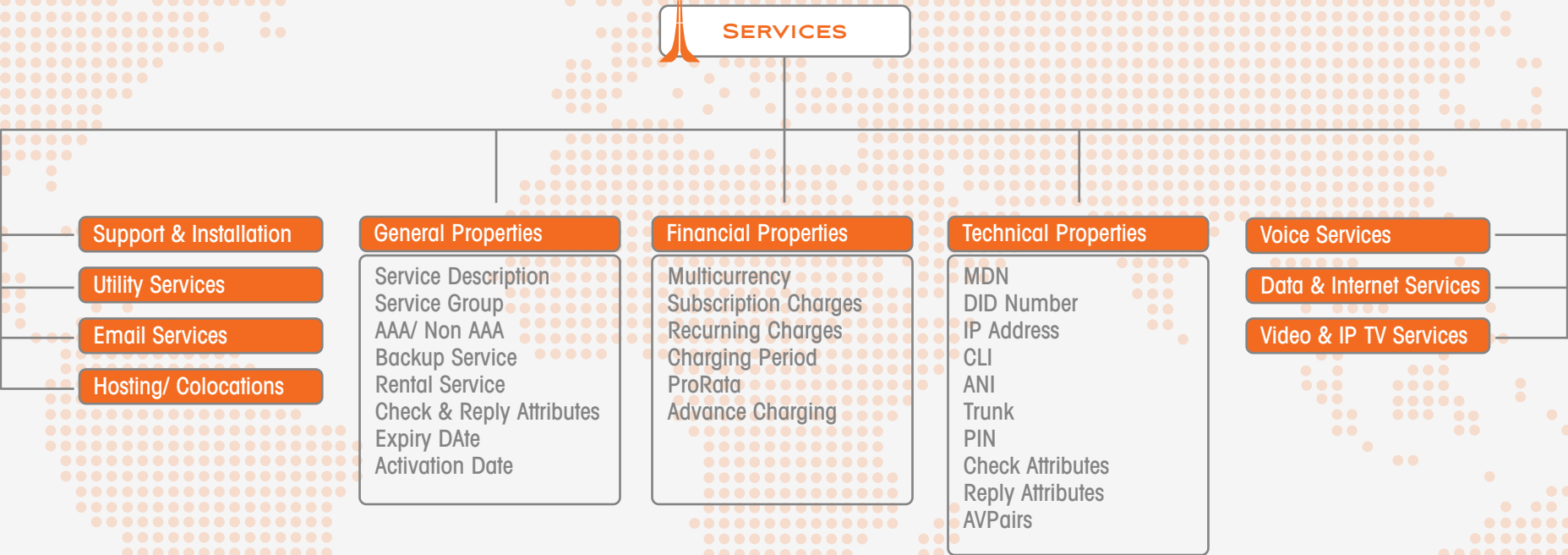
IP TV, Cable TV  
Video Conference Flexible to integrate any Video Service

## Utility Services

Electricity, Water, Gas, etc







## Destination Based Rates

- Prefix based like Rate for USA 001, India 0091, Pakistan 0092

## Minute Based Rates

- Rate Per Minute
- Per Session: will be used over a single call like Rate for first 2 minutes, next 5 minutes, next 10 minutes etc
- Per Billing Period : will be implemented over one billing period like first 100 minutes are free, next 200 minutes on/off net and onward

## Hourly Rates

- Defined as Rate / Hour, Rate for first hours , next 2 hours and after it can be different
- Peak/Off Peak Rates

## Volume Based

- Traffic Volume based rates
- Upload / Download Data
- Per Session and Per Billing period  
10 slots supported. Example: Rate for first 100 MB , next 200 MB and onward can be different

## Unit Based Rates

- Single instance / Transaction based
- Per Billing Period
- Up to 10 slots supported

## Parallel Rating against one Service

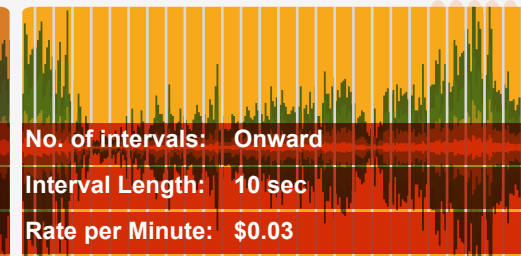
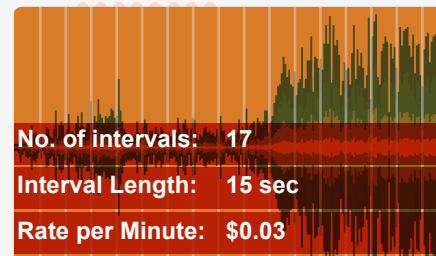
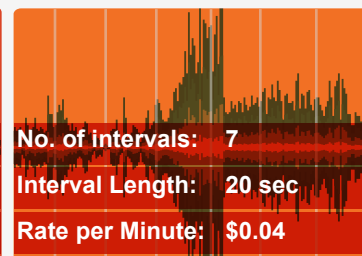
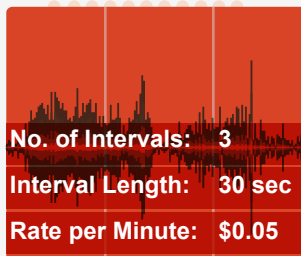
- Time Based
- Volume Based

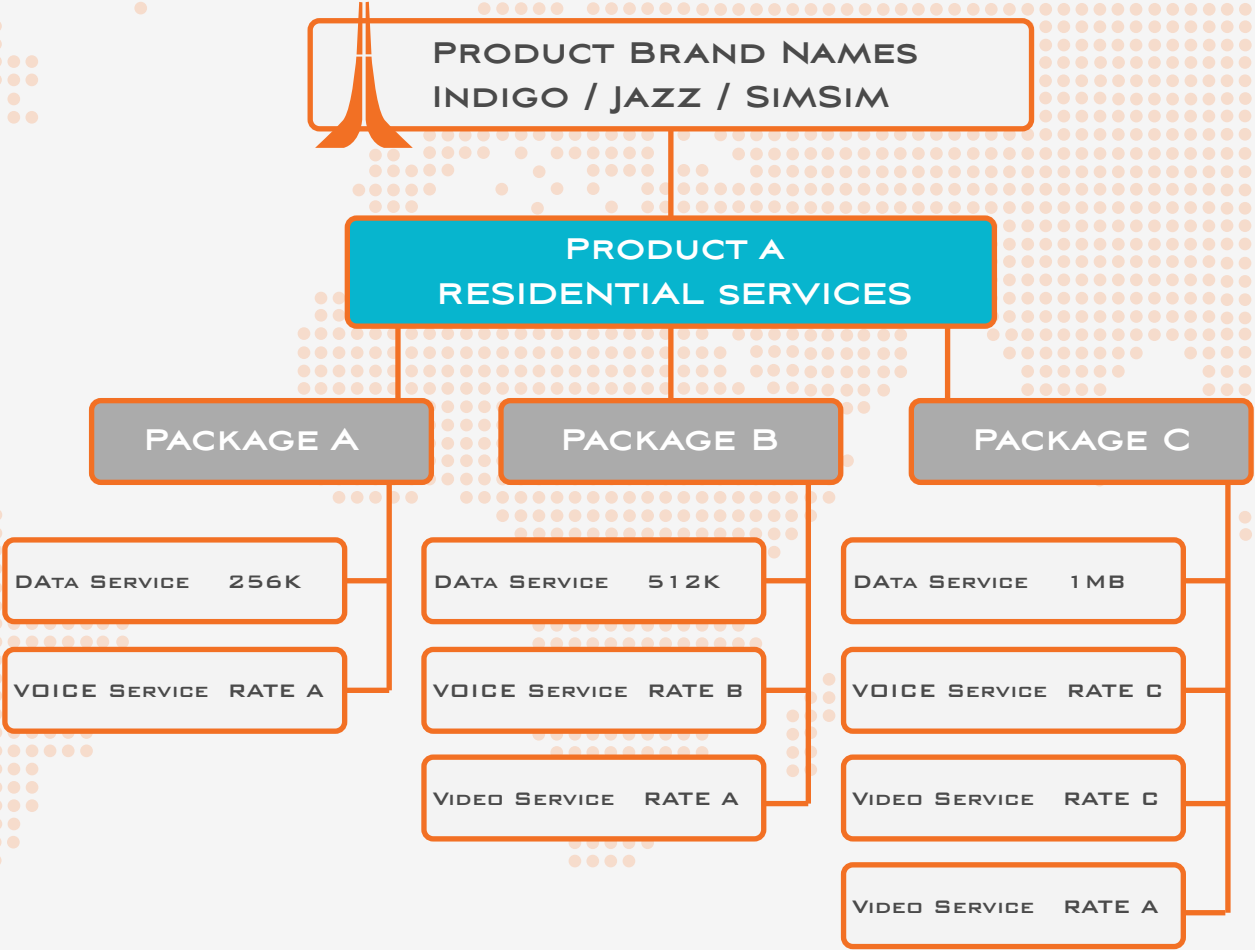
## Fixed Charging

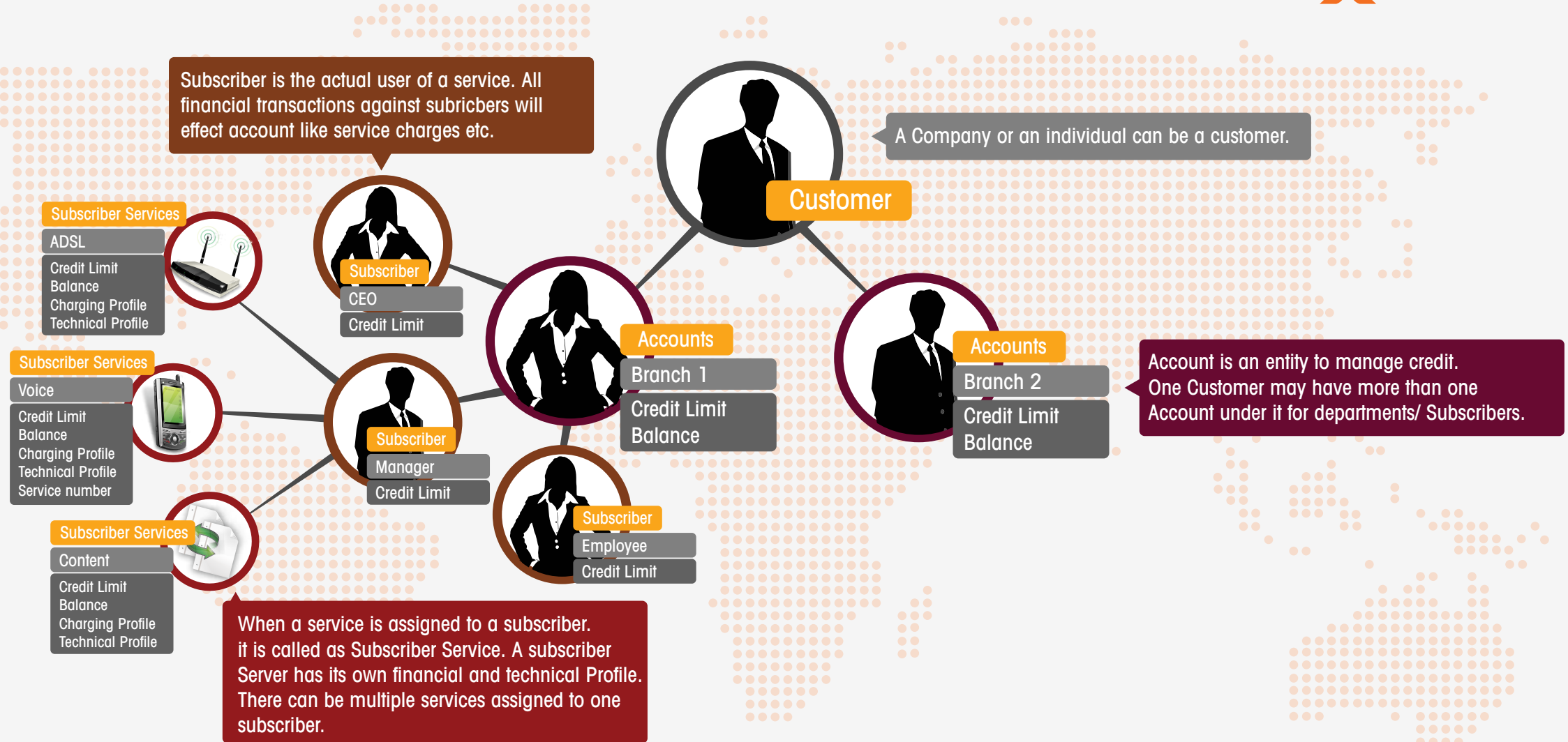
- Daily basis Charging
- Monthly Basis Charging
- Quarterly Basis Charging
- Half Yearly / Yearly Basis Charging

## New Rate Activation for a specified Period of Time

## Holidays & Weekend Rates











## Billing Cycle Management

- Configurable for billing cycle for each customer & carrier
- Fixed billing run cycle like 7 days, 15 days , 30 days , 1 month
- Configurable Billing cycle Starting Date like 1st of each month, 15th of each month, Activation date of Account.

## Credit Control of Each Service

- Each Service May have its own Credit
- If one service is blocked due to its own credit, it will not affect other service if Account has credit.
- Backup Service management. A Service may have its backup like DSL may have dialup as backup.

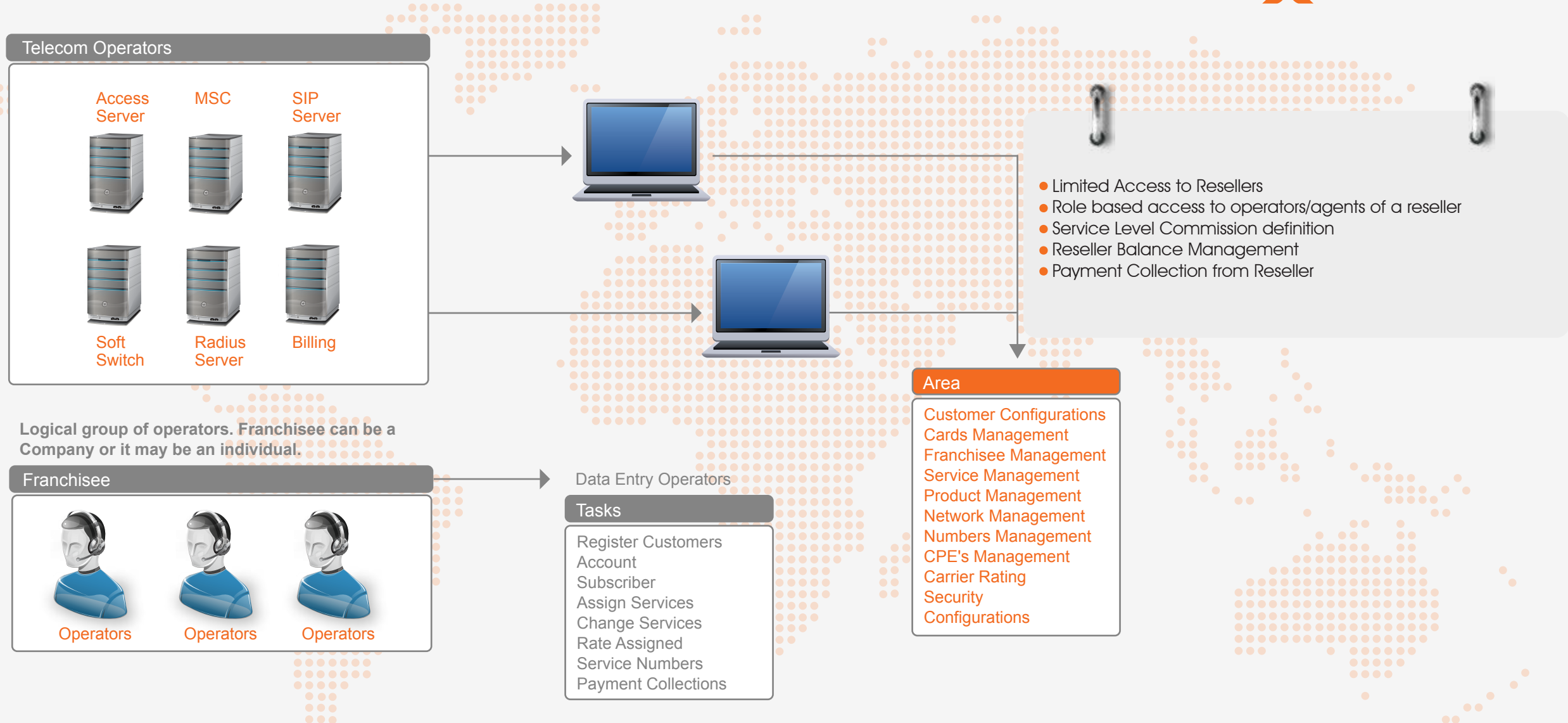
## Invoices & Payment

- Manual & Auto Invoice Generation
- Summary & Detailed Invoice for Account
- Registration/Usage based/Monthly Fixed Charge Invoice
- Track of Balance Before, Balance After, Carry Forward Amount, Advanced Payment
- Discount/Tax/Service Activation and Deactivation charges
- Comprehensive Reports / PDF version of Invoices
- Payment collection by Cash, Check, Wire Transfer, Credit Card, Voucher
- Payment Receipt Printing

## Payment Posting

- Credit Notes
- Debit Notes against Account or Service
- Payment Posting (Partial or Full) against Invoices,
- Account Level and Customer Level Payments
- Payments & Invoices in Multicurrency

# RESELLER SYSTEM





## Terminus Technologies - Calling Card System

- Card generation/activation
- Card batch management
- Card Sales channel management
- Card for different denominations along with different Rate plans
- Card history management
- Card credit management
- Realtime Authentication/Authorization and Accounting for Cards
- Configurable IVR time for announcement
- Different rate for charging call
- Change in Rate along with length of call



## Equipment Inventory Management

- Equipment (SIM's, PAP2 devices, Routers, Modems etc) information
- Equipment Vendor Management
- Stock availability management
- Order Management
- Order History
- CPE assignment history management
- Sales Tax Invoices
- Payment collect against sale tax Invoice
- Credit Note & Debit Notes

## Network Element Management

- Network Elements information
- Access Information
- Vendor Dictionary information
- Network Profile Management

A light gray rectangular clipboard with two silver binder rings at the top, containing a list of features. The background of the slide features a faint, dotted world map in orange.

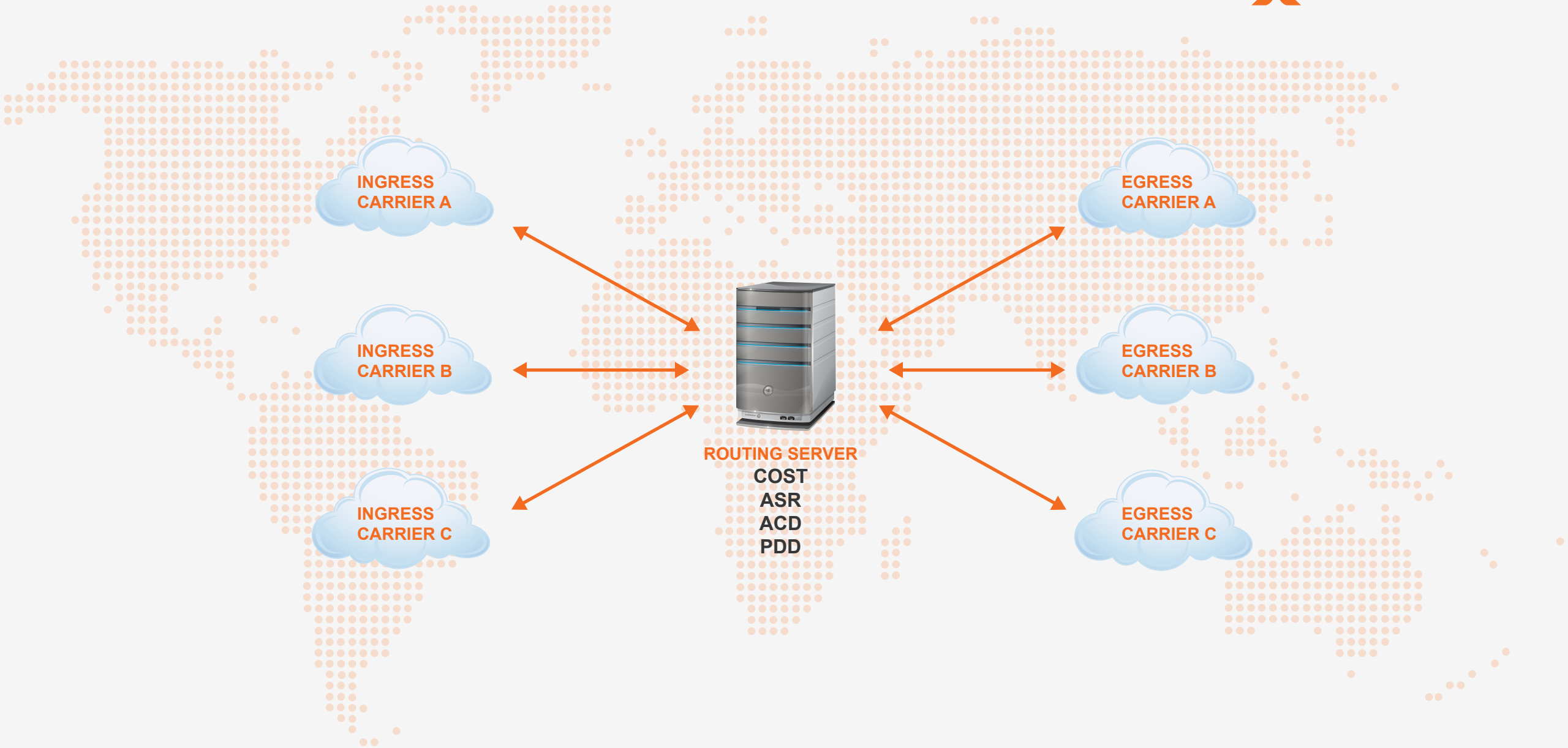
## Trouble Ticketing System Covers Following Features:

- Add new problems and assign to concern department
- Update status of problems after solving problem
- Get report of problems
- Email problems to concerned department

# INTERCONNECT CARRIER



- Interconnect Carriers Provisioning
- Carrier Rating Management
- Carrier Credit Management



## Terminus Reports CARRIER CDR(S)

Terminus Billing System

Carrier CDR(s)

Contents: Traffic Summary Report

From Date: 01/01/2010 To Date: 12/31/2010  
Carrier: All Carriers  
Radio Profile: Radio Profile

#	Destination	No. of Calls	Duration (min)	% of Total	Rate
1	Australia Mobile Corp	1	11:52	0.04	
2	Australia Mobile Telecom	1	0:00	0.00	
3	Australia Mobile Telecom	24	24:04	0.08	
4	Australia Mobile Telecom	1	0:00	0.00	
5	Australia Mobile Telecom	1	0:00	0.00	
6	Australia Mobile Telecom	1	0:00	0.00	
7	Australia Mobile Telecom	1	0:00	0.00	
8	Australia Mobile Telecom	1	0:00	0.00	
9	Australia Mobile Telecom	1	0:00	0.00	
10	Australia Mobile Telecom	1	0:00	0.00	
11	Australia Mobile Telecom	1	0:00	0.00	
12	Australia Mobile Telecom	1	0:00	0.00	
13	Australia Mobile Telecom	1	0:00	0.00	
14	Australia Mobile Telecom	1	0:00	0.00	
15	Australia Mobile Telecom	1	0:00	0.00	
16	Australia Mobile Telecom	1	0:00	0.00	
17	Australia Mobile Telecom	1	0:00	0.00	
18	Australia Mobile Telecom	1	0:00	0.00	
19	Australia Mobile Telecom	1	0:00	0.00	
20	Australia Mobile Telecom	1	0:00	0.00	

## Terminus Reports CDR PROCESSING FILES

Terminus Billing System

CDR Processing Files

Report CDR Processing Files

Processing Month: 12 2010  
Processing Date: 12 2010

File Name: CDR010101 for 12/01/2010

#	File Name	File Size	Status	Network	Network Class
1	CDR0101010101	101101010101	Processed	Network	Network
2	CDR0101010101	101101010101	Processed	Network	Network
3	CDR0101010101	101101010101	Processed	Network	Network
4	CDR0101010101	101101010101	Processed	Network	Network
5	CDR0101010101	101101010101	Processed	Network	Network
6	CDR0101010101	101101010101	Processed	Network	Network
7	CDR0101010101	101101010101	Processed	Network	Network
8	CDR0101010101	101101010101	Processed	Network	Network
9	CDR0101010101	101101010101	Processed	Network	Network
10	CDR0101010101	101101010101	Processed	Network	Network

## Terminus Reports CARRIERS RAW CDR(S)

Terminus Billing System

Carrriers RAW CDR(s)

Contents: Raw CDR Summary Report

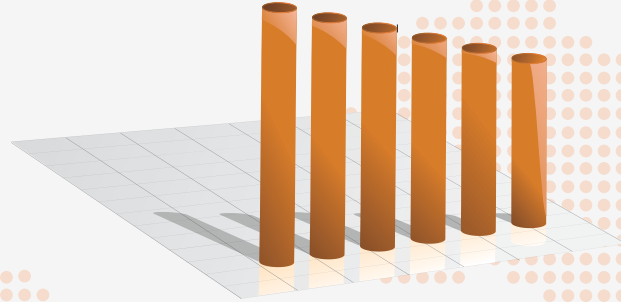
From Date: 01/01/2010 To Date: 12/31/2010  
Carrier: All Carriers  
Radio Profile: Radio Profile

#	Carrier	Volume	Example Data	Full Data	Rate
1	Carrier	1,000,000	1000000	1000000	1.00
2	Carrier	1,000,000	1000000	1000000	1.00
3	Carrier	1,000,000	1000000	1000000	1.00
4	Carrier	1,000,000	1000000	1000000	1.00
5	Carrier	1,000,000	1000000	1000000	1.00
6	Carrier	1,000,000	1000000	1000000	1.00
7	Carrier	1,000,000	1000000	1000000	1.00
8	Carrier	1,000,000	1000000	1000000	1.00
9	Carrier	1,000,000	1000000	1000000	1.00
10	Carrier	1,000,000	1000000	1000000	1.00

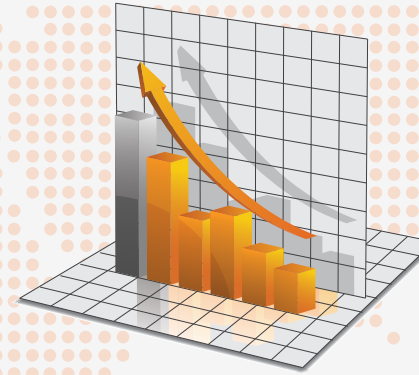
- Search Customer/Account/Subscriber/MDN/DID/IP
- Customers/Accounts/Subscribers Report
- Payment Collection Reports
- Payment Posting Reports
- Invoices Reports
- Credit Note Report
- Debit Note Report
- Payments Posting Report
- Revenue Reports
- Receivable Aging Analysis Reports
- Franchisee Collection Reports
- Accumulated Revenue Monthly
- Technical Reports
- CDR Reports
- Non Rated CDR Reports
- Data Usage Reports
- Interconnect Carrier Reports



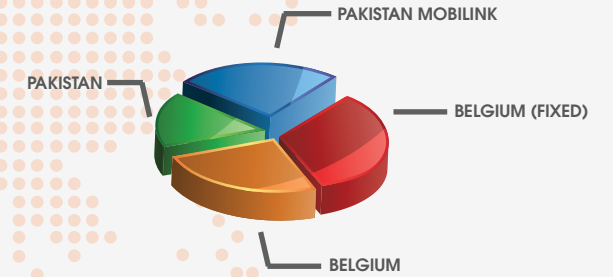
**TERMINUS BAR CHARTS**  
REVENUE SUMMARY



**TERMINUS BAR CHARTS**  
CALLS SUMMARY

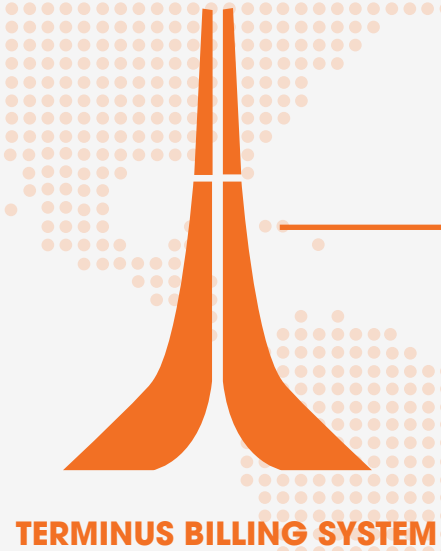


**TERMINUS BAR CHARTS**  
ASR SUMMARY

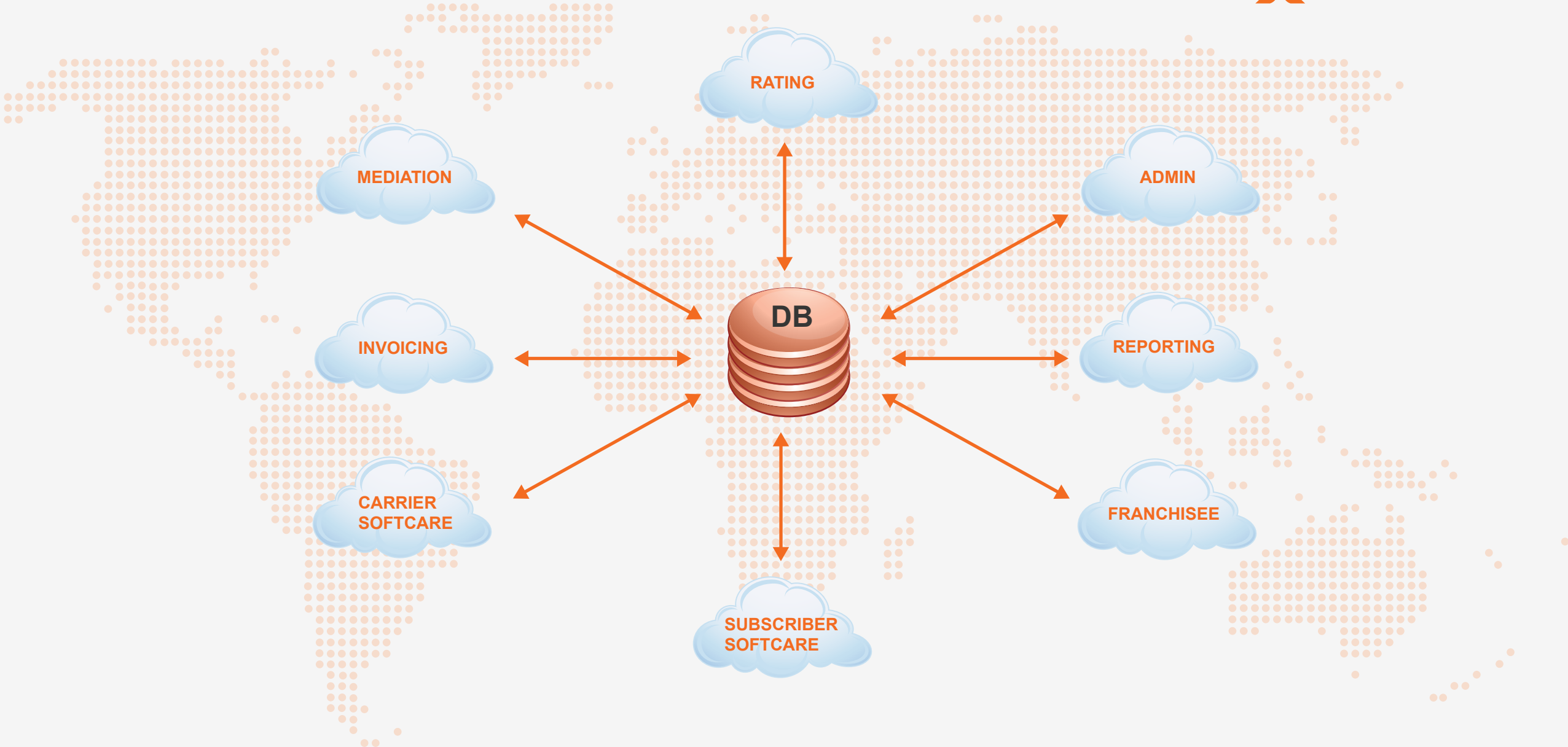


**TERMINUS CHARTS**  
SUMMARY









## Operating System

- Unix/ Linux
- Solaris

## Database

- Oracle 9i/ 10g

## Hardware

- HP
- Sun Sparc

## LAN Switches/ Routers

- Cisco

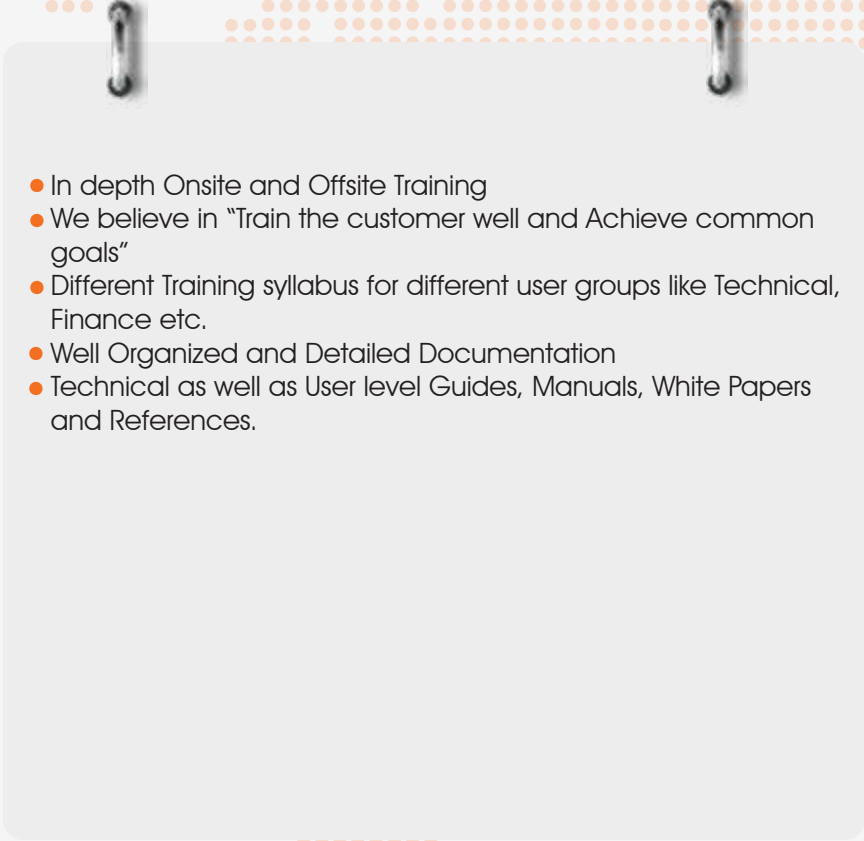
## Web Server

- Apache / Tomcat / Any Java enabled web server

## Programing Language

- Java/ JSP
- C/ C++

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- A light gray rectangular clipboard with two silver binder rings at the top, containing a bulleted list of services. The clipboard is centered on a background featuring a world map composed of orange dots.
- Customer is our Passion and our Support is our strength.
  - Onsite and Remote Deployment options
  - Proper Deployment Planning and Phased Implementation
  - O&M Support Available
  - Round the Clock 24/7 Onsite OR Remote Support
  - Onsite and Offsite Customization Services

- 
- A light gray rectangular clipboard with two silver binder rings at the top, containing a bulleted list of training and documentation services. The clipboard is centered on a background featuring a world map composed of orange dots.
- In depth Onsite and Offsite Training
  - We believe in "Train the customer well and Achieve common goals"
  - Different Training syllabus for different user groups like Technical, Finance etc.
  - Well Organized and Detailed Documentation
  - Technical as well as User level Guides, Manuals, White Papers and References.

# SAMPLE DEPLOYMENTS IN VOIP/ IMS/ 3G NETWORK

