



S-Series IPPBX Billing App User Guide

Version 1.0

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Introduction

Yeastar S-Series IPPBX Billing application provides a powerful and flexible billing solution that enables the enterprises to grow and prosper in this challenging environment by managing their business efficiently.

Use the Billing App to allocate call credit and top up extensions, and conduct call analysis. Both prepaid and postpaid payments are supported. Rate can be set according to extensions, time periods, call duration, prefix number and number length. Real-time top-up history and statistics are all recorded.

About This Guide

In this guide, we introduce all the features on the Billing App and provide instructions on how to set up and use billing on Yeastar S-Series IPPBX.

Features

- **Call Credit Management**

Extension level or account level credits can be assigned. Users could choose to charge the call cost from the extension level or the account level.

- Extension level: call credits are assigned to specific extensions.
- Account level: call credits are assigned to pre-configured accounts and shared by users who know the password (PIN code).

- **Real-time Billing**

The immediate real-time billing empowers the user by making rating, charging and balance and account management responsive, interactive and flexible.

- **Prepaid and Postpaid Service**

Prepaid and postpaid modes provide real-time billing.

- **Flexible Rating**

Rate can be set according to extensions/accounts, time periods, call duration, call types (whether local or international, from landline or mobile phone).

- **Detailed Statistics**

Provides call detail reports (display usage by time frames, extension/account, and trunks) for management and traffic analysis.

Getting Started

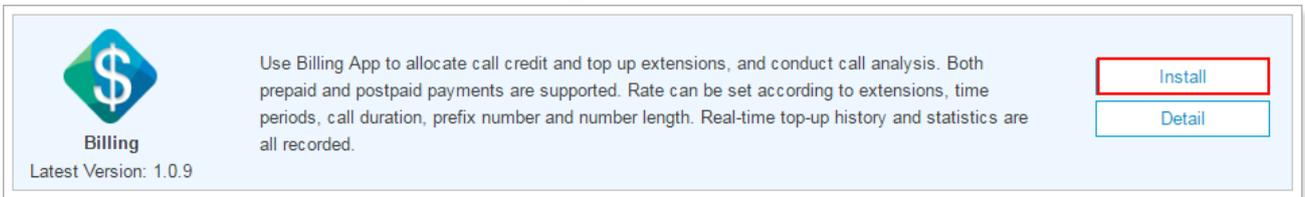
Installing Billing App

The Billing App is supported on Yeastar S-Series IPPBX firmware version 30.3.0.10 or later. To install and use the Billing App, you need to upgrade your S-Series IPPBX first.

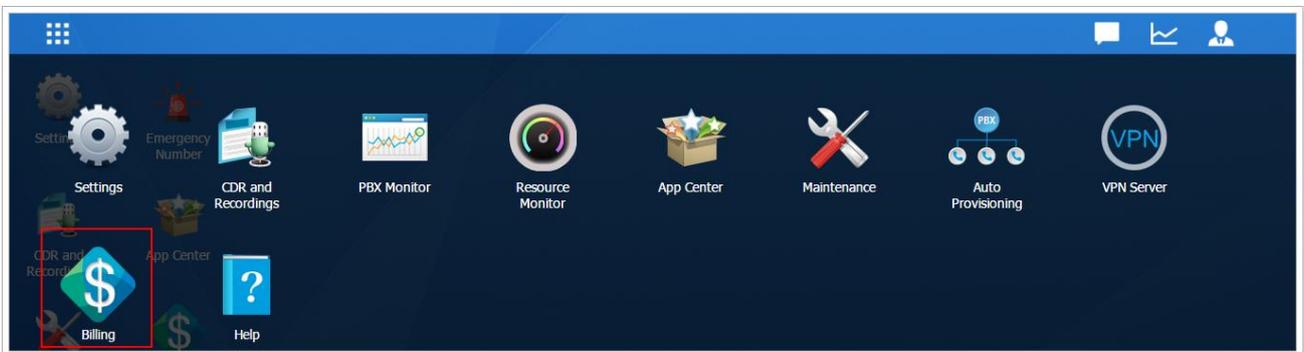
Note: if you uninstall the Billing App, all of your billing data will be erased.

Follow the steps below to install Billing App:

1. After upgrading the S-Series IPPBX, log in the web user interface, click App Center, and you will see the Billing App.
2. Click “**Install**” to install and try the Billing App on Yeastar S-Series IPPBX.

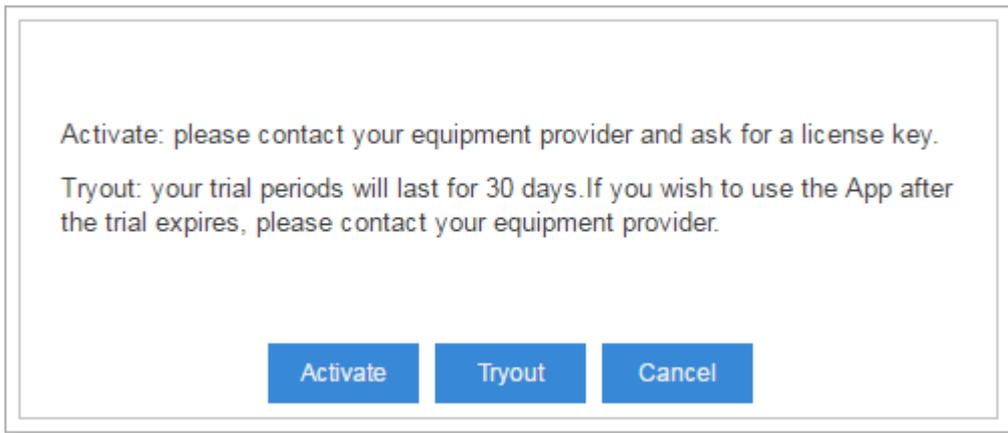


3. Refresh the webpage, and find the Billing App on the Main Menu.



Activating Billing App

After installing the Billing App, navigate to Billing “**General Settings**” page, check the option “**Enabling Billing**”, you will see the system prompt as below.



- **Trial**

Click “Tryout” to test the Billing functions. You have 30-day trial.

- **Activate**

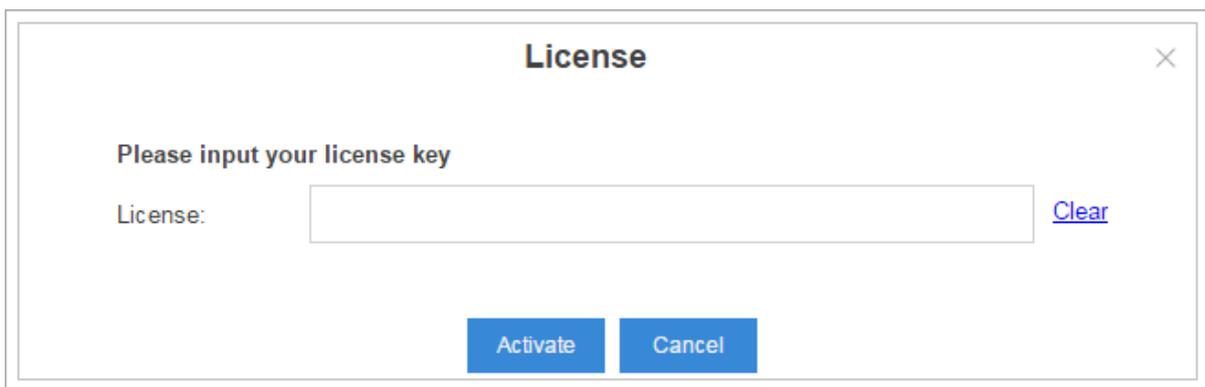
You can click “Activate” to activate the Billing App directly without trial.

To buy a billing license, you need to provide the following information:

- The S-Series IPPBX model
- S-Series IPPBX Serial Number (SN)

After your trial expires, your Billing App will not work. You can buy license and follow the steps below to activate Billing App:

1. Log in the S-Series IPPBX web user interface, navigate to “**App Center**”.
2. Choose Billing App, and click “**License**”.
3. Enter the license, and click “**Activate**”. If the license is correct, the system will prompt you “Activate Success.”



Quick Start Instruction

1. Install and activate Billing App.
2. Enable billing feature and set the billing currency, rounding scale, and prompts on Billing

“General Settings” page.

3. Manage extensions and accounts. The cost can be charged from extensions or accounts.
4. Top up for the extensions/accounts.
5. Set your billing rate for the extensions/accounts.
6. Create scheduled tasks. You can create auto recharge task, auto reset balance task or switch account/extension status task.
7. Make an outgoing call and check call log.
8. Search and download billing statistics.

Setting Up

General Settings

Before you start using Billing App, you need to check the option “**Enable Billing**” on “**General Settings**” page.

The screenshot shows the 'Billing' application interface. At the top right, it says 'Your trial period ends on: 1-21-2017'. On the left is a navigation menu with options: Extension, Account, Rate, Scheduled Task, Top up History, Statistics, and General Settings (which is highlighted in blue). The main content area is titled 'General Settings' and contains a red-bordered box around the 'Enable Billing' checkbox, which is checked. Below this are several settings, each with a help icon (i): Currency (set to \$), Rounding Scale (set to 2), Insufficient Balance Prompt (set to [Default]), Extension Locked Prompt (set to [Default]), Top up Prompt (set to [Default]), and Balance Threshold (\$) (set to 0.00).

On the General Settings page, you can set the Currency, Insufficient Balance Prompt, Top up Prompt, Rounding Scale, Extension Locked Prompt, and Balance Threshold.

Check the description of the general settings in Table 1.

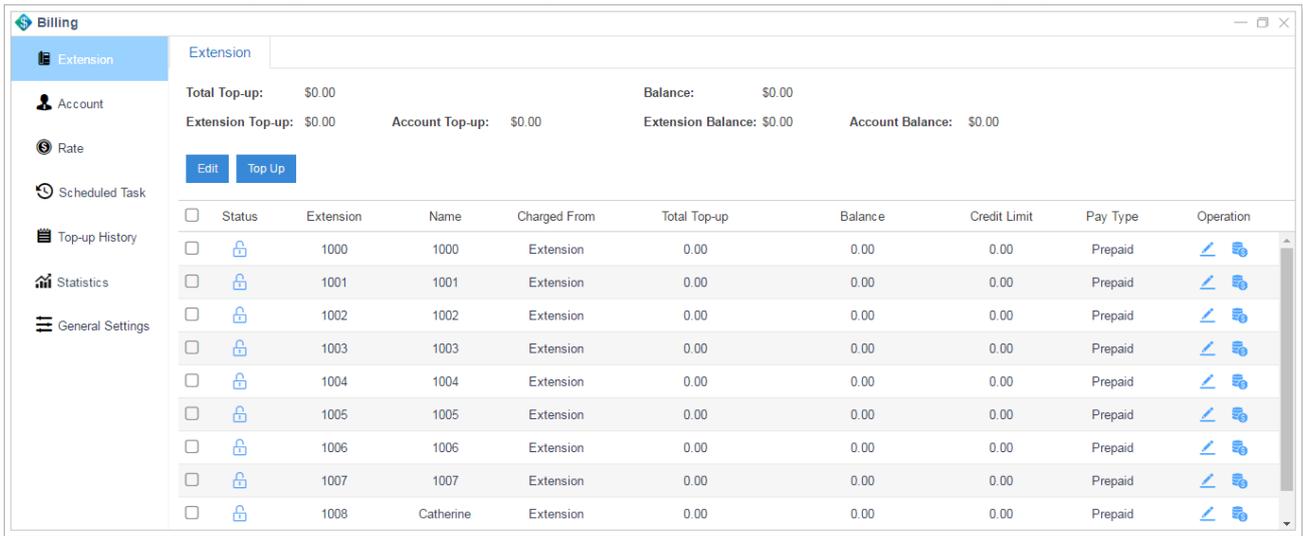
Table 1 Description of Billing General Settings

Option	Description
Currency	Select the billing currency, or you can enter a currency in the text box directly.
Rounding Scale	Set the number of significant digits to the right of the decimal point. For example, a scale of 2 applied to 11.3633 rounds to 11.36.
Insufficient Balance Prompt	When the extension/account doesn't have sufficient balance to dial out, the system will play the prompt.
Extension Locked Prompt	When the extension/account is locked, the system will play the prompt.
Top up Prompt	If the extension/account reaches the “ Balance Threshold ”, the system will play the top up prompt when you are calling out.
Balance Threshold	When the balance of the extension/account reaches the threshold, the system will play the “ Top up Prompt ” to remind you to top up your extension/account.

Extension Management

Click “**Extension**” on the Billing left navigation to manage the extensions. At the top of the page, you

can see the total top-up and total balance, also the extension and account top-up and balance.

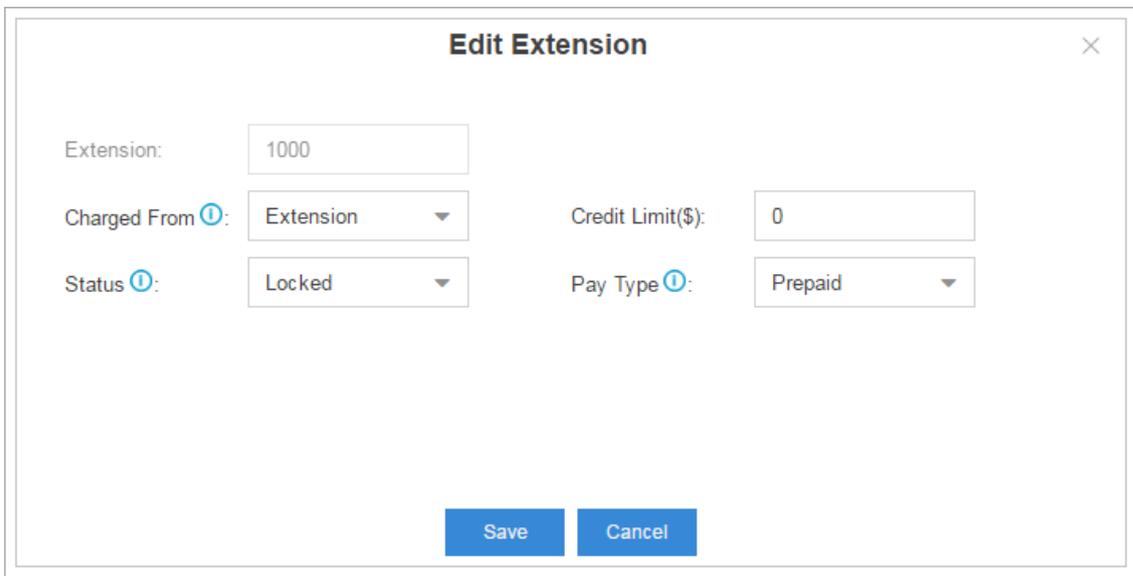


 (Locked): the extension is locked, and could not be used to dial out make outbound calls.

 (Available): the extension is available to use.

Editing an Extension

Choose an extension, and click  to edit the extension.



Check the description of Extension settings in Table 2.

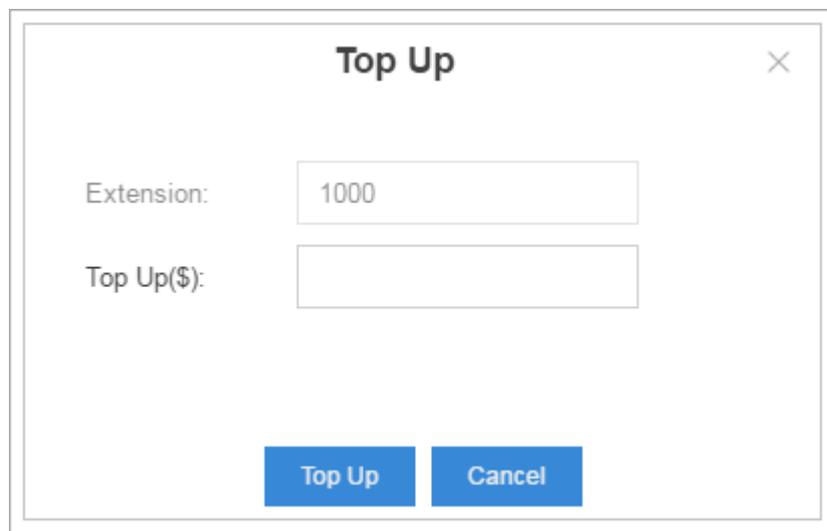
Table 2 Description of Extension Settings

Option	Description
Charged From	You can choose to charge the cost from the extension or account.

	<ul style="list-style-type: none"> • Extension: the bill will be charged from the extension. • Account: if the extension is shared by multiple accounts, you can choose to charge the cost from account. When dialing out using the extension, the users need to enter their account credentials. • Don't Charge: don't bill any phone calls for the extension.
Credit Limit	<p>Set the credit limit.</p> <ul style="list-style-type: none"> • If the pay type is prepaid, when the extension balance is less than the “Credit Limit”, it will not be able to dial out external numbers. • If the pay type is postpaid, the “Credit Limit” is the total amount the extension can owe.
Status	<p>Set the extension status:</p> <ul style="list-style-type: none"> • Available • Locked
Pay Type	<p>Choose the pay type:</p> <ul style="list-style-type: none"> • Prepaid • Postpaid

Topping up an Extension

Choose an extension, and click  to top up the extension. Enter the top up amount, and click “**Top Up**”.



Bulk Editing Extensions

1. Select the checkbox of the desired extensions, and click “**Edit**” to edit the extensions in bulk.
2. Select the checkbox of the options that you want to edit, and configure them.
3. Click “**Save**”.

Edit Selected Extensions ✕

Charged From ⓘ: Extension ▾

Status ⓘ: Available ▾

Credit Limit(\$): 0

Pay Type ⓘ: Prepaid ▾

Save
Cancel

Bulk Topping up Extensions

1. Click **“Top Up”**.
2. Enter the top up amount, and select extensions to the **“Selected”** box.
3. Click **“Top up”** to recharge the selected extensions.

Top Up ✕

Top Up(\$):

Member Extensions ⓘ

Available

1000 - 1000

1001 - 1001

1002 - 1002

1003 - 1003

1004 - 1004

1005 - 1005

1006 - 1006

1007 - 1007

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Selected

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Top Up
Cancel

Account Management

The Billing App supports to charge cost from an account. This solution is typically for a shared extension, which is shared by multiple users. Everyone can use the extension to make outgoing calls with their account credentials.

Click “**Account**” on the Billing left navigation to manage the extensions. At the top of the page, you can see the total top-up and total balance, also the extension and account top-up and balance.

Status	Account	Password	Total Top-up	Balance	Credit Limit	Pay Type	Operation
	Room801	112187	0.00	0.00	0.00	Prepaid	
	Room802	187615	0.00	0.00	0.00	Prepaid	
	Room803	571691	0.00	0.00	0.00	Prepaid	
	Room804	333516	0.00	0.00	0.00	Prepaid	
	Room805	278323	0.00	0.00	0.00	Prepaid	
	Room806	147471	0.00	0.00	0.00	Prepaid	
	Room807	147962	0.00	0.00	0.00	Prepaid	
	Room808	142878	0.00	0.00	0.00	Prepaid	
	Room809	195495	0.00	0.00	0.00	Prepaid	

(Locked): the account is locked, and could not be used to dial out make outbound calls.

(Available): the account is available to use.

Adding an Account

Click “**Add**” to add an account, specify the account name and set the account Credit Limit, Status, Pay Type and the Password.

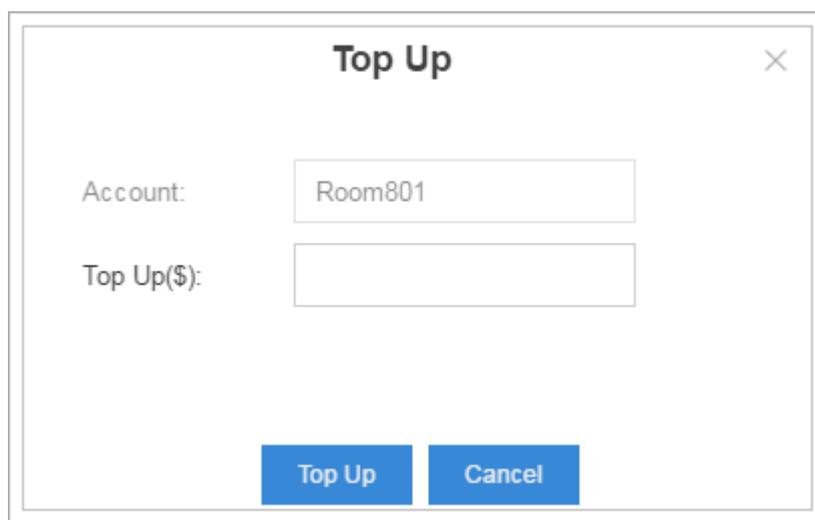
Check the description of Account settings below.

Table 3 Description of Account Settings

Option	Description
Charged From	<p>You can choose to charge the cost from the extension or account.</p> <ul style="list-style-type: none"> • Extension: the bill will be charged from the extension. • Account: if the extension is shared by multiple accounts, you can choose to charge the cost from account. When dialing out using the extension, the users need to enter their account credentials. • Don't Charge: don't bill any phone calls for the extension.
Credit Limit	<p>Set the credit limit.</p> <ul style="list-style-type: none"> • If the pay type is prepaid, when the account balance is less than the "Credit Limit", it will not be able to dial out external numbers. • If the pay type is postpaid, the "Credit Limit" is the total amount the account can owe.
Status	<p>Set the account status:</p> <ul style="list-style-type: none"> • Available: the account is available to use. • Locked: the account could not be used to dial out make outbound calls.
Pay Type	<p>Choose the pay type:</p> <ul style="list-style-type: none"> • Prepaid • Postpaid

Topping up an Account

Choose an account, and click  to top up the account. Enter the top up amount, and click "**Top Up**".



Top Up ×

Account:

Top Up(\$):

Top Up
Cancel

Bulk Topping up Accounts

1. Click **“Top Up”**.
2. Enter the top up amount, and select accounts to the **“Selected”** box.
3. Click **“Top up”** to recharge the selected accounts.

The screenshot shows a "Top Up" dialog box. At the top, there is a title "Top Up" and a close button (X). Below the title, there is a text label "Top Up(\$):" followed by an empty input field. Underneath is the label "Member Accounts" with a help icon (i). The main area is divided into two columns: "Available" on the left and "Selected" on the right. The "Available" column contains a list of room numbers: Room801, Room802, Room803, Room804, Room805, Room806, and Room807. Between the two columns are four blue buttons with white arrows: ">>", ">", "<", and "<<". To the right of the "Selected" column are four blue buttons with white arrows: "<", "^", "v", and ">". At the bottom of the dialog are two blue buttons: "Top Up" and "Cancel".

Editing and Deleting Accounts

- **Editing Accounts**

Click  to edit an account or select multiple accounts, and click **“Edit”** to edit accounts in bulk.

- **Deleting Accounts**

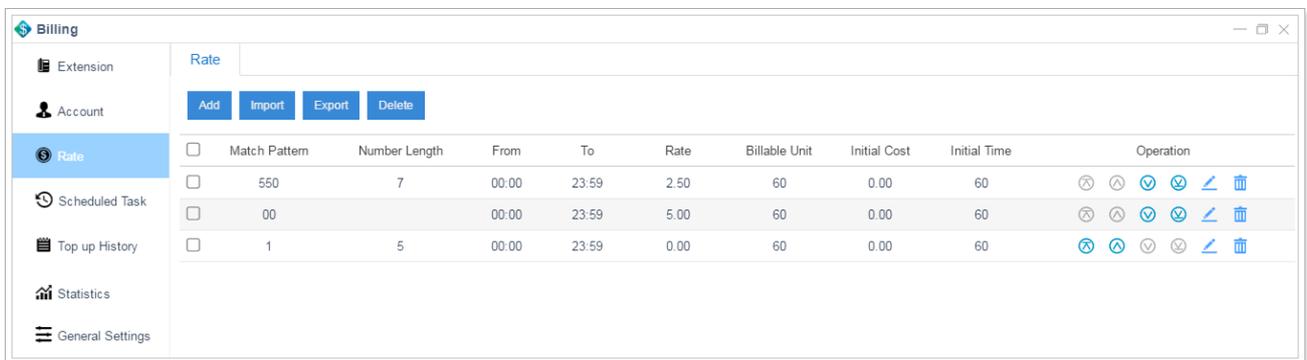
Click  to delete an account or select multiple accounts, and click **“Delete”** to delete accounts in bulk.

Rate

You can set up billing rate according to extensions/accounts, time periods, call duration, call types (whether it's local or international, from landline or mobile phone).

When calls are made to external numbers, they are checked against the “Match Pattern”, “Number Length”, and “Time”. Adjust the rate sequence by clicking these buttons    . The matching priority is as bellow:

1. Time
2. Number Length
3. Match Pattern



Call Costs

If a match is found then the cost is calculated as follows:

- Total Cost = Initial Cost + Billable Unit Number * Rate
- If the talking time is less than the “Initial Time”, the Total Cost = Initial Cost.

Below is an example billing rate setting, please check call cost details for different calls.

Table 4 Call Cost Details

Rate Settings		
Initial Time: 120 seconds Initial Cost: 0.2\$ Rate: 0.3\$ Billable Unit: 60 seconds		
Talk Time (s)	Total Cost (\$)	Call Cost Details
68	0.2	Talk Time(68) < Initial Time(120) Total Cost = Initial Cost
125	0.5	Talk Time: 125=120+5 Total Cost: 0.2+0.3*1=0.5
180	0.5	Talk Time: 180=120+60*1 Total Cost: 0.2+0.3*1=0.5
190	0.8	Talk Time: 190=120+60*1+10 Total Cost: 0.2+0.3*2=0.8

380	1.7	Talk Time: $380=120+4*60+20$ Total Cost: $0.2+0.3*5=1.7$
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Adding a Rate

1. Click **“Add”**.
2. Set the General Settings for the rate:
 - **Match Pattern:** it's the prefix of the called number. This setting must match the dial pattern of the outbound routes in your S-Series IPPBX. Leave it blank, the rate will apply to all numbers.
Note: wildcard character “.” and “!” are not allowed to set here.
 - **Number Length:** if the length of dialed number is shorter or equal to the “Number Length”, the rate will apply to it. Leave it blank, the rate will apply to all numbers.
 - **Rate:** after the initial time, each billable unit will be charged with this rate.
 - **Billable Unit:** set the billable unit after initial time. If the rate is \$0.2 and billable unit is 60 seconds, the call you make will cost \$0.2 per 60 seconds (less than one billing unit will be regarded as one billing unit).

The screenshot shows a dialog box titled "Add Rate" with a close button (X) in the top right corner. It has two tabs: "General Settings" (selected) and "Other Settings". Under "General Settings", there are four input fields:

- Match Pattern ⓘ: [Empty text box]
- Number Length ⓘ: [Empty text box]
- Rate(\$ ⓘ: [Text box containing "0"]
- Billable Unit(s) ⓘ: [Text box containing "60"]

3. Click **“Other Settings”** tab, configure the following settings:
 - **Initial Time & Initial Cost:** if the “Initial Cost” is \$0.2 and the “Initial Time” is 60 seconds, it means the first 60 seconds of this call will cost \$0.2.
 - **Time:** set when the rate will be applied to.
 - **Days of Week:** set which days the rate will be applied to.
 - **Member Extensions:**
 - **Member Accounts:**

4. Click **“Save”**.

Editing and Deleting Rates

- **Editing Rates**

Click  to edit a rate or select multiple rates, and click **“Edit”** to edit rates in bulk.

- **Deleting Rates**

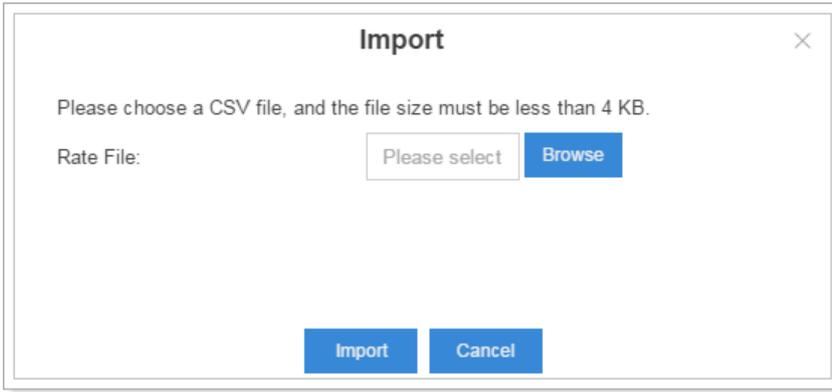
Click  to delete a rate or select multiple rates, and click **“Delete”** to delete rates in bulk.

Importing and Exporting Rates

Users could import and export rate rules; this helps you manage billing rates easily.

- **To Import Rates**

1. Click **“Import”**, you will see a dialog window shown as below.



- Click **“Browse”** and select the file to start uploading. The file must be a .csv file. Check the sample file below. You can export a rate file from the IPPBX and use it as a sample to start with.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Match Pattern	Number Length	From	To	Days of Week	Rate	Billable Unit	Initial Cost	Initial Time	Member Extensions	Member Accounts		
2	550	7	0:00	23:59	1234560	2.5	60	0	60	1000-1012-1013-1014-1015-1016-1017-1018-1019-1010-1009-1000-1			
3	0		0:00	23:59	1234560	5	60	0	60	1011-1012-1013-1014-1015-1016-1017-1018-1019-1010-1009-1000-1			
4	1	90	0:00	23:59	1234560	0	60	0	60	1011-1012-1013-1014-1015-1016-1017-1018-1019-1010-1009-1000-1			
5	9999		0:00	0:01	1234560	0	60	0	60	1011-1012-1013-1014-1015-1016-1017-1018-1010-1009-1008-1000-1			

- The sample csv file will result in the following rates in the S-Series IPPBX.

Rate														
<input type="button" value="Add"/> <input type="button" value="Import"/> <input type="button" value="Export"/> <input type="button" value="Delete"/>														
<input type="checkbox"/>	Match Pattern	Number Length	From	To	Rate	Billable Unit	Initial Cost	Initial Time	Operation					
<input type="checkbox"/>	550	7	00:00	23:59	2.50	60	0.00	60	<input type="checkbox"/>					
<input type="checkbox"/>	00		00:00	23:59	5.00	60	0.00	60	<input type="checkbox"/>					
<input type="checkbox"/>	1	90	00:00	23:59	0.00	60	0.00	60	<input type="checkbox"/>					
<input type="checkbox"/>	9999		00:00	00:01	0.00	60	0.00	60	<input type="checkbox"/>					

- To Export Rates**

Select the checkbox of the rates, click **“Export”**, the selected rates would be exported to your local PC.

Rate														
<input type="button" value="Add"/> <input type="button" value="Import"/> <input type="button" value="Export"/> <input type="button" value="Delete"/>														
<input checked="" type="checkbox"/>	Match Pattern	Number Length	From	To	Rate	Billable Unit	Initial Cost	Initial Time	Operation					
<input checked="" type="checkbox"/>	550	7	00:00	23:59	2.50	60	0.00	60	<input type="checkbox"/>					
<input checked="" type="checkbox"/>	00		00:00	23:59	5.00	60	0.00	60	<input type="checkbox"/>					
<input checked="" type="checkbox"/>	1	90	00:00	23:59	0.00	60	0.00	60	<input type="checkbox"/>					
<input checked="" type="checkbox"/>	9999		00:00	00:01	0.00	60	0.00	60	<input type="checkbox"/>					

Scheduled Task

You can create scheduled task for recharging, resetting balance or changing extensions/accounts status purpose.

1. Set the task name.
2. Choose the task type.
 - **Top up:** top up for the selected extensions/accounts, the money will be added to their balance periodically.
 - **Reset Balance:** reset the balance for the selected extensions/accounts periodically.
 - **Available:** unlock the selected extensions/accounts.
 - **Lock:** lock the selected extensions/accounts.
3. Set the schedule task time:
 - **Date:** set the frequency.
 - **Time:** when to start the task.
4. Select the extensions or accounts to execute the task.
5. Click **“Save”**.

Add Scheduled Task ✕

Name:

Task Type ⓘ: Available ▾

Date ⓘ: Every Day ▾

Time: 00:00 ▾

Member Extensions ⓘ

Available	Selected
1000 - 1000	
1001 - 1001	
1002 - 1002	
1003 - 1003	
1004 - 1004	

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Save
Cancel

Top up History

Check the extensions and accounts top up history on this page. You can also search an extension top up history or an account top up history.

- Click **“Top Up”**, and select extensions/accounts to top up for them.
- Click **“Clear Balance”**, and select extensions/accounts to clear their balance.

Top up History

Total Top-Up: \$100.00
 Extension: \$100.00 Account: \$0.00

Top Up Clear Balance Extension,Account

Top up Date	Account/Extension	Before Top-up	Total Top-Up	After Top-up
2016-12-27 15:56:50	1008	0.00	100.00	100.00
2016-12-26 17:14:43	1029	0.00	0.00	0.00
2016-12-26 17:14:43	1027	0.00	0.00	0.00
2016-12-26 17:14:43	1026	0.00	0.00	0.00
2016-12-26 17:14:43	1025	0.00	0.00	0.00
2016-12-26 17:14:43	1024	0.00	0.00	0.00
2016-12-26 17:14:43	1023	0.00	0.00	0.00
2016-12-26 17:14:43	1022	0.00	0.00	0.00

Displaying 1 - 10 of 73

Call Logs

To check the call logs, you need to navigate to S-Series IPPBX **“CDR and Recording”**. If you have enabled call recording on your S-Series IPPBX, you can:

- click  to play the recording.
- click  to download the recording.

CDR and Recordings

Time: 2016-12-01 00:00 - 2016-12-28 23:59

Call From: Call To: Include Recording Files Search

Call Duration (s): Talk Duration (s):

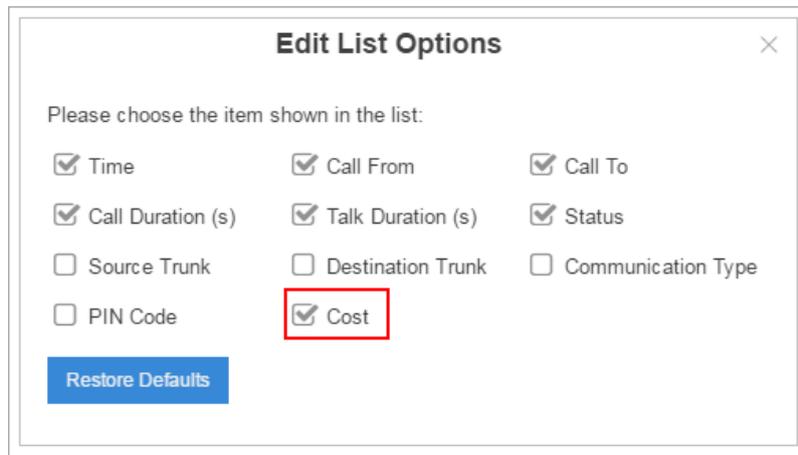
Status: All

Advanced Options

Download CDR

Time	Call From	Call To	Call Duration (s)	Talk Duration (s)	Status	Cost	Recording Options
2016-12-28 09:10:43	1008 <1008>	15880270600	00:00:37	00:00:25	Answered	14.00	 
2016-12-27 16:20:49	1008 <1008>	15880270600	00:00:22	00:00:00	No Answer		 
2016-12-27 15:57:03	1008 <1008>	15880270600	00:00:12	00:00:00	No Answer		 
2016-12-26 14:32:11	1008 <1008>	15880270600	00:00:08	00:00:08	No Answer		 
2016-12-26 14:21:27	1008 <1008>	15880270600	00:00:41	00:00:23	Answered	18.00	 
2016-12-26 13:48:04	1008 <1008>	15880270600	00:00:22	00:00:03	Answered	5.00	 

Click , and select “Cost” option, the cost for each call will be displayed.



Check the description of Call Log options in Table 4.

Table 4 Description of Call Log Options

Option	Description
Time	Select the call start time and end time.
Call From	Enter the caller name or caller extension.
Call To	The destination number.
Call Duration	The time duration between when the call starts and when the call ends.
Talk Duration	The time duration of billing.
Status	Call status.
Source Trunk	Which trunk the outside caller calls.
Destination Trunk	Which trunk the PBX user uses to call out.
Communication Type	The call type, inbound, outbound, internal or system alert.
PIN Code	The outbound route password.
Number Fuzzy Search	Fuzzy search for the caller or called numbers.
Cost	The billing cost for this call.

Statistics

This page displays the billing statistics. You can search billing statistics by the following criteria:

- **Start/End Date**
- **Statistics Filter**
 - None-zero statistics: the calls that have zero cost will not be analyzed in the statistics.
 - All statistics: all calls including the calls that do not generate cost will be analyzed.
- **Statistics Type:** set type as “Daily”, “Monthly”, or “Annually”.
- **Trunk:** which trunk was used to call out.

- Extension
- Account

The screenshot shows the 'Billing' application interface. On the left is a sidebar menu with options: Extension, Account, Rate, Scheduled Task, Top-up History, Statistics (highlighted), and General Settings. The main area is titled 'Statistics' and contains several filter controls: Start Date (2016-12-30 00:00), End Date (2016-12-30 23:59), Statistics Filter (non-zero statistics), Statistics Type (Daily), Trunk (All), Extension (All), and Account (All). There are 'Search' and 'Download' buttons. Below the filters is a table with the following data:

Date	Number of Calls	Total Duration(s)	Average Duration(s)	Amount
2016-12-23	5	71.00	14.20	78.20
2016-12-26	6	91.00	15.17	98.00
2016-12-28	3	74.00	24.67	30.60