

Porta  **Switch** TM



Handbook:

Rating, Subscriptions and Invoicing
Maintenance Release 22

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**PortaSwitch Handbook:
Rating, Subscriptions and Invoicing, November 2010
Maintenance Release 22
V1.22.1**

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Preface

This document provides PortaBilling100 users with step-by-step instructions and examples for setting up various prepaid and postpaid services on a VoIP network.

Where to Get the Latest Version of this Guide

The hard copy of this guide is updated at major releases only, and does not always contain the latest material on enhancements occurring between minor releases. The online copy of this guide is always up to date, and integrates the latest changes to the product. You can access the latest copy of this guide at: www.portaone.com/support/documentation/

Conventions

This publication uses the following conventions:

- Commands and keywords are given in **boldface**
- Terminal sessions, console screens, or system file names are displayed in fixed width font



The **exclamation mark** draws your attention to important information or actions.

NOTE: Notes contain helpful suggestions about or references to materials not contained in this manual.



Timesaver means that you can save time by performing the action described in the paragraph.



Tips provide information that might help you solve a problem.

1 . Charging for Value-added Services

When providing VoIP calling services, quite often you will have to charge your customers for some additional services rendered: IP phone rental, voicemail service, “bundled” free minutes, and so on. The PortaBilling subscription module allows you to efficiently manage these charges.

Checklist

Print the following page and use it to check off the operations you have completed while performing system setup according to the instructions in this chapter. Please be sure to perform all of the operations (all of the boxes must be checked), otherwise the service will not work.


Operation	Done
General configuration	
General and network configuration has already been performed according to the instructions in the previous sections.	[]
Rating configuration	
Create a subscription plan A which will be bundled with your product.	[]
Create any optional subscription plans you may require.	[]
Associate subscription plan A with your product.	[]
Account provisioning	
Create a retail customer who will be using your services.	[]
Create an account for this customer.	[]
If required, assign some subscriptions directly to the account.	[]
Testing	
Verify that the subscriptions are visible under the account.	[]

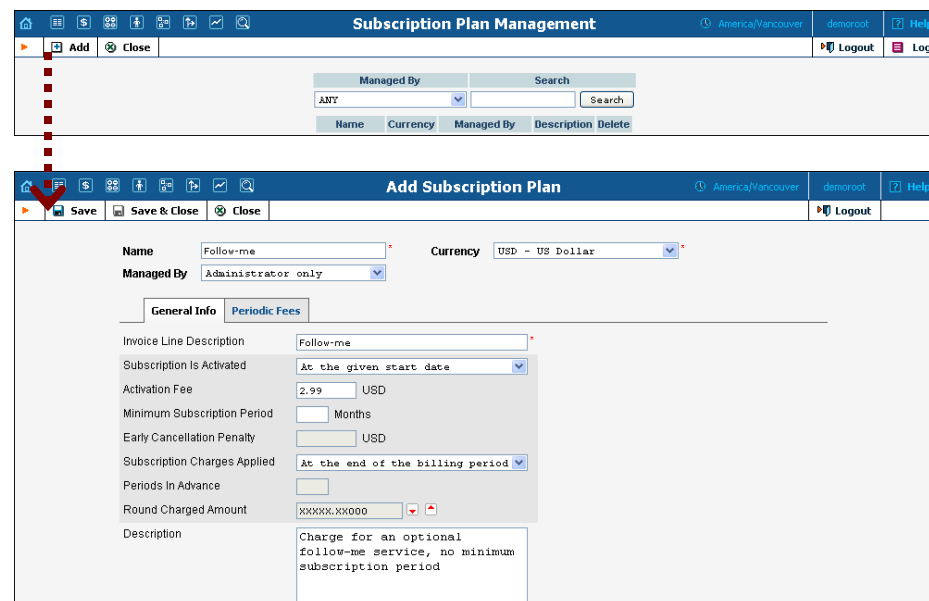
General, Network, Rating Configuration

This is identical to the procedure described in the previous chapters; please follow the instructions provided there.

Create Subscription Plans

A subscription plan defines the charges associated with a particular service.

1. In the **Rating** section of the Admin interface, choose **Subscription Plans**.
2. On the Subscription Plan Management page, choose  **Add**.



The screenshot displays the 'Subscription Plan Management' interface. At the top, there's a header bar with 'Subscription Plan Management' and user information 'America/Vancouver', 'demo@port', and 'Help'. Below the header, there's a toolbar with 'Add' and 'Close' buttons. A red dashed line points from the 'Add' button to the 'Add Subscription Plan' form below. The form has a header bar with 'Add Subscription Plan' and the same user information. It includes a toolbar with 'Save', 'Save & Close', and 'Close' buttons. The form fields include 'Name' (Follow-me), 'Managed By' (Administrator only), and 'Currency' (USD - US Dollar). There are two tabs: 'General Info' and 'Periodic Fees'. The 'General Info' tab is active, showing fields for 'Invoice Line Description' (Follow-me), 'Subscription Is Activated' (At the given start date), 'Activation Fee' (2.99 USD), 'Minimum Subscription Period' (Months), 'Early Cancellation Penalty' (USD), 'Subscription Charges Applied' (At the end of the billing period), 'Periods In Advance', 'Round Charged Amount' (XXXXXX.XX000), and 'Description' (Charge for an optional follow-me service, no minimum subscription period).

3. Fill in the required information:

Main form (top)

- **Name** – Name of the subscription plan which is to be used on the Admin interface.
- **Currency** – Indicates in which currency pricing information is given. A subscription plan can only be applied to a product, account or customer with this same currency.



NOTE: The currency for the subscription plan may be chosen only once, and cannot be changed later.

- **Managed By** – If you want this subscription plan to be used for your reseller's accounts, so that the reseller himself can change the parameters of the plan and apply it to his accounts, choose a customer name from the menu. Otherwise, choose **Administrator only** here.

General Info

- **Invoice Line Description** – A subscription plan description to be included on every invoice line visible to the customer (for instance, it may be in a language different than English).
- **Subscription Is Activated** – Defines when the subscription will be considered active (and charges will begin to apply): either simply from the date it is entered into the system, or you may postpone it until the date when the customer actually uses the account for the first time.
- **Activation Fee** – Enter the value charged for every new subscription upon startup; leave this field empty to waive the activation fee.
- **Minimum Subscription Period** – Time (in months) during which the customer must keep the subscription plan active in order to avoid penalties. Leave this field empty to create a subscription plan that can be closed at any time.
- **Early Cancellation Penalty** – The fee applied if the minimum subscription period condition is not met.
- **Subscription Charges Applied** – The default method is **At the end of the billing period**, so that subscription charges are applied to the account/customer balance when the billing period is closed. Another option is **Progressively**, where a small portion of the total subscription fee is applied each day, so that the balance grows gradually. You can also choose to apply charges **In advance**.
- **Periods in Advance** – If you selected **In advance** in the previous field, specify the number of periods (the default value is 1).
- **Round Charged Amount** – Leave the default value unchanged if you want to calculate charges with the maximum available precision; otherwise, see the [PortaBilling100 Web Reference Guide](#) for more details about setting up rounding.
- **Description** – Your comments about the intended purpose of this subscription plan.

Periodic Fees

By default, only one type of pricing is available: this is the default fee which will be applied to the subscription. Click the  icon to edit it, then click the  icon after you have finished entering all the information. There are four column groups (monthly, bi-weekly,

weekly and daily billing), each of which allows you to specify fees for every billing period separately.

Default/promotional rate	Monthly Billing	Bi-weekly Billing	Weekly Billing	Daily Billing
unlimited	2.99000	unlimited	1.49500	unlimited
unlimited	2.99000	unlimited	1.49500	unlimited

- **N** – Duration of the promotional period (not available for the default fee).
- **Fee** – Full amount of subscription fee to be applied during the billing period.



The periodic fees table includes an automatic calculation feature, simplifying the entry of values into the four column groups; e.g. if you enter 2.00 as the value of the monthly fee, while the fields for fees for other periods remain empty, these will be populated with pro-rated values (1.0, 0.46667 and 0.06667, respectively). Of course, you may change the actual values afterwards, e.g. make weekly billing more expensive by setting the fee to 0.49. The same applies to defining the length of promotional periods, e.g. if you enter 2 as the duration (in months) of the promotion, the other empty fields will be populated with 4, 9 and 60, respectively.



If you want to add more promotional periods (e.g. for the first three months) click the Add button in the toolbar to insert a row into the pricing table, then click the icon when you have entered all the required information.


Default/promotional rate	Monthly Billing	Bi-weekly Billing	Weekly Billing	Daily Billing
unlimited	2.99000	unlimited	1.49500	unlimited
unlimited	2.99000	unlimited	1.49500	unlimited

The screenshot above defines a product which:

- will be free for the first month,
- will have a monthly fee of \$0.99/month for the next six months,


- will have a normal subscription fee of \$2.99/month afterwards.

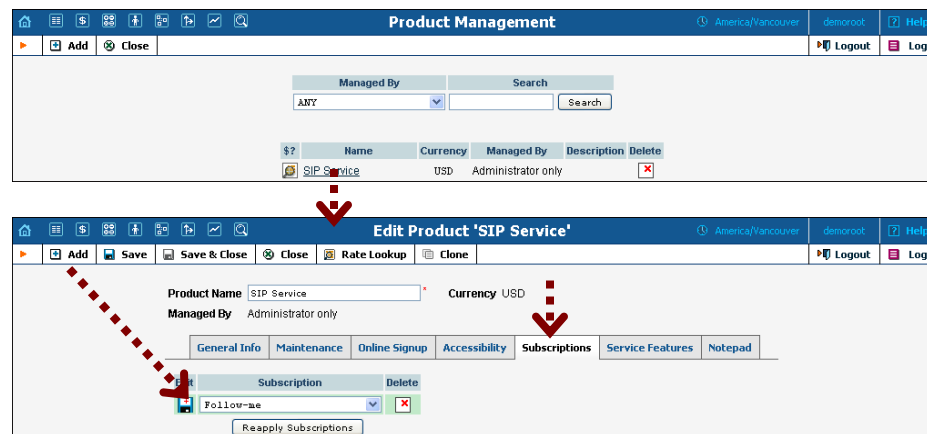
A reference table is provided for your convenience at the bottom of the screen, so that you can clearly see when a change in the subscription fee is to occur. You may also change the order of the promotional periods by moving them up and down using the  and  icons.

4. Click  **Save&Close** to finish the subscription plan definition and save it to the database.
5. Repeat steps 2-4 to create any other additional subscription plans

Bundle Subscription Plans with Product



You can create subscription plans as bundled with a product, so that they will apply to every account using this product.

1. In the **Rating** section of the Admin interface, choose **Products**.
2. On the Product Management page, click on the name of a specific product.
3. Select the Subscriptions and click the  Add icon.
4. Select the subscription plan from the select menu.



The screenshot shows the 'Product Management' interface. The top section is titled 'Product Management' and includes a search bar and a table of products. The table has columns for 'Name', 'Currency', 'Managed By', 'Description', and 'Delete'. A product named 'SIP Service' is listed with a currency of 'USD' and managed by 'Administrator only'. A red dashed arrow points from this product to the 'Edit Product' page below.


The 'Edit Product' page is titled 'Edit Product 'SIP Service'' and includes a toolbar with buttons for 'Add', 'Save', 'Save & Close', 'Close', 'Rate Lookup', and 'Clone'. The 'Subscriptions' tab is selected, showing a table with columns for 'Subscription' and 'Delete'. A red dashed arrow points from the 'Add' button in the toolbar to the 'Add' button in the 'Subscriptions' table. Another red dashed arrow points from the 'Subscriptions' tab to the 'Add' button in the table.

5. Click the  **Save** button in the toolbar, or the  icon on the left end of the row to save the data.
6. Repeat steps 3-5 to include more than one mandatory subscription with the product.

Check Subscription Plan Assignment



After a subscription plan has been bundled with a product, every new account created with this product will automatically be assigned this subscription.

The screenshot shows the 'Account Info / Retail Customer 'EasyCall Ltd.' page. The 'Subscriptions' tab is active. The 'Pending Subscriptions' section is empty. The 'Active Subscriptions' section shows one subscription: 'Follow-me' with a start date of 2010-09-17 and a finish date of 2010-09-17. The 'Closed Subscriptions' section is empty.



The  icon indicates that this subscription forms part of the product definition, and is therefore mandatory (cannot be canceled).

Manually Assign Subscription to Account

You may also assign some additional, optional subscription plans to an account.


1. Go to the **Customers** screen (the one containing a list of customers).
2. Next to the customer name, click the  icon (the one in the **Accounts** column) to enter account management for this customer.
3. Perform an account search and, when the required account is displayed, click on the account ID.
4. On the Account Info page, click on the **Subscriptions** tab.
5. Click the  **Add** icon.

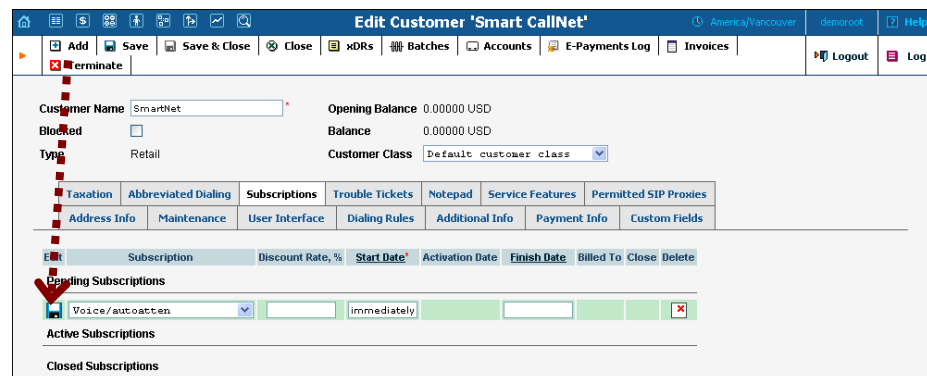
The screenshot shows the 'Account Info / Retail Customer 'EasyCall Ltd.' page. The 'Subscriptions' tab is active. The 'Pending Subscriptions' section shows a new subscription being added: 'Linksys_phone_rental' with a start date of 'immediately'. The 'Active Subscriptions' section shows one subscription: 'Follow-me' with a start date of 2010-09-17 and a finish date of 2010-09-17. The 'Closed Subscriptions' section is empty.

6. Select the subscription plan from the select menu. You may also specify a start date for the subscription (by default, it will be activated on the day you create it).
7. Click the  **Save** button in the toolbar, or the  icon on the left end of the row to save the data.
8. Repeat steps 5-7 to add more subscriptions to this account.



Manually Assign Subscription to Customer (Optional)

You may also assign some additional, optional subscription plans to an account or customer.

1. Go to the **Customers** screen (the one containing a list of customers).
2. Click on the customer name.
3. On the Customer Info page, click on the **Subscriptions** tab.
4. Click the  **Add** icon.



The screenshot shows the 'Edit Customer 'Smart CallNet'' form. The 'Subscriptions' tab is selected, displaying a table with columns: Subscription, Discount Rate, %, Start Date, Activation Date, Finish Date, Billed To, and Delete. A red arrow points to the 'Add' icon in the toolbar.

5. Select the subscription plan from the select menu. You may also specify a start date for the subscription (by default, it will be activated on the day you create it).
6. Click the  **Save** button in the toolbar, or the  icon on the left end of the row to save the data.
7. Repeat steps 4-6 to add more subscriptions to this customer.

2. Invoicing Process Illustrated

This chapter outlines the information needed to understand how the service charges, credits/refunds and payments are used in the invoicing process and how they are reflected in the attributes of the invoice (such as the amount due). The process is explained using different scenarios.

Invoicing Process

PortaBilling provides a flexible and easy-to-use invoicing system, covering various scenarios of likely interactions with customers. An administrator can specify:

- the invoice grace period (this indicates within how many days payment must be received following an invoice's date of issue);
- when to send reminders about an approaching due date or overdue payment of an invoice;
- when a customer's service should be suspended; and
- when to permanently close a customer's account.

An invoice is a PDF document reflecting all transactions (calls, payments, refunds, subscription charges, etc.) which have occurred during the billing period.

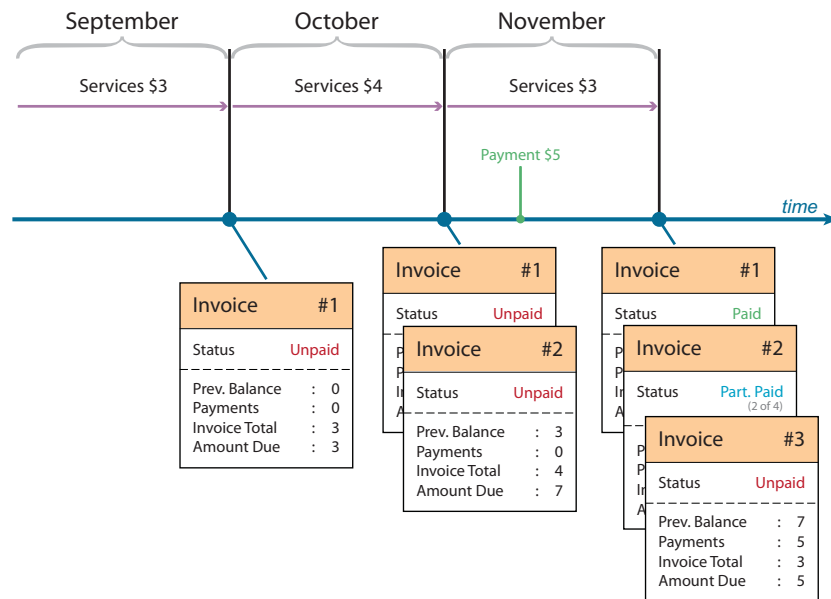


For the sake of simplicity, we will use “calendar” billing periods in the following examples (i.e. the billing period starts on the first day of the month and ends on the last day of the month). However, the principles described here will work with any other billing period – monthly, weekly, etc.

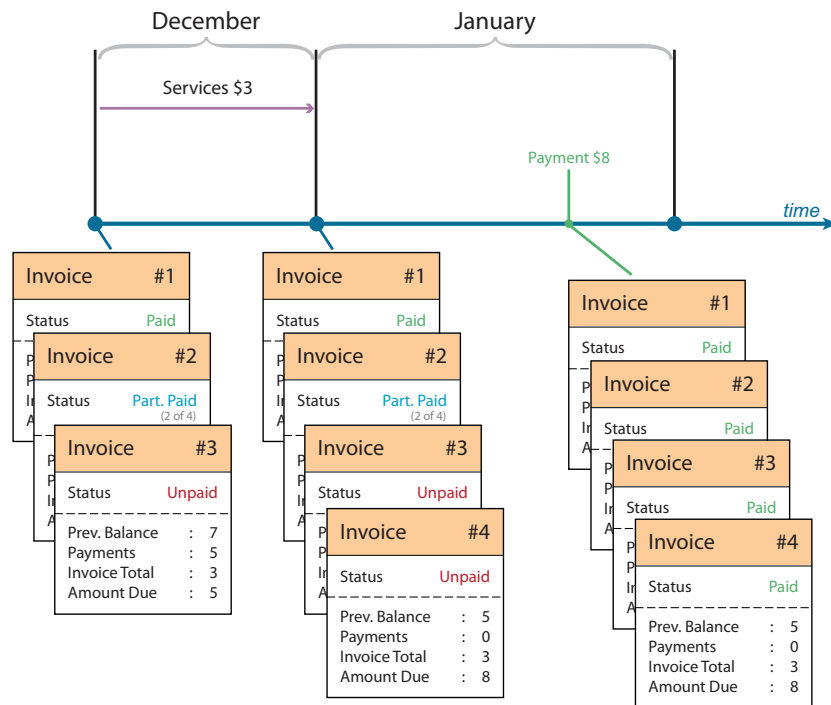
Example 1: Invoice Amount Due, Invoice Status

Suppose a customer's service charge for the September billing period is \$3. An invoice (see #1) with a **total** of \$3 is then produced at the end of the month, and since there are no other factors to be considered (previous balance, etc.), the **amount due** for this invoice is \$3. In October, the service charge is \$4, so the **total** (or **net amount**) of October's invoice (#2) is \$4, while the **amount due** is \$7 (\$3 + \$4), since the previous invoice balance is included.

On November 10th the customer makes a payment of \$5. This payment is applied first to the oldest unpaid invoice (#1 for the September billing period, \$3 total), and the remaining portion (\$2) is then applied to the most recent unpaid invoice (#2, for October). As a result, the invoice status for September is now “paid,” while October's invoice status is “partially paid” (the remaining balance due for this invoice period is \$2). In November the total service charge is \$3, so on December 1st a new invoice for November is produced. Its total is \$3, and the amount due is \$7 (previous invoice's amount due) minus \$5 (payment made during this period) equals \$2 + \$3 (new invoice total) = \$5.

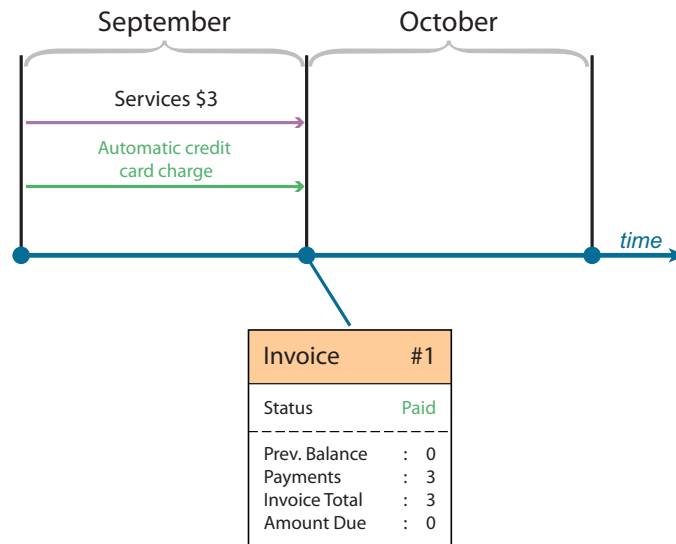


The total charge for December is \$3, so invoice #4 for December is for a total of \$3 with an amount due of \$8. When payment is made in January, it is again split: \$2 is applied to the October invoice (#2), whose status becomes “paid;” then \$3 is applied to the November invoice (#3), and its status also becomes “paid;” and finally, the remaining amount of \$3 is applied to the December invoice, (#4). As a result, all invoices are now paid.



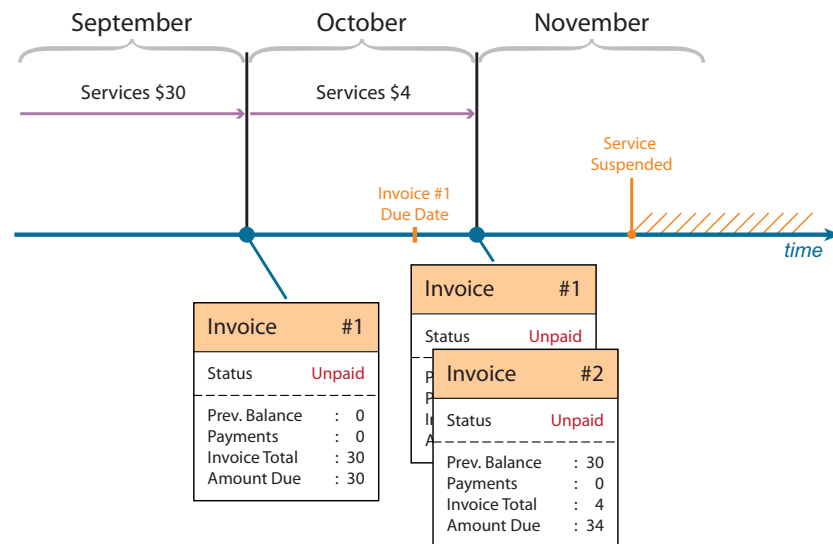
Example 2: Automatic Payment at the End of the Billing Period

The total service charge during September is \$3. At the end of the billing period when the invoice is produced, its total is \$3 – so as a part of the invoice generation the customer's credit card is charged \$3 to pay the invoice. The payment is recorded as being applied to the September billing period, and as a result, the invoice is created with a zero **amount due**, and its status is “paid” (see below).

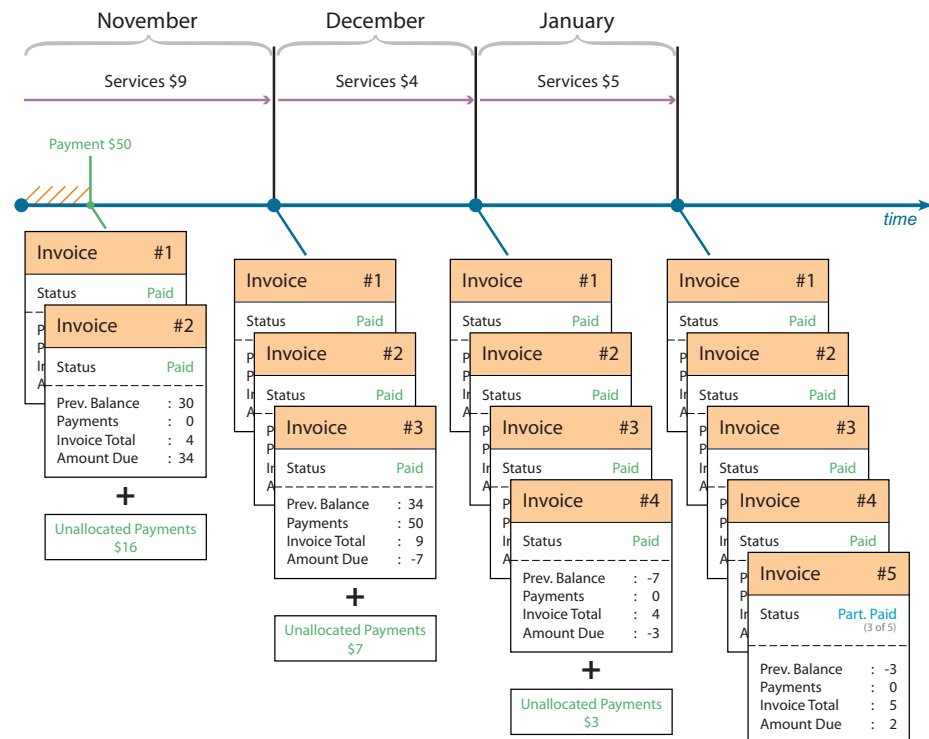


Example 3: Suspension, Overpaying an Invoice

Customer's invoice #1 for the September billing period had an invoice total of \$30 and was due on October 21st. No payment was received until the end of October, so invoice #2 (produced on November 1st) has an invoice total of \$4, bringing the amount due to \$34.



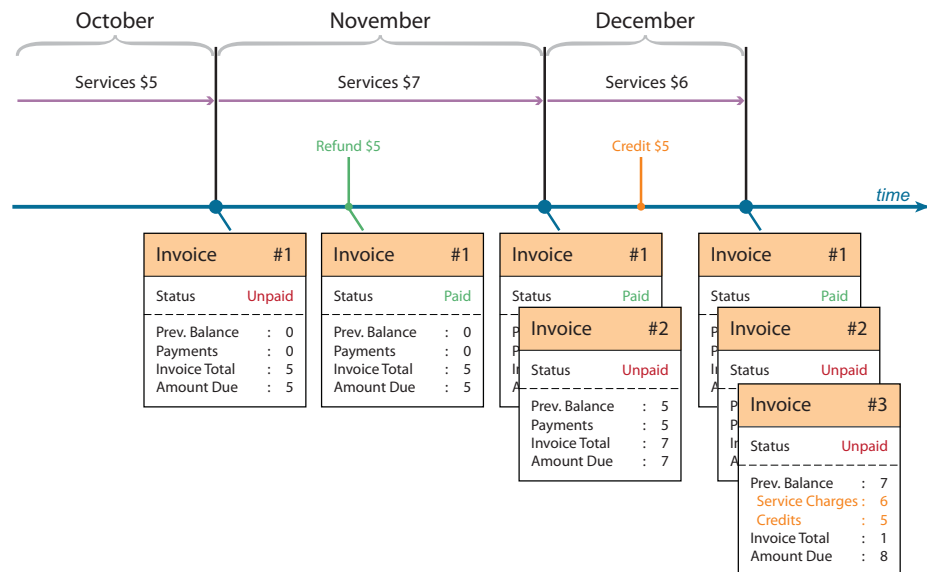
On November 10th the customer's service is suspended because invoice #1 is overdue. On November 15th the customer makes a payment of \$50 and \$30 of this payment is applied to invoice #1, which then becomes paid. Since there are no other overdue invoices, the suspension is lifted from the customer's service. Then \$4 of the remaining payment amount is applied to invoice #2 designating it as paid. There are no other outstanding invoices, and the remaining sum (\$16) of what has already been paid is not applied to any invoice. This sum will be recorded in the "unallocated payments" property of the customer (you can see it on the **Payment Info** tab in the **Customer Info** form) so that it can be applied to future invoices. When invoice #3 for the November billing period is produced (with an invoice total of \$9) the customer's unallocated payment amount is immediately applied to the invoice. As a result, the invoice becomes "paid" and the unallocated payments now total \$7.



For the December billing period the customer's invoice total is \$4. The remaining sum of unallocated payments (\$7) covers this invoice, which becomes "paid" and the unallocated payments now total \$3 (\$7 - \$4). In the January billing period, the customer's invoice is for \$5. Given that \$3 is left in unallocated payments, this covers part of the invoice amount. Now the invoice is "partially paid" (the remaining balance is \$2), and unallocated payments are down to zero.

Example 4: Refunds and Credits

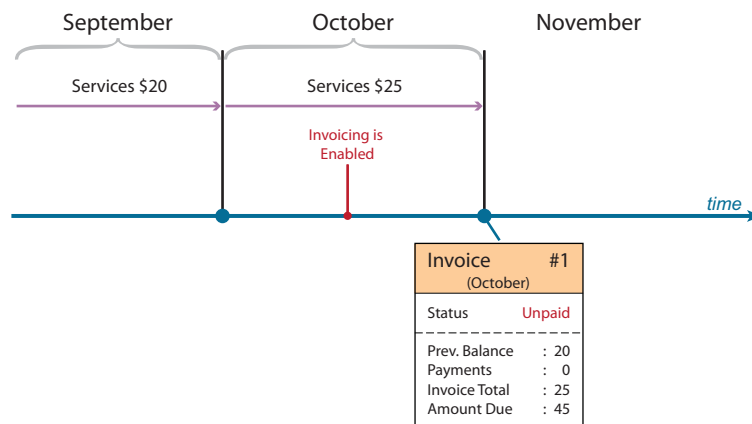
For example, the customer's invoice #1 for the October billing period is \$5, but later it is discovered that this amount includes some erroneous charges. As a result, sometime during November (while the November billing period is still open) a **refund** of \$5 is awarded to the customer. This amount is immediately applied to the currently open invoice (i.e. the one for October), and it then becomes "paid."



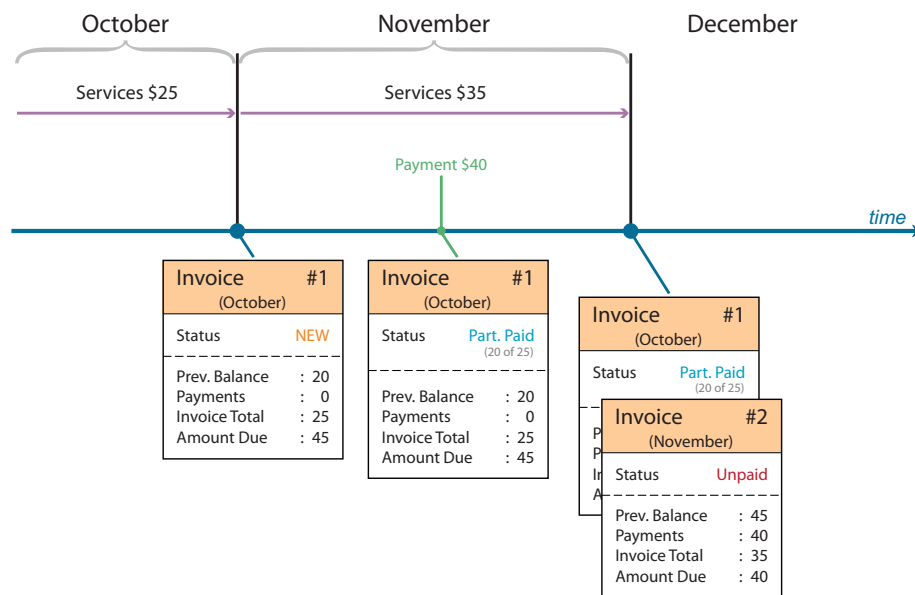
The customer continues to use the service in November, and invoice #2 for November comes to a total of \$7. This invoice will also contain a note saying that the previous invoice balance was \$5 and that there was \$5 in payments/refunds, bringing the amount due to \$7. Now suppose that sometime during December (after the November invoice has already been produced) the customer calls the helpdesk and complains about the sound quality of some calls he made back in November. He is offered a \$5 **credit**, which is applied to his account on December 5th. This does not affect the November invoice, but will be reflected in the next billing cycle. So when the December billing period is over, the invoice will contain the applicable service charges for that period (\$6) minus the credit (\$5) bringing the total to \$1 – and the amount due then becomes \$8. Thus the main difference between refunds and credits is that a refund is immediately applied to an existing invoice, while a credit will be visible on the next invoice.

Example 5: Turn On the Invoicing Later

The customer was initially created with invoicing disabled. During the first period (September) the total sum of charges was \$20 (\$13 for calls plus a \$7 subscription fee), but no invoice was produced. During the October billing period invoicing is enabled, so invoice #1 is created on November 1st. This invoice, covering the October billing period, will contain the actual charges for October (\$20 for calls and a \$5 subscription fee) – and the invoice total will be \$25. The total charges accumulating in the account prior to October will be included on this invoice as the previous balance (\$20), so the amount due for this invoice will come to a total of \$45 (\$25 + \$20).

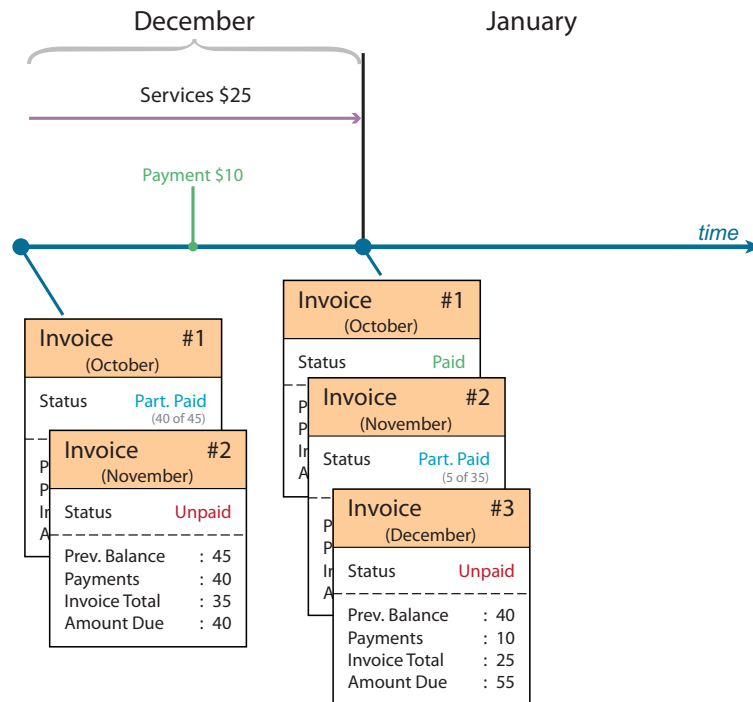


During November the customer makes a payment of \$40 which is recorded as follows: \$20 is applied to the “previous balance” of the first invoice (since there were no invoices for earlier periods) and the rest (\$20) is applied to the invoice total itself. Since the payment applied to the invoice is less than the invoice total (\$25), invoice #1 is “partially paid” (the sum still pending is \$5). When November ends, a new invoice #1 is produced that contains the applicable charges for services provided in November (\$35), so the invoice total is \$35. Combining the previous balance (\$45 due from invoice #1), payments made during this period (\$40) and the invoice total (\$35) work out like this: $\$45 - \$40 + \$35 = \40 .



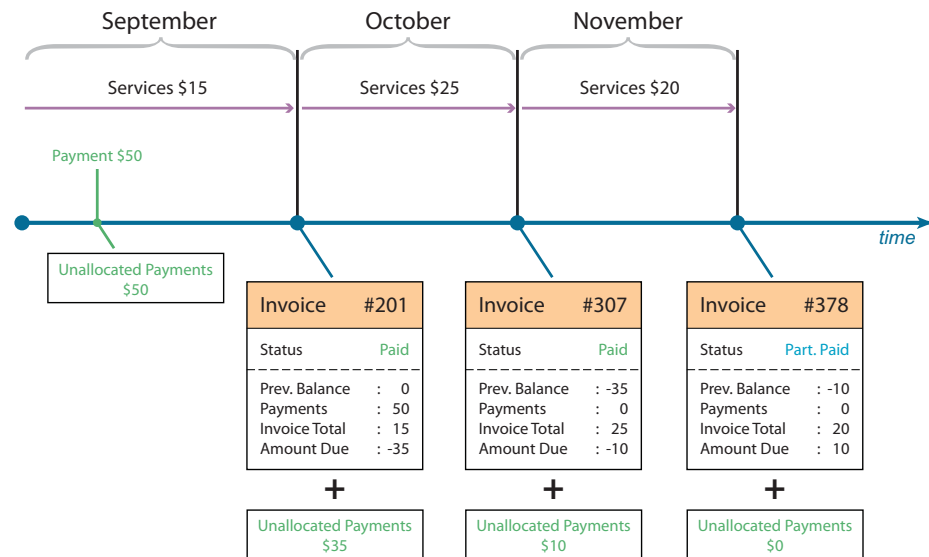
When sometime during the December billing period the customer makes a payment of \$10, it is applied to the remaining outstanding balance for invoice #1 (for October), and its status then becomes “paid,” and as the rest of the payment (\$5) covers part of invoice #2 (for the November period), its status now becomes “partially paid” (since the outstanding sum owed is \$30). During December the following charges are applied to the customer: \$10 for calls, \$5 for subscription, and \$10 for configuration

assistance (applied personally by an administrator), so invoice #3 will contain: the previous balance due of \$40, payments: \$10, invoice total \$25 (\$10 + \$5 + \$10), bringing the amount due to \$55.



Example 6: Advance Payment

Let's say the customer plans to be away for several months starting at the end of September, and is worried that he will not be able to pay his bills regularly. Then in mid-September (while there are no outstanding invoices) he makes a payment of \$50. Since there are no unpaid invoices, this amount goes to "unallocated payments." Assuming the service charge for September is \$15 (\$10 for calls and \$5 for subscription), on October 1st when invoice #201 is generated, the unallocated payment balance is applied and the invoice status immediately becomes "paid." The amount due, shown on the invoice, is $-\$50 + \$15 = -\$35$ – and since it is a negative number, a "Credit balance, do not pay" message will appear next to the amount due in the invoice PDF. The unallocated payments now total \$35 (\$50 - \$15).



Service charges for the October billing period are \$25, so when invoice #307 (invoice total = \$25, amount due = $-\$35 + \$25 = -\$10$) is produced for this period, the “unallocated payments” are again applied to it, and the invoice becomes “paid.” The unallocated payments now total \$10 ($\$35 - \$25 = \10). The charges for November are \$20, so the same process is repeated at the end of the November billing period. Invoice # 378 for a total of \$20 is created stating the amount due: $-\$10 + \$20 = \$10$. The remaining amount in “unallocated payments” (\$10) is applied to this invoice – but since the available amount is less than the invoice total, the invoice status becomes “partially paid” and the unallocated payment amount is zero. Starting with the next billing period the invoicing continues as usual.

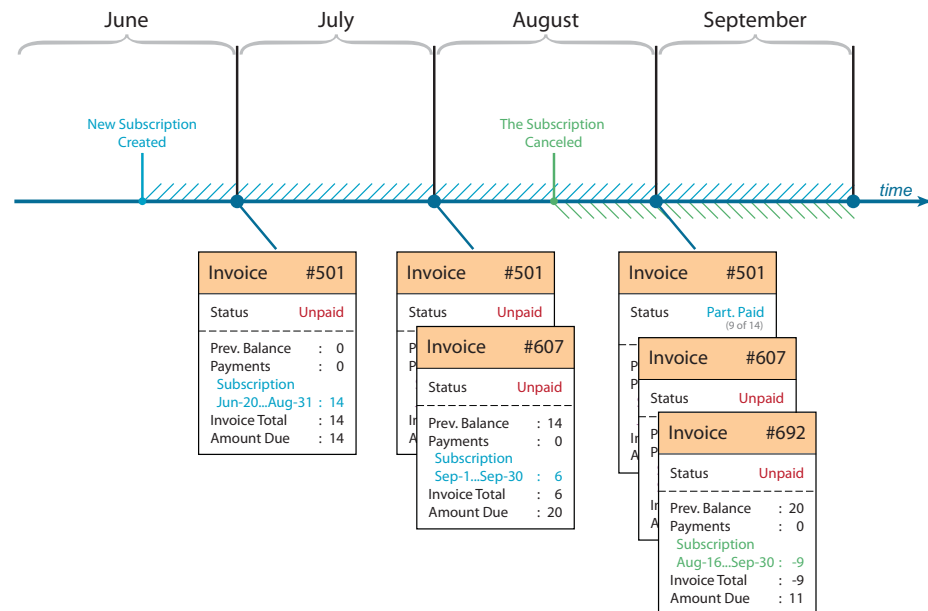
Example 7: Advance Subscriptions, Invoices with Negative Total

For example, on June 20th a \$6 subscription, charged two months in advance, is added to an account.

When invoice #501 for June is generated (on July 1st), it contains the “past” subscription charge for the period from the day the subscription was activated until the last day of June (10 days), as well as advance charges for two future billing periods (July and August), bringing the total subscription charges to \$14: \$2 (10 days out of 30 in June, so the pro-rated charge is $\$6 * 10/30 = \2) + \$6 (July) + \$6 (August) and the “billed to” property of this subscription is set to August 31st. So the invoice total for invoice #501 is \$14, and the amount due is \$14 as well.

Invoice #607 for the July billing period (produced on August 1st) contains a \$6 subscription charge for September (since the customer has already

been charged for July) and the “billed to” property is updated to September 30th, accordingly. Since the previous balance (on invoice #501 for the June period) was \$14, the amount due for this invoice becomes \$20 (\$14 + \$6).



On August 15th, the subscription is canceled. At that moment, a credit is issued for the entire billed but unused service period - from August 15th until the “billed to” date (September 30th), so the credited amount is \$9 (\$3 for half of August and \$6 for September). Invoice #692 is produced on September 1st for the month of August. It includes the \$9 credit, and assuming there were no other charges for that period, the invoice total is \$9. The amount due will then come to \$20 - \$9 = \$11. In addition, a negative invoice total is recorded in the system in the same way the payment would be (since effectively, the outstanding customer balance is **less** now). The \$9 balance is applied to pay off invoice #501 for the June period (\$14), which becomes “partially paid” (the sum remaining is \$5). Invoice #607 for the July period remains “unpaid” (\$6). The status of invoice #692 is a bit tricky – and although there is nothing due on the invoice total itself, it still carries an unpaid balance from the previous invoices – so the customer still needs to pay this invoice’s amount due (\$11) for all invoices to be paid and up to date.

3. Creating a Service with Discount Plans

This chapter will show you how to use PortaBilling volume discounts to provision products that include a certain number of “free” monthly minutes, or to give your customers extra discounts after they make a certain amount of calls.

The following sections will assist you in setting up a product that includes various types of volume discounts. In the example below, we assume that the goal is to set up a product which will provide:

- several discount levels of calls to US and Canada per month: 200 free minutes, then 400 minutes in normal rate, then 700 minutes with a 10% discount and beyond that, an unlimited 20% discount
- \$5 worth of calls to all European destinations per month
- a 10% discount on all European calls after at least \$20 of such calls have been made in the current month

Checklist

Print the following page and use it to check off the operations you have completed while performing system setup according to the instructions in this chapter. Please be sure to perform all of the operations (all of the boxes must be checked), otherwise the service will not work.




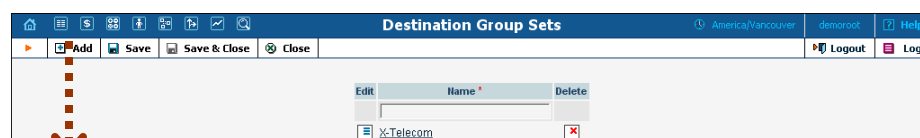
The checklist below assumes that you have already configured the basic SIP service according to the instructions provided in previous chapters.

Operation	Done
Initial configuration	
General and network configuration has already been performed according to the instructions in previous chapters.	[]
Basic SIP service configuration has already been performed according to the instructions in previous chapters.	[]
Rating configuration	
Create a destination group set.	[]
Create the required destination groups.	[]
Assign prefixes to these destination groups.	[]
Create a volume discount plan.	[]
Define discounts within this discount plan.	[]
Assign this discount plan as the default one for a certain product.	[]
Account provisioning	
Check that the retail SIP service customer has already been created according to the instructions in previous chapters.	[]
Testing	
Program the parameters (phone #, password, SIP server address) into the SIP phone and make a test call.	[]

Create a Destination Group Set

A destination group set is a logical container for destination groups which are used for the same purpose. For instance, in this case a destination group set contains various destination groups (such as US&Canada, or Europe) that apply to your customers.

1. In the **Rating** section of the admin interface, choose **Destination Group Sets**.
2. On the Destination Group Sets Management page, choose  **Add**.





The screenshot shows the 'Destination Group Sets' management interface. The toolbar at the top includes buttons for 'Add', 'Save', 'Save & Close', and 'Close'. A red dashed arrow points to the 'Add' button. The main area contains an 'Edit' form with a 'Name' field and a 'Delete' button. Below the form, there is a list of existing group sets: 'X-Telecom'.



This screenshot is identical to the previous one, showing the 'Add' button highlighted with a red dashed arrow. The 'Name' field in the 'Edit' form is now empty, and the 'Delete' button is still present.



This screenshot is identical to the previous ones, showing the 'Add' button highlighted with a red dashed arrow. The 'Name' field in the 'Edit' form is now empty, and the 'Delete' button is still present.

3. Type in the name of the new destination group set.
4. Click the  **Save** button in the toolbar or the  icon on the left end of the row.



One common mistake in naming a destination group set results when you need to define a discount for US and Canada calls, and so create a destination group set named US&Canada which includes a US&Canada destination group. While this may suffice initially, what happens if you soon also need to provide a special rating for Asia calls? You can, of course, create another destination group for Asian phone prefixes, but then the name of the destination group set will be misleading. This is why it is recommended that a destination group set be named according to its purpose, not its contents. Thus a destination group set to be used for entering rates for your vendor X-Telecom will be named “X-Telecom”, while a destination group set to be used to define rates for your customers will be named “Retail customers” or the like.

Define a Destination Group

Now you need to create the actual destination groups, each of which will contain phone prefixes.

1. In the **Rating** section of the admin interface, choose **Destination Group Sets**.
2. On the Destination Group Sets page, click on the destination group set name to enter the Edit screen.
3. Click **Add** to add a new destination group.

The image shows three sequential screenshots of the 'Edit Destination Group Set 'Retail'' interface. The first screenshot shows the 'Add' button in the toolbar. The second screenshot shows the 'Add' button being clicked, and a new row is added to the table with the text 'US&Canada' in the 'Destination Group Name' field. The third screenshot shows the 'Save' button in the toolbar being clicked, and the 'US&Canada' entry is now saved in the table.

4. Type in the destination group name, then click the **Save** button in the toolbar or the **+** icon on the left end of the row.

Assign Prefixes to the Destination Group

Assuming that you have already defined all the required prefixes (destinations) in the Destinations section earlier, you now just need to allocate them to destination groups, so that PortaBilling will know exactly which prefixes belong to which destination group.

Add Prefixes Online from the Web Interface

1. When in edit mode for a destination group set, click on the name of the destination group to see detailed information about it.

Search

Destination Group Name * Prefixes Delete

Edit	Destination Group Name	Prefixes	Delete
	US&Canada		

Prefix Country Description

Prefix Country Description Delete

2. Click **Add** to enter “add prefixes” mode.

Prefix Country Description

Prefix Country Description

3. To display the available prefixes, type in the country name or a master phone prefix and press one of the search buttons (**Prefix** to search by prefix, **Country** to search by a country name).

Prefix Country Description

Prefix Country Description

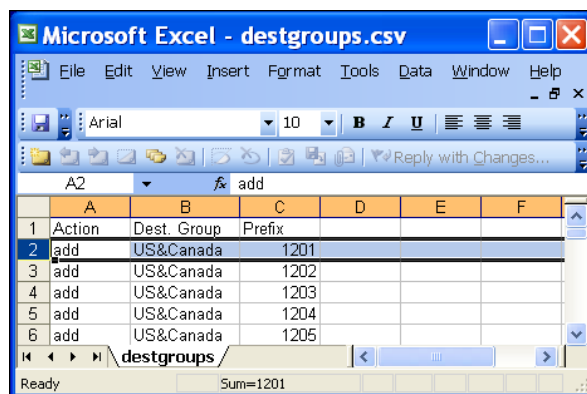
Prefix Country Description

Prefix Country Description Delete

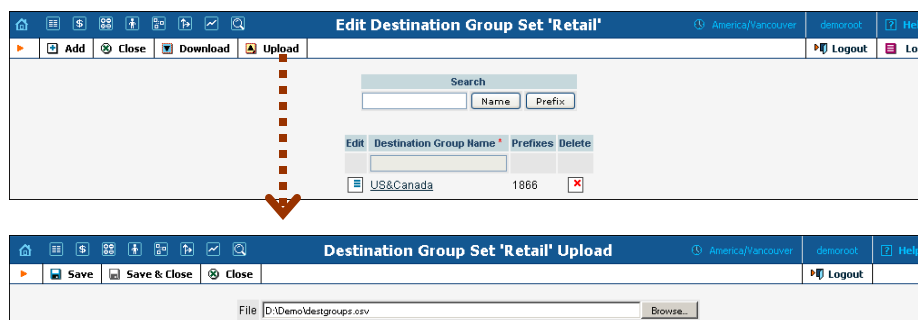
4. When you see a list of the available prefixes, select the ones you would like to include in this destination group, and then press the **Save** button.
5. Now you will return to edit destination group mode, where you can see a list of currently included prefixes. You may delete some of these, or add more prefixes if required.

Upload Prefixes from a File

When dealing with destination groups that contain a large number of prefixes (such as US&Canada, in this example) the preferred way to populate the destination group is by uploading a CSV file.



1. Prepare a CSV file which contains information about the prefixes. The file structure is as displayed in the picture: the first row contains column titles (and is ignored), while all the other rows include three columns: <action>, <destgroup>, <prefix>. **Action** is either add or delete, **destgroup** is the name of the destination group, and **prefix** is the actual destination (in E.164 format). You may include definitions of multiple destination groups in the same file.
2. When in edit mode for a destination group set, click the **Upload** button in the toolbar.



3. Either enter the name of your file manually, or click **Browse...** and choose the file.
4. Click **Save&Close**.
5. You will now see the Edit Destination Group Set screen, which displays the currently defined destination groups and the prefixes included.



NOTE: If the number of prefixes within the destination group is too large, not all of them will be displayed on this page; instead, "..." will be shown at the right end of the

Prefixes column. Click on the destination group name to go into edit mode and see all the prefixes.

Create All Required Destination Groups



Repeat the *Define a destination group* and *Assign Prefixes to the destination group* steps, and then create a destination group for each calling area for which you would like to offer special conditions. For example, if you plan to provide free minutes to US&Canada and special volume discounts for calls to Europe, you will need two separate destination groups within the *same* destination group set.

Create a Volume Discount Plan


A volume discount plan contains definitions of all the applicable special discounts offered to users of a certain product.

1. In the **Rating** section of the admin interface, choose **Volume Discount Plans**.
2. On the Discount Plan Management page, choose **Add**.

The screenshot shows two parts of the admin interface. The top part is the 'Discount Plan Management' header with an 'Add' button. A red dashed arrow points from this button to the 'Add Discount Plan' form below. The form includes fields for Plan Name, Currency, Managed By, Destination Group Set, Counter Reset, Destination Group Lookup Type, and a Description text area.

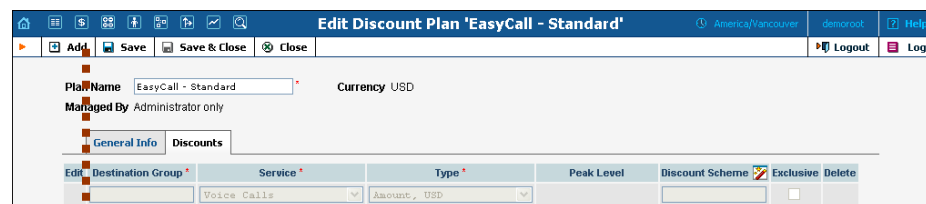
3. Fill in the Add Discount Plan form:
 - **Plan Name** – A short descriptive name for this discount plan.
 - **Currency** – Indicates in which currency pricing information is defined; a volume discount plan can only apply to accounts and customers with the same currency.

NOTE: The currency for the discount plan may be chosen only once (at creation) and cannot be changed later.

- **Managed by** – If you want this discount plan to be used for your reseller's accounts, so that the reseller himself can change the parameters of this tariff and create new accounts using this product, choose a customer name from the menu. Otherwise, choose **Administrator only** here.
 - **Destination Group Set** – The destination group set which will be used to select the definitions of individual destination groups. Choose the destination group set you created in the previous steps.
 - **Counter Reset** – If you want your customers to receive a one-time promotion (e.g. 500 free minutes for each new subscriber), choose **Never**. This means that call counters will be never reset, and discounts will always be calculated based on the sum total of calls since account activation. The default option is **Once in billing period**, meaning that in every billing period the counters are set to zero and the process starts all over again, e.g. every month the customer is entitled to 200 free minutes.
 - **Description** – An extended tariff description.
4. Click  **Save**.

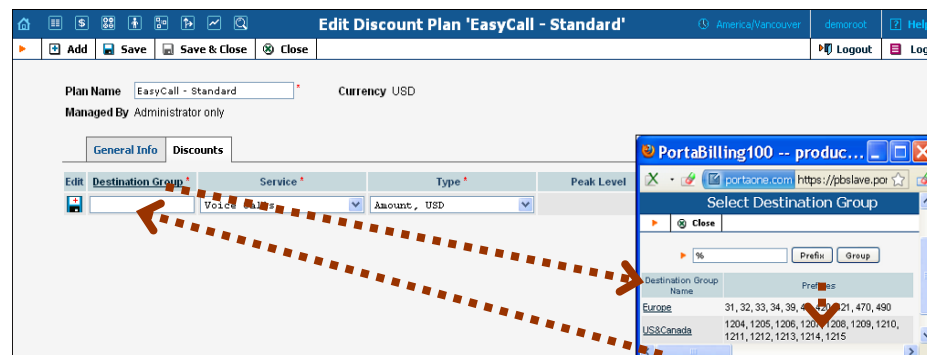
Define Discounts within a Volume Discount Plan



1. While in the **Edit Discount Plan** form, click on the **Discounts** tab.
2. Press  **Add** to add a new discount.



Destination Group	Service	Type	Peak Level	Discount Scheme	Exclusive	Delete
Voice Calls		Amount, USD			<input type="checkbox"/>	

3. Enter the initial information about this discount:
 - **Destination Group** – Type in the name of the destination group this discount will apply to, or click on the column header to invoke a popup menu, where you can search for available destination groups and select one of them.





- **Type** – If the discount levels are to be based on the total number of minutes, choose Volume, min. Otherwise, choose Amount, USD to use cost-based discount levels. For more details about different discount level options, see the [PortaBilling Administrator Guide](#).
- **Discount Scheme** – Click the  icon in the toolbar to invoke the discount definition wizard. There are three tabs where you can define three different discounts for the peak, off-peak, and second off-peak periods. Setting discounts for multiple off-peak periods is explained in a separate chapter *Creating Service with Multiple Off-Peak Periods* below.
Define the applicable discount levels for the peak period:
 - Press  **Add** to add a new discount level threshold.
 - In the **Threshold** column, enter the threshold value; the current discount will be applied *until* the counter value is *lower* than this threshold. For instance, if you specify 200 as the threshold for a volume-based discount, this discount level will be applied until the total number of minutes is between 0 and 199. If you tick the **Unlimited** checkbox, this discount will have no “upper” threshold. Typically, this is the last discount in the definition, e.g. “200 minutes free, then 200 minutes at the normal rate, then 300 minutes with a 10% discount and, if you go beyond that, another 20% discount”. Therefore, in this case the correct sequence of discount thresholds would be 200, 400, 700, Unlimited (see below).

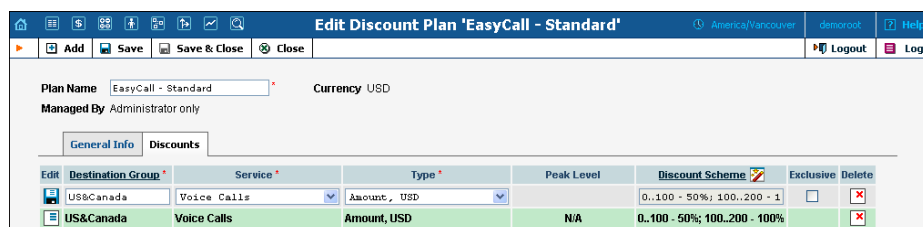




- In the Discount column, enter the actual value of the discount (use 100 to specify free calls). Do not put a %



sign after the number, as this will be appended automatically.

- Check the **Notification** box if you want an e-mail to be sent to the customer or account subscriber when a threshold is crossed. If no e-mail is specified for the subscriber, notification will be sent to the customer to whom the subscriber belongs.
- Click on the  icon on the left end of the row to complete definition of this discount level. Repeat the steps above to define more discount levels.

Click  **Save&Close** in the toolbar in order to return to the Discount Plan screen. You will see that the **Discount Scheme** column is now populated with the discount definition:

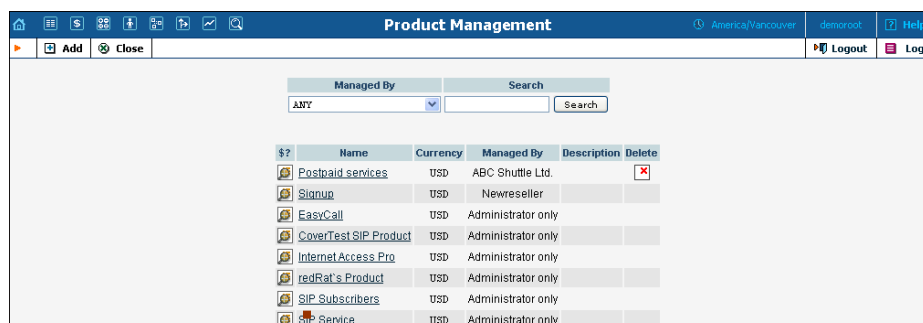











Destination Group *	Service *	Type *	Peak Level	Discount Scheme	Exclusive	Delete
US&Canada	Voice Calls	Amount, USD		0..100 - 50%; 100..200 - 1	<input type="checkbox"/>	
US&Canada	Voice Calls	Amount, USD	N/A	0..100 - 50%; 100..200 - 100%	<input checked="" type="checkbox"/>	

- **Exclusive** – Defines whether an account should be granted exclusive free calls, i.e. calls to which a 100% discount is applied (these calls do not affect the customer's counters). See the [PortaBilling Administrator Guide](#) for more details.
4. Click the  **Save** button in the toolbar or the  icon on the left end of the row to save this discount.
 5. Repeat steps 2-4 above to define more discounts within this discount plan.

Assign a Default Discount Plan to a Product

1. In the **Rating** section of the admin interface, choose **Products**.
2. On the Product Management page, click on the name of your SIP services product.



?	Name	Currency	Managed By	Description	Delete
	Postpaid services	USD	ABC Shuttle Ltd.		
	Signup	USD	Newreseller		
	EasyCall	USD	Administrator only		
	CoverTest SIP Product	USD	Administrator only		
	Internet Access Pro	USD	Administrator only		
	redRat's Product	USD	Administrator only		
	SIP Subscribers	USD	Administrator only		
	SIP Service	USD	Administrator only		

Product Name: SIP Subscribers Currency: USD

Managed By: Administrator only

General Info Maintenance Online Signup Accessibility Subscriptions Service Features Notepad

Breakage: 15 USD

Overdraft Protection: All accounts

Account Default ACL: Account self-care

Default Discount Plan: None


Info URL: None

Description: None

3. In the Default Discount Plan select menu, choose the volume discount plan you have just created.
4. Click **Save&Close**.









Now this discount plan will be applied automatically to all accounts with this product (unless it is manually overridden at the account level – see below).

Override the Discount Plan for an Account (Optional)

1. Go to the **Customers** screen (the one containing a list of customers).
2. Next to the customer name, click the  icon (the one in the **Accounts** column) to enter account management for this customer.
3. Perform an account search and, when the required account is displayed, click on the account ID.
4. On the Account Info page, click on the **Additional Info** tab.

Customer Management

Type: Direct Customers Representative: ANY Search: Search Advanced search

xDRs	Name	Accounts	Currency	Credit Limit	Balance	E-mail	Status	Delete
	Carol Reseller		USD	0.00000	0.00000			
	Aardvoip		USD		0.47000	c@aard		
	Asgard Telecom		USD		0.00000			
	EasyCall Ltd.		USD		0.00000			

Accounts of Retail Customer 'EasyCall Ltd.'

Account ID: Batch: Ctrl #: SIP Status: Show Accounts Advanced search

Accounts of Retail Customer 'EasyCall Ltd.'

Account ID: Batch: Ctrl #: SIP Status: [Advanced search](#)

xDRs	Account ID	Idle, days	Currency	Balance	Credit Limit	Type	Product	Batch	UM	Status	SIP
	12457000910		USD	10.00000		Debit	EasyCall	EasyCall			
	12457000911		USD	7.01000		Debit	EasyCall				
	12457000999		USD	10.00000		Debit	EasyCall	EasyCall			
	132903819783		USD	20.00000		Debit	EasyCall	EasyCall			
	44100000010		USD	0.00000		Credit	EasyCall				
	44100000020		USD	0.00000		Credit	EasyCall				

Account Info / Retail Customer 'EasyCall Ltd.'

Account ID: Product: Balance: 0.00000 USD

Blocked: ☐ User Agent: Contact:

Life Cycle	Subscriptions	Notepad	Service Features
Account Info	Maintenance	User Interface	Subscriber
Aliases	Additional Info	Custom Fields	

IP Phone: IP Phone Port:

E-commerce Enabled: ☒

Discount Plan:

Product default
Product default
None
EasyCall - Standard
INTERNET
Test for refed
New plan
VoiceCalls

5. In the **Discount Plan** select menu, choose the volume discount plan you have just created.
6. Click **Save&Close**.

Assign a Specific Discount Plan to a Customer

1. Go to the **Customers** screen (the one containing a list of customers).
2. Click on the customer name.
3. On the Customer Info page, click on the **Additional Info** tab.

Customer Management

Type: Representative: Search: [Advanced search](#)

xDRs	Name	Accounts	Currency	Credit Limit	Balance	E-mail	Status	Delete
	Carol Reseller		USD	0.00000	0.00000			
	Aardhoia		USD		0.47000	c@ard		
	Asgard Telecom		USD		0.00000			
	EasyCall Ltd.		USD		0.00000			

The screenshot shows the 'Edit Customer' form for 'EasyCall Ltd.'. The form includes fields for Customer Name, Opening Balance, Balance, Type, Customer Class, and various tabs like Taxation, Abbreviated Dialing, Subscriptions, etc. The 'Discount Plan' dropdown is set to 'None', and the 'Subscription Discount Rate' is set to 'EasyCall - Standard'. The 'Billing Period' is set to 'monthly', and the 'Next Billing Date' is '2010-10-01'. The 'Shift Billing Date To' is set to 'YYYY-MM-DD'. The 'Send Statistics' dropdown is set to 'Summary Only', and the 'Invoice Template' is set to 'Invoice'. The 'Send Invoices' dropdown is set to 'Customer class' default. The 'Creation Date' is '2010-09-07 11:05:19'.

4. In the Discount Plan select menu, choose the volume discount plan you have just created.
5. Click **Save&Close**.


Check Current Volume Discount Statistics for an Account

1. Go to the **Customers** screen (the one containing a list of customers).
2. Next to the customer name, click the icon (the one in the **Accounts** column) to enter account management for this customer.
3. Perform an account search and, when the required account is displayed, click on the account ID.
4. On the Account Info page, click on the **Volume Discounts** tab.

The screenshot shows the 'Account Info / Retail Customer' page for 'EasyCall Ltd.'. The 'Volume Discounts' tab is selected. The table below shows the discount statistics for the account.

Destination Group	Service	Peak Level	Threshold	Used	Remaining	Current Discount	Next Discount Level	Discount Info
CZ-Mobile	Voice Calls	N/A	200 USD	0 USD	200 USD	100% (for free)	0% (normal rate)	

5. View the information in the table:
 - **Destination Group** – The destination group this discount applies to.
 - **Peak Level** – The type of peak level this discount applies to (peak, off-peak or 2nd off-peak). In case of **N/A**, no off-peak levels are defined for the destination group in this discount plan, and the same discount applies all the time.
 - **Threshold** – The threshold value of the currently applied discount level.
 - **Used** – The current volume counter (total number of minutes or money spent).

- **Remaining** – The total number of minutes or money remaining at this discount level; after it is used up, the next discount level will be applied.
- **Current Discount** – The currently applied discount percentage.
- **Next Discount Level** – The discount percentage which will be applied after the threshold is crossed.
- **Discount Info** – Click on the  icon to view comprehensive information about all applicable discounts levels.

Click  **Close**.

4. Creating a Service with Multiple Off-Peak Periods

This chapter will show you how to use off-peak periods to create different rates for different times of the day or week, and also how to apply different discounts based on the time period.

In the previous chapter, we defined a product that offered several discount levels for calls to US and Canada without distinguishing between peak and off-peak time. In the example that we use in this chapter, we assume that the goal is to set up a product which will provide calls to US and Canada with:

- 500 free weekend minutes
- 750 free night minutes.

Checklist

Print the following page and use it to check off the operations you have completed while performing system setup according to the instructions in this chapter. Please be sure to perform all of the operations (all of the boxes must be checked), otherwise the service will not work.



The checklist below assumes that you have already configured the basic SIP service according to the instructions provided in the [PortaSwitch Handbook: Residential VoIP and IP Centrex Services](#).

Operation	Done
Initial configuration	
General and network configuration has already been performed according to the instructions in previous chapters.	[]
Basic SIP service configuration has already been performed according to the instructions in previous chapters.	[]
Rating configuration	
Volume discount plan has already been created according to the instructions in previous chapter.	[]
Create first and second off-peak periods in the tariff.	[]
Define different rates for the first and second off-peak periods.	[]
Add off-peak discounts to the volume discount plan.	[]

Create Off-Peak Periods in the Tariff



You have to enable the second off-peak period feature by activating the `MultiOffPeakPeriod` option via the PortaSwitch configuration interface. It is located in the **PortaSwitch/Admin** node, **Tariff** group of the configuration tree. After this option has been enabled, define the second off-peak period via the Off-peak period wizard. For more information on off-peak periods, please refer to the *System Concepts* chapter of **PortaBilling Administrator Guide** (the *Cost-based Billing* section).

Off-peak periods are defined per tariff as shown on the sequence of screenshots in this section. We will define two off-peak periods:

- weekends (from the midnight of Saturday until the midnight of Monday) as the first off-peak period and
 - night hours (from 9pm until 8am) as the second off-peak period.
- In the **Rating** section of the Admin-Index page, choose **Tariffs** and click on Off-Peak Periods. You need to create an off-peak period first, and then assign it to the necessary Tariff.
 - To add a new off-peak period to the system, select **Add** to go to the Off-Peak Periods screen.
 - As we are setting weekends as the first off-peak period, click **Skip** on the first page of the wizard (defining hours). Then select *Weekend* in the **Day of week** box and click **Next**. Click **Skip** on the following two pages defining **Day of month** and **Month**. Select one of the three options depending on when you want the call to start and/or finish. Click **Next**.

Tariff Management							
Applied To				Service	Managed By	Search	
ANY				ANY	ANY	<input type="text" value="Search"/>	
Rates	Name	Currency	Applied To	Service	Managed By	Routing	Delete
	DID supplier costs	USD	Customer	Voice Calls	Administrator only		
	Aardvoip	USD	Customer	Voice Calls	Administrator only		
	Prepaid cards	USD	Customer	Voice Calls			
	SIP Phone Subscribers	USD	Customer	Voice Calls		Yes	
	SIP Subscribers - incoming	USD	Customer	Voice Calls	Administrator only		
	Termination Service	USD	Vendor	Voice Calls		Yes	

Off-Peak Periods				
Name	Description	Managed By	Test Period	Delete
Friday	OFF PEAK 1: From 01:00 until 02:00 any day of any month OTHERWISE PEAK	Administrator only		
Evening off-peak	PERIOD: From 05:00 until 15:00 any day of any month	Administrator only		

Off-Peak Period Definition [?] Help

Save Save & Close Close

Name: Weekend

Managed By: Administrator only

From: 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
 00 05 10 15 20 25 30 35 40 45 50 55
 Until: 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
 00 05 10 15 20 25 30 35 40 45 50 55

Cancel Clear Delete Skip Next >

Off-Peak Period Definition [?] Help

Save Save & Close Close

Name: Weekend

Managed By: Administrator only

Day of week: Sunday Monday Tuesday Wednesday Thursday Friday Saturday **Weekend** Workdays

Cancel Delete Skip Next >

Off-Peak Period Definition [?] Help

Save Save & Close Close

Name: Weekend

Managed By: Administrator only

Day of month: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

OFF PEAK 1:
 Weekend
 01-01-2011-12-31-2011
 OTHERWISE PEAK

#startstopwd(mo su)

Cancel Delete Skip Next >

Off-Peak Period Definition

Name: Weekend

Managed By: Administrator only

Month: January, February, March, April, May, June, July, August, September, October, November, December

OFF PEAK 1:
Weekend
of any month
OTHERWISE PEAK

startstop:wd(aa su)

Cancel Delete Skip Next >

Off-Peak Period Definition

Name: Weekend

Managed By: Administrator only

Month: January, February, March, April, May, June, July, August, September, October, November, December

OFF PEAK 1:
Weekend
of any month
OTHERWISE PEAK

startstop:wd(aa su)

Cancel Delete Skip Next >

4. Now you need to define the second off-peak period (from 9pm until 8am during working days). Press the **Add another period** button.
5. Select **21** and **00** in the **From** columns and **08** and **00** in the **Until** columns, then click **Next**. Click **Skip** on the following three pages. Select one of the three options depending on when you want the call to start and/or finish. Click **Next**.

Off-Peak Period Definition

Name: Weekend

Managed By: Administrator only

Period definition completed.

Month: January, February, March, April, May, June, July, August, September, October, November, December

OFF PEAK 1:
Weekend
of any month
OTHERWISE PEAK

startstop:wd(aa su)

Delete Add another definition to this period Add another period Finish Test Period

Off-Peak Period Definition

Name: Night

Managed By: Administrator only

From: 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Unit: 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

OFF PEAK 1:
Weekend
of any month
OTHERWISE PEAK

startstopwd(ma su)

Cancel Clear Delete Skip Next

Off-Peak Period Definition

Name: Night

Managed By: Administrator only

Day of week: Sunday Monday Tuesday Wednesday Thursday Friday Saturday Weekend Workdays

OFF PEAK 2:
From 21:00 until 08:00
any day of any month
OTHERWISE OFF PEAK 1:
Weekend
of any month
OTHERWISE PEAK

startstopwd(ma su) | hr(21-7)

Cancel Delete Skip Next

Off-Peak Period Definition

Name: Night

Managed By: Administrator only

Day of month: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

OFF PEAK 2:
From 21:00 until 08:00
any day of any month
OTHERWISE OFF PEAK 1:
Weekend
of any month
OTHERWISE PEAK

startstopwd(ma su) | hr(21-7)

Cancel Delete Skip Next

Off-Peak Period Definition

Name: Night

Managed By: Administrator only

Month: January, February, March, April, May, June, July, August, September, October, November, December

OFF PEAK 2:
From 21:00 until 08:00
any day of any month

OTHERWISE OFF PEAK 1:
Weekend
of any month
OTHERWISE PEAK

@startstop:wd(ma su) | hr(21-7)

Cancel Delete Skip Next >

Off-Peak Period Definition

Name: Night

Managed By: Administrator only

Off-peak rate is used if

☐ Session starts during the off-peak period

☐ Session finishes during the off-peak period

☒ Session starts and finishes during the off-peak period

OFF PEAK 2:
From 21:00 until 08:00
any day of any month

OTHERWISE OFF PEAK 1:
Weekend
of any month
OTHERWISE PEAK

@startstop:wd(ma su) | hr(21-7)

Cancel Delete Skip Next >

6. Press **Finish** to finish defining the off-peak periods.

Off-Peak Period Definition

Name: Night

Managed By: Administrator only

Period definition completed.

OFF PEAK 2:
From 21:00 until 08:00
any day of any month

OTHERWISE OFF PEAK 1:
Weekend
of any month
OTHERWISE PEAK

@startstop:wd(ma su) | hr(21-7)

Delete Add another definition to this period Finish Test Period

7. On the Tariff Management page, choose the tariff for which you want to set up the created off-peak period.

Edit Tariff 'SIP Phone Subscribers'

Name: SIP Phone Subscribers * Currency: USD
 Applied To: Customer Service: Voice Calls

General Info | Web Upload & Download | Email Upload | Notepad

Default Off-Peak Period: Night
 Destination Group Set:

8. The off-peak periods are visible in the Default **Off-Peak Period** field.
9. Click **Save&Close**.

Define Rates for Off-Peak Periods



You can define different rates for the off-peak and second off-peak periods on the **Rates** page. Insert prices for the first and second off-peak periods into two adjacent fields (0.007 and 0.006 on the screenshot) next to the fields where you define first and next intervals for the off-peak period:



Also, you need to select the special **pricer** element in the rating formula as price per minute instead of **price_first/price_next**. Click on the Rate formula wizard icon (), then click the **Rating Sequence** tab, select **Interval** in the **Available** box, choose **Unlimited** in the **Count** box, select **Custom** and type in **60** sec. in the **Duration** box and choose **Pricer** in the **Price** box, then click **Include**. The new rating sequence will appear in the **Rating Sequence** box. Click **Save&Close**:

Global | Rating Sequence | Add Duration

Available: Interval, Fixed Surcharge, Relative Surcharge, Call Disconnect

Count: Custom (radio button selected), Unlimited (radio button), until the end of the call (radio button)

Duration: Custom (radio button selected), 60 sec. (text input), First Interval (radio button), Next Interval (radio button)

Price: Custom (radio button selected), CAD (text input), First Price (radio button), Next Price (radio button), Pricer (radio button)

Include Remove

Rate Formula Wizard for '1201 UNITED STATES OF AMERICA'

Save Save & Close Close

Interval, sec.		Price, CAD/min		Off-Peak			
First	Next	First	Next	Interval, sec.		Price, CAD/min	
				First	Next	First	Next
60		0.01200	0.01200	60	60	0.00600	0.00700

Formula: SEQ=60xMxpricer

Global Rating Sequence Add Duration

Available

- Interval
- Fixed Surcharge
- Relative Surcharge
- Call Disconnect

Count

Custom ☒ times

Unlimited ☐ until the end of the call

Duration

Custom ☒ sec.

First Interval ☐

Next Interval ☐

Price

Custom ☒ CAD

First Price ☐

Next Price ☐

Pricer ☐

Include Remove

Rating Sequence

M intervals of 60 seconds, price CAD/min

PortaBilling will then check whether the call fits into the main period; if so, the **pricer** will be set to the **Off-peak price next** value. If the call does not fit into the main off-peak period, then the second off-peak period will be checked; if the call fits into this period, **pricer** will be assigned the **Off-peak price first** value. Otherwise, peak rates are applied, and **pricer** will be populated with the value from **Price_next**.

Define Discounts for Off-Peak Periods

Now we will add different discounts for the off-peak and second off-peak periods to the discount plan created in the previous chapter.

1. In the **Rating** section of the admin interface, choose **Volume Discount Plans**.
2. Click on the discount plan which you want to edit.
3. Click on the **Discounts** tab.
4. Click the **Edit** icon for the discount to which you want to add off-peak discounts:

Edit Discount Plan 'EasyCall - Standard' America/Vancouver demoport Help

Add Save Save & Close Close Logout Log

Plan Name EasyCall - Standard Currency USD

Managed By Administrator only

General Info Discounts

Edit	Destination Group	Service	Type	Peak Level	Discount Scheme	Exclusive	Delete
	Europe	Voice Calls	Amount, USD	N/A	0.5 - 100%; 5.20 - 0%; 20.unlimited - 10%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	US&Canada	Voice Calls	Volume, minute	N/A	0.200 - 100%; 200.400 - 0%; 400.700 - 10%; 700.unlimited - 20%	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Edit Discount Plan 'EasyCall - Standard'

Plan Name: EasyCall - Standard Currency: USD
Managed By: Administrator only

General Info Discounts

Edit	Destination Group *	Service *	Type *	Peak Level	Discount Scheme	Exclusive	Delete
	US&Canada	Voice Calls	Volume, minute		0..200 - 100%; 200..400 - 0%; 400..700 - 1	<input type="checkbox"/>	
	Europe	Voice Calls	Amount, USD	N/A	0.5 - 100%; 5.20 - 0%; 20..unlimited - 10%	<input type="checkbox"/>	
	US&Canada	Voice Calls	Volume, minute	N/A	0..200 - 100%; 200..400 - 0%; 400..700 - 10%; 700..unlimited - 20%	<input type="checkbox"/>	

Discount Wizard

Peak Period Off-Peak Period 2nd Off-Peak Period

☐ Use the same discount scheme as for the peak period

Edit	Threshold, minute *	Discount, % *	Notification	Delete
	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	

Discount Wizard

Peak Period Off-Peak Period 2nd Off-Peak Period

☐ Use the same discount scheme as for the peak period

Edit	Threshold, minute *	Discount, % *	Notification	Delete
	500	100	<input checked="" type="checkbox"/>	

Discount Wizard

Peak Period Off-Peak Period 2nd Off-Peak Period

☐ Use the same discount scheme as for the off-peak period

Edit	Threshold, minute *	Discount, % *	Notification	Delete
	500	100	Yes	

- Click the icon in the toolbar to invoke the discount definition wizard. There are three tabs where you can define three different discounts for the peak, off-peak, and second off-peak periods.
- Click the **Off-peak Period** tab and uncheck the box reading **Use the same discount scheme as for the peak period**.
- Press **Add** to add a new discount level threshold. Define the threshold in the same way as was explained in the section *Define Discounts within Volume Discount Plan* above.
- Click on the icon on the left end of the row to complete definition of this discount level.

Discount Wizard

Peak Period Off-Peak Period 2nd Off-Peak Period

☐ Use the same discount scheme as for the off-peak period

Edit	Threshold, minute *	Discount, % *	Notification	Delete
	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	

Discount Wizard

☐ Use the same discount scheme as for the off-peak period

Edit	Threshold, minute *	Discount, % *	Notification	Delete
	750	<input type="checkbox"/> Unlimited	100	<input checked="" type="checkbox"/>

Discount Wizard

☐ Use the same discount scheme as for the off-peak period

Edit	Threshold, minute *	Discount, % *	Notification	Delete
	750	<input type="checkbox"/> Unlimited	100	<input checked="" type="checkbox"/>

Edit Discount Plan 'EasyCall - Standard'

Plan Name: EasyCall - Standard Currency: USD

Managed By: Administrator only

General Info Discounts

Edit	Destination Group *	Service *	Type *	Peak Level	Discount Scheme	Exclusive	Delete
	US&Canada	Voice Calls	Volume, minute	N/A	0..200 - 100%; 200..400 - 0%; 400..700 - 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Europe	Voice Calls	Amount, USD	N/A	0.5 - 100%; 5..20 - 0%; 20..unlimited - 10%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	US&Canada	Voice Calls	Volume, minute	N/A	0..200 - 100%; 200..400 - 0%; 400..700 - 10%; 700..unlimited - 20%	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Edit Discount Plan 'EasyCall - Standard'

Plan Name: EasyCall - Standard Currency: USD

Managed By: Administrator only

General Info Discounts

Edit	Destination Group *	Service *	Type *	Peak Level	Discount Scheme	Exclusive	Delete
	Europe	Voice Calls	Amount, USD	N/A	0.5 - 100%; 5..20 - 0%; 20..unlimited - 10%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	US&Canada	Voice Calls	Volume, minute	Peak	0..200 - 100%; 200..400 - 0%; 400..700 - 10%; 700..unlimited - 20%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			Off-Peak	0..500 - 100%			
			2nd Off-Peak	0..250 - 100%			

- Click the **2nd Off-peak Period** tab and uncheck the box reading **Use the same discount scheme as for the off-peak period**.
- Press **Add** to add a new discount level threshold. Define the threshold in the same way as was explained in the section *Creating a Service with Discount Plans* above.
- Click on the icon on the left end of the row to complete definition of this discount level.
- Click **Save&Close** in the toolbar in order to return to the Discount Plan screen.
- Click the **Save** button in the toolbar to save this discount.