

**iTel Billing**



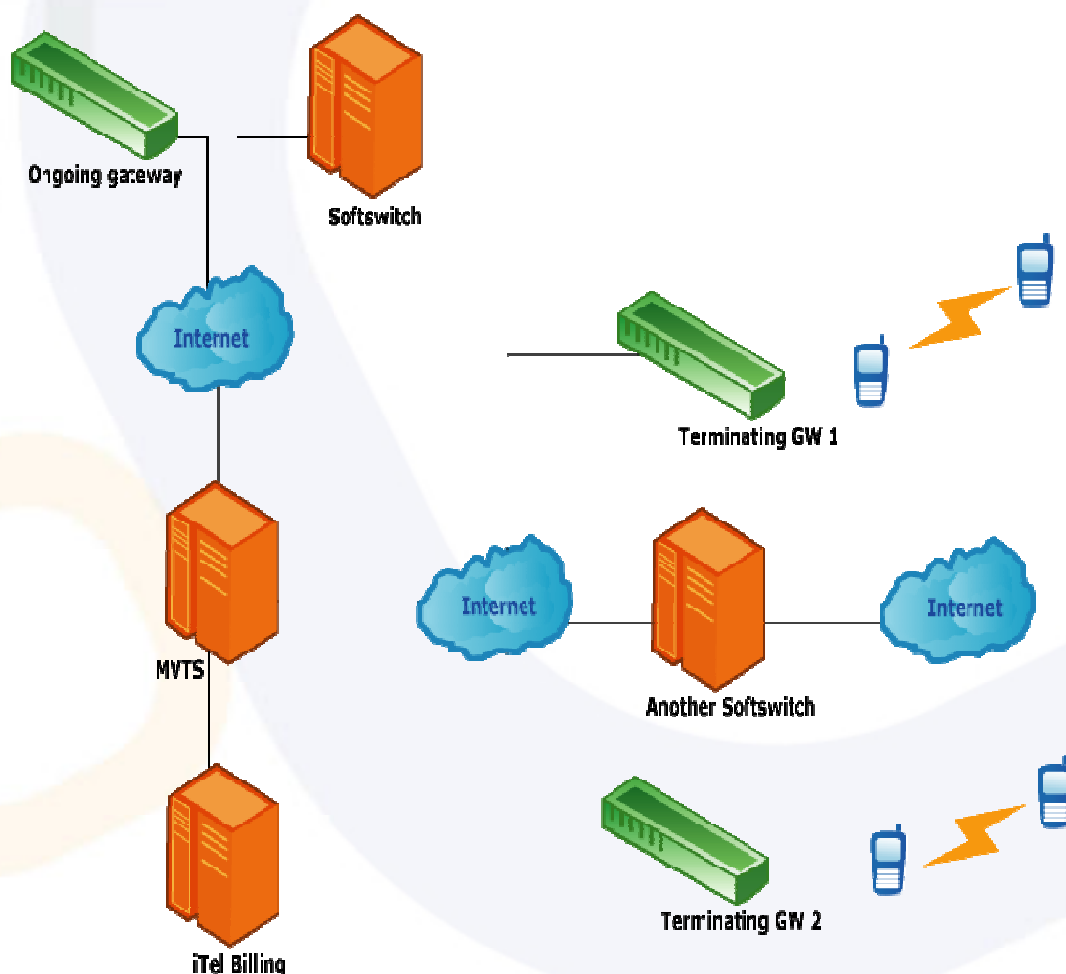
## **Termination Version Datasheet**

iTel Billing is a very powerful and flexible software that can satisfy the most demanding Internet Telephony Service Providers (ITSPs). The Termination Version of this software is used for wholesale minute exchange. This software is also used by clients who terminate calls, and do not take part in end user call origination. The Origination Version of iTel Billing supports both call origination and termination. Please go through the datasheet for Origination Version for further details.

## Functional Specification

iTel Billing is a powerful and flexible tool that can help you operate smoothly your internet telephony business. This powerful software can control access to your systems, keep track of all calls, and take into account customer balances on both postpaid and prepaid basis.

iTel Billing is a powerful software that controls VoIP systems using the RADIUS protocol. It will support all platforms which support RADIUS, e.g., Cisco, Quantum, Centile, MERA, SVI, GnuGK, Asterisk and others. iTel Billing performs Authorization, Authentication, and Accounting (AAA). The Functionality of iTel Billing is described below.



## Access Control

iTel Billing continuously monitors your systems and grants access to only authorized users. There are several methods of access control supported by iTel Billing:

*IP Address:* In this case only users originating from some known specified IP address will be permitted to make VoIP calls using the systems under the control of iTel Billing.

*Prefix Based (DNIS):* In this case a certain number sequence, known as a prefix, is added to the called number. iTel Billing will permit users only who add the right prefix to the called numbers to make VoIP calls.

*Caller ID (ANI):* In this method, only users with a certain caller ID (i.e., phone number) are allowed to make VoIP calls. iTel Billing's access control is very powerful and flexible: it is also possible to use different combinations of access control methods, e.g., a call may be allowed to pass if both Caller ID and prefix match correctly.

## Security of the Systems

iTel Billing provides highly secured platform for the operators. Not only the access control of calls is secured but also the access of users to the systems is highly secured. In addition to the password, operators also may specify the IP or a list of IPs from which only a specific user can login. It also keeps record of activity logs.

## Call Detail Records (CDR)

The RADIUS Server within iTel Billing collects and preserves all call Detail Records (CDR). This enables iTel Billing to count accurately the duration of every single call. In case of any dispute with carriers, operators can submit CDR, collected from iTel Billing and can settle the dispute.

## Prepaid and Postpaid Customer Accounting

iTel Billing is a very powerful software that can perform sophisticated accounting functions. Both prepaid and postpaid customers are supported. The software can keep track of customer's balances in real time, i.e., the customer balances are being updated continuously. In case of prepaid customers, iTel Billing can instruct the VoIP system to drop the last call after a certain duration when the prepaid amount is fully consumed.

## Accounting Report Generation

Accountants can use iTel Billing to gather cumulative statistics such as total number of minutes used, or total amount of money used. They can also view individual customer balance at any time, as well as their payment history. iTel Billing can generate bills and invoices every week according to requirements.

## External Routing Facility

The iTel Billing Termination solution is integrated with iTel Router; and external routing module. Hence, the operator doesn't need to configure from the switch, rather he/she can do it more easily

from the graphical user interface of iTel Billing. Even the operator can leave the routing to be changed dynamically based on some given parameters (given by the operator).

### **Business Monitoring**

iTel Billing enables its users to monitor their overall profit, as well as profit by destination, or even profit by client IP address. This type of monitoring is essential to weed out less profitable routes and increases the use of profitable routes.

### **Business Analysis**

The Business Power Tool module of iTel Billing enables business persons to conduct analysis based on their own historical data. For example, he or she can change the rate of the billing increment and re-compute the billed amount. These types of analyses allow one to make intelligent choices when presented with many different choices by originating carriers.

### **Flexible Rate Input System**

iTel Billing has a very flexible rate input system: it can take into account flat rates as well as peak-off peak rates. Operators can set different values for connection charge, tax, failed call duration, grace period, first interval, and subsequent intervals in the rate sheet for any originating or terminating client.

### **Multiple Levels of Resellers**

iTel Billing supports multiple levels of resellers. A reseller is an entity who buys traffic at a certain rate and sells at another rate. An operator can create any number of resellers, and his or her resellers can create again any number of resellers under their own accounts. A hierarchy of resellers are permitted by iTel Billing.

### **Flexible Role Assignment**

iTel Billing permits operators and resellers to assign different roles and to permit different levels of access to users. Certain users may only observe the systems: they may not be allowed to change rates, or to add and remove gateways. Other users could be given full privileges to perform all functions within their domain or operator can assign role at any other combination.

### **Customized Access to Information**

iTel Billing allows its users to customize and specify exactly which variable will be displayed in the reports generated by iTel Billing for each individual client. Operators may permit terminating clients to view only terminating minutes, rates and balances, and permit originating clients to view only originating minutes, rates and balances.

## System Performance Report & Status

System Administrators can utilize iTel Billing to monitor performance of overall systems. They can use iTel Billing to determine the ASR (Average Success Rate) and ACD (Average Call Duration) for each client. Authorized persons can view the current status of their system: the number of active calls, the duration of each active call, the calling number and called number or each active call. Administrators can use iTel Billing to examine the q931 Disconnect Cause codes for low level monitoring and troubleshooting.

## Monitoring Graphs

iTel Billing can generate several useful graphs that enable system administrators to troubleshoot their terminating client systems. The following graphs can be generated by iTel Billing: the Total Number of Calls as a function of time; the Number of Active Calls as a function of time; the Average Success Rate (ASR) as a function of time; the Average call Duration (ACD) as a function of time.

## Fault Detection and Alarm Generation

iTel Billing can be configured to check the performance (ASR and ACD) for each IP address and even each individual port of a certain threshold, and an alarm is generated. Efficient fault detection by iTel Billing minimizes losses and maximizes profits.

## System Sizing Information

### Up to 300 Concurrent Calls

Pentium 4	3GHz
Memory	2GB
Disk size	80GB

### Up to 1000 Concurrent Calls

Dual Xeon	3.6GHz
Memory	4GB
Dish Space	120GB

### Up to 500 Concurrent Calls

Dual Core	3.6GHz
Memory	4GB
Disk Size	120GB

### Up to 5000 Concurrent Calls

Dual Core Dual Xeon	3.5GHz
Memory	4GB
Disk Space	120GB

Up to 100,000 concurrent calls can be supported by iTel Billing Enterprise Edition on SUN/Solaris Platforms. See iTel Billing Enterprise Edition datasheet for further details.

## Compatible list

iTel Billing is compatible with Cisco, Quintum, Centile, Mera VoIP Transit Softswitch (MVTs), Nextone, SVI, SER, GnuGK, Asterisk, HS Teliann and others.

iTel Router is compatible with MVTs, GnuGK and Asterisk.

## Specification

### iTel Billing Termination Version 2.5.X

#### Hardware Platform

Intel x86 Servers  
Compatible x86 Servers

#### Operating System

Linux and Unix family  
Red Hat Fedora Core 5  
Red Hat Enterprise v 4  
Windows Server Versions

#### Environment

Java Platform  
Jakarta Tomcat 5.0.27

#### Supported Browsers

Internet Explorer  
Opera 9  
Konqueror 3.4  
Netscape

#### Supported Databases

MySQL  
SQL Server  
Oracle

## Our Offices

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