



# PortaSwitch



# New Features Guide

Maintenance  
Release

49



Documentation

## Copyright Notice & Disclaimers

Copyright © 2000–2015 PortaOne, Inc. All rights reserved

**PortaSwitch® New Features Guide, July 2015**  
**Maintenance Release 49**  
**V1.49.08**

Please address your comments and suggestions to: Sales Department,  
PortaOne, Inc. Suite #408, 2963 Glen Drive, Coquitlam BC V3B 2P7  
Canada.

Changes may be made periodically to the information in this publication. The changes will be incorporated in new editions of the guide. The software described in this document is furnished under a license agreement, and may be used or copied only in accordance with the terms thereof. It is against the law to copy the software on any other medium, except as specifically provided for in the license agreement. The licensee may make one copy of the software for backup purposes. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopied, recorded or otherwise, without the prior written permission of PortaOne Inc.

The software license and limited warranty for the accompanying products are set forth in the information packet supplied with the product, and are incorporated herein by this reference. If you cannot locate the software license, contact your PortaOne representative for a copy.

All product names mentioned in this manual are for identification purposes only, and are either trademarks or registered trademarks of their respective owners.

## Table of Contents

Preface .....	4
Life Cycle for Add-On Products .....	5
Frozen DID Numbers and the DID Pool.....	6
DID Provisioning for Resellers .....	7
Completely Free of Charge DID Numbers.....	8
Extended Call Forwarding Management for End Users.....	10
Calls per Second Control.....	11
Prepay Plan Self-management .....	12
Customer Statement Advanced Report.....	13
Auto-provisioning for New Models of IP Phones .....	14
Other Features and Enhancements .....	14
Web Interface Changes .....	24
Important Upgrade Notes .....	28

## Preface

PortaSwitch® Maintenance Release 49 is the next leap-forward release, consistent with our “fast releases, precisely on time” ideology.

### Where to get the latest version of this guide

The hard copy of this guide is updated upon major releases only and does not always contain the latest material on enhancements introduced between major 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/](http://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 actions that must be taken for proper configuration.

**NOTE:** Notes contain additional information to supplement or accentuate important points in the text.



**Timesaver** means that you can save time by performing the action described here.



**Archivist** explains how the feature worked in previous releases.



**Gear** points out that this feature must be enabled on the Configuration server.



**Tips** provide information that might help you solve a problem.

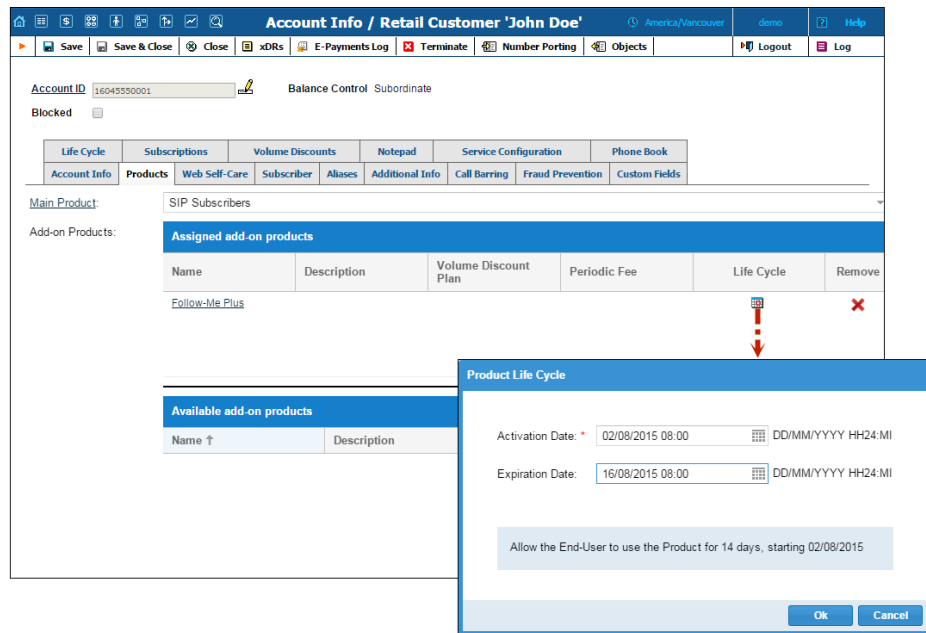
## Trademarks and Copyrights

PortaBilling®, PortaSIP® and PortaSwitch® are registered trademarks of PortaOne, Inc.

## Life Cycle for Add-On Products

With this release, a PortaBilling® administrator can schedule the activation and expiration dates for add-on products. Thus, end users can order value-added services in advance and start using them whenever required. This enhancement makes your add-on product’s services more flexible and attractive and can lead to an increase in revenue.

The administrator specifies the **Activation Date** and **Expiration Date** on the **Products** tab when assigning the add-on product to the account. If the life cycle is not specified, the services are immediately activated without an expiration date. Note that the expiration date can be specified later.



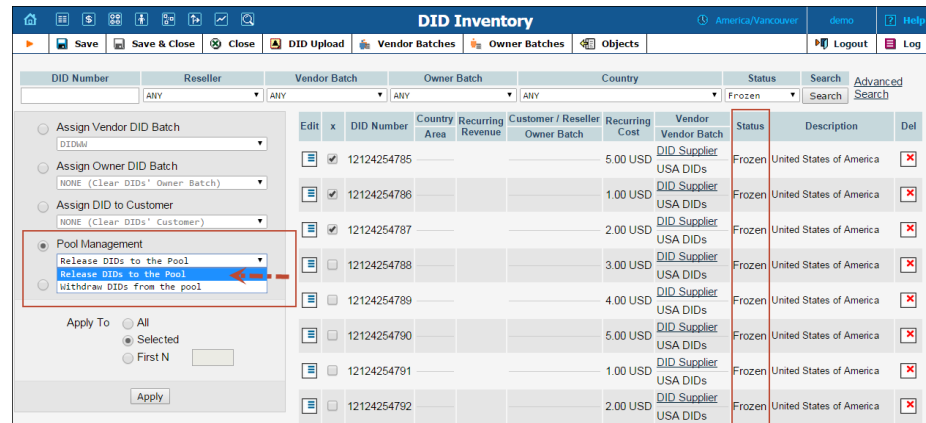
Consider the following example:

John Doe is a customer of the EasyCall ITSP in Canada. John is going to spend his vacation at his cottage in the US, so he wants all calls to be forwarded to his US number. John calls the EasyCall helpdesk on July 20<sup>th</sup> and asks to activate the forwarding service for 2 weeks – from August 2<sup>nd</sup> till August 16<sup>th</sup>. The helpdesk operator assigns the **Follow-Me Plus** add-on product to John’s account and configures the service life cycle. On August 2<sup>nd</sup> the service is activated and the charge is applied for the exact requested term.

## Frozen DID Numbers and the DID Pool

It may be that you do not want to immediately provision DID numbers acquired from a DID provider (e.g. you plan to release a new product next month and therefore need to keep the DIDs until then). In this case you need to prevent the DID numbers from being used by your customers and resellers.

In order to keep the DIDs unavailable for usage, they are uploaded to the DID inventory under the new **Frozen** status. When frozen, DIDs are displayed on the administrator's DID inventory page only.



DID Number	Reseller	Vendor Batch	Owner Batch	Country	Status	Description	Del
12124254785				USA	Frozen	United States of America	X
12124254786				USA	Frozen	United States of America	X
12124254787				USA	Frozen	United States of America	X
12124254788				USA	Frozen	United States of America	X
12124254789				USA	Frozen	United States of America	X
12124254790				USA	Frozen	United States of America	X
12124254791				USA	Frozen	United States of America	X
12124254792				USA	Frozen	United States of America	X

To allow resellers to provision DID numbers, the administrator simply releases them to the pool of available DIDs.

The DID pool is the tool that allows you to control the DID numbers that will be provisioned by your resellers. It contains the numbers that are:

- not frozen,
- not assigned to owner batches, and
- not assigned to customers or resellers.



In order to retrieve DID numbers from the pool, resellers must have owner batches with the DID markup assigned to them.

Consider the following example:

You are releasing a new product in two weeks – the IP Centrex solution for your corporate customers. For this you have acquired the following range of DID numbers: 12045556500 – 12045556599. You must be sure that these DID numbers remain reserved for provisioning until the product is released. Therefore you keep them frozen in the DID inventory.

When the product is released, you unfreeze the DID numbers by assigning them to respective owner batches.

Or, if you want your resellers to provision DIDs along with the new product, release some of these DIDs to the DID pool.

Thus, this frozen DID Number functionality and the introduction of the DID pool make DID provisioning more flexible and effective.

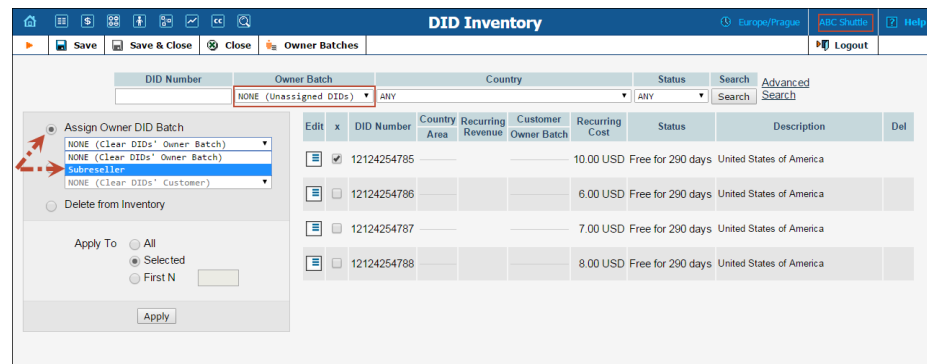
## DID Provisioning for Resellers

As mentioned above, the administrator defines the number of DIDs for resellers' use by managing the DID pool. Therefore, resellers are no longer limited by the number of DID numbers manually assigned to them by the administrator. Instead, by assigning these numbers to their owner batches and then to their subcustomers, resellers provision as many numbers as they need from the DID pool.

Consider the following example:

Reseller ABC Shuttle needs 20 DIDs for a corporate customer. Instead of asking the administrator for these numbers and waiting for their assignment, the reseller does the following:

- Goes to the DID inventory page and creates an owner DID batch.
- Selects **Unassigned DIDs** from the **Owner Batch** list on the search bar.
- Selects the country and the amount of required DIDs.
- Assigns them to the owner DID batch and then to the required customer.



Thus, re-designed DID provisioning for resellers reduces the load on your administrators and boosts your sales.

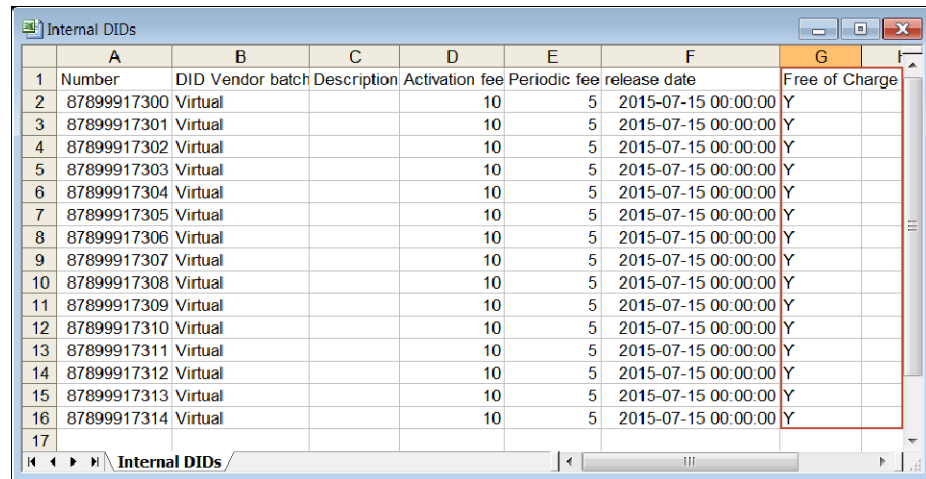
## Completely Free of Charge DID Numbers

When you provide virtual DID numbers for internal use (e.g. for SIP calls among accounts within your network), you still want to see which of them are in use and which are available. The best way to do this is by using the DID inventory. However, since these DIDs are virtual, they are, as a rule, provisioned free of charge and incur no charges to customers. Therefore, it is desirable to manage such DID numbers differently.

With this release the concept of *completely free of charge* DID has been introduced. These are the DID numbers that have no costs or charges associated with them and are therefore free of charge for every entity they are provisioned to.

To operate with completely free DID numbers, they must be uploaded to DID inventory. For this, do the following:

1. Add the additional **Free of Charge** column to the .csv file with the list of DID numbers and type **Y** next to the required DIDs. If any activation and recurring fees are defined for DID numbers, they will be ignored during the DID upload.



	A	B	C	D	E	F	G	H
1	Number	DID Vendor batch	Description	Activation fee	Periodic fee	release date	Free of Charge	
2	87899917300	Virtual		10	5	2015-07-15 00:00:00	Y	
3	87899917301	Virtual		10	5	2015-07-15 00:00:00	Y	
4	87899917302	Virtual		10	5	2015-07-15 00:00:00	Y	
5	87899917303	Virtual		10	5	2015-07-15 00:00:00	Y	
6	87899917304	Virtual		10	5	2015-07-15 00:00:00	Y	
7	87899917305	Virtual		10	5	2015-07-15 00:00:00	Y	
8	87899917306	Virtual		10	5	2015-07-15 00:00:00	Y	
9	87899917307	Virtual		10	5	2015-07-15 00:00:00	Y	
10	87899917308	Virtual		10	5	2015-07-15 00:00:00	Y	
11	87899917309	Virtual		10	5	2015-07-15 00:00:00	Y	
12	87899917310	Virtual		10	5	2015-07-15 00:00:00	Y	
13	87899917311	Virtual		10	5	2015-07-15 00:00:00	Y	
14	87899917312	Virtual		10	5	2015-07-15 00:00:00	Y	
15	87899917313	Virtual		10	5	2015-07-15 00:00:00	Y	
16	87899917314	Virtual		10	5	2015-07-15 00:00:00	Y	
17								

2. Upload the DID numbers to the DID inventory.
3. Upon upload, recurring costs will not be displayed for marked DID numbers.



DID Number	Reseller	Vendor Batch	Owner Batch	Country	Status	Description	Del
87899917300	Virtual				Frozen	Virtual	X
87899917301	Virtual				Frozen	Virtual	X
87899917302	Virtual				Frozen	Virtual	X
87899917303	Virtual				Frozen	Virtual	X
87899917304	Virtual				Frozen	Virtual	X
87899917305	Virtual				Frozen	Virtual	X
87899917306	Virtual				Frozen	Virtual	X
87899917307	Virtual				Frozen	Virtual	X
87899917308	Virtual				Frozen	Virtual	X
87899917309	Virtual				Frozen	Virtual	X
87899917310	Virtual				Frozen	Virtual	X

When an administrator assigns a completely free DID number to an owner batch and then provisions the DID number to a customer, no charges apply.

Since there are no recurring costs associated with the DID number, the vendor is not billed either. Thus, both customer and vendor balances remain unchanged since no xDRs are created in the database.

Consider the following example:

You operate with thousands of end users. The services you provide allow end users to make and receive calls within your network. Since end users are not available from outside of your network, they do not require geographic DID numbers. However, to identify them within your network, you provision them virtual DID numbers. For this, you use the pool of virtual DID numbers 87899800000-87899989999.

Since these are your own internal numbers, you bear no costs and apply no charges to customers for their usage. Therefore you have them as completely free of charge in the DID inventory.

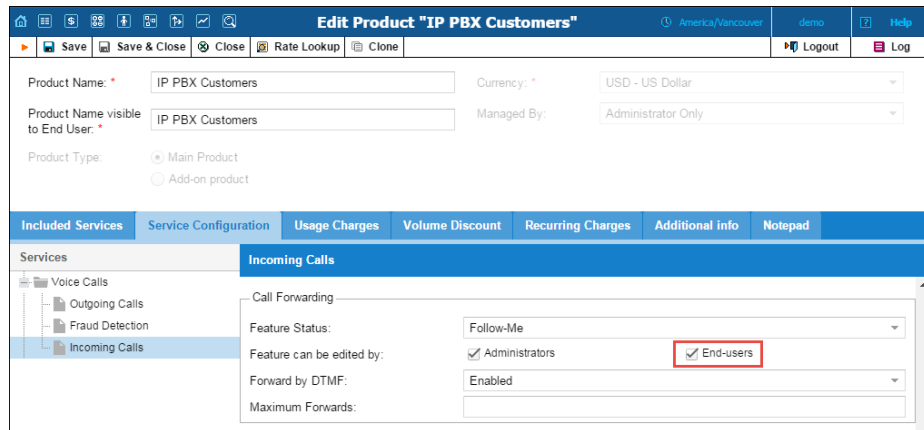
When a customer signs up for a product directly or via a reseller, no costs for DID provisioning apply to him or her.

Thus, with completely free of charge DIDs you perform simplified management of internal DID numbers.

# Extended Call Forwarding Management for End Users

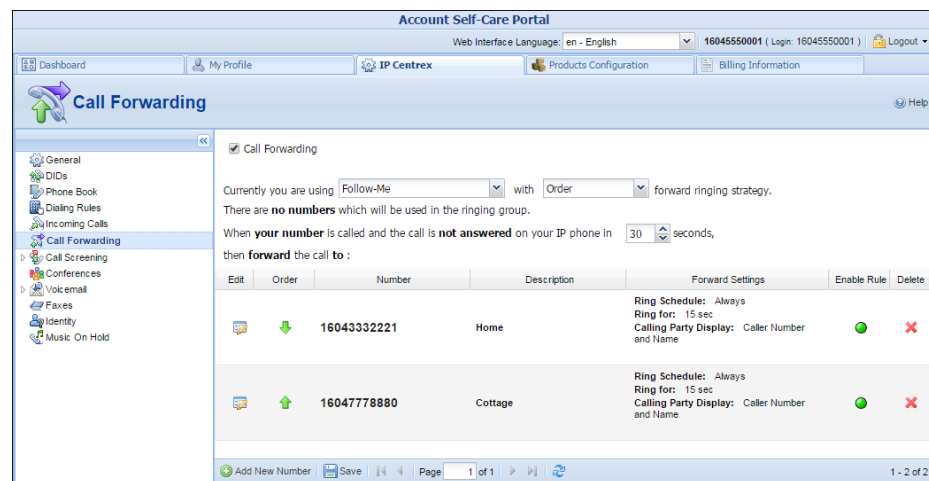
With this release end users are authorized to enable / disable call forwarding and select a forwarding mode via their self-care interfaces. This makes call forwarding configuration more convenient for your end users and consequently attracts them to use this service. Moreover, the work load on an administrator decreases considerably.

To enable your end users to manage call forwarding, give them the rights to edit this feature in the Product (the **End-users** check box is selected).



When an administrator authorizes end users to manage call forwarding, end users can:

- Enable / disable a call forwarding service.
- Select and configure a call forwarding mode (**Follow-Me, Advanced Forwarding, Forward to SIP URI or Simple Forwarding**).



If you want your end user to only use a single forwarding mode, select the required forwarding mode either on the product or on the account level and unselect the **End-users** check box. Now the end user can adjust their selected forwarding mode, but cannot select a different one.

If you want to completely disable call forwarding services for your end users and make it invisible on the account self-care interfaces, unselect the **End-users** check box and disable call forwarding on the product or account levels.

Extended call forwarding management gives your end users the opportunity to add, change and delete numbers for all call forwarding modes. This can be done any time that end users need and without an administrator's involvement. This therefore simplifies service usage for end users and account configuration for administrators.

## Calls per Second Control

Many ITSPs try to prevent situations in which heavy traffic overloads various components of the VoIP network (for example, because of call centers with auto-dialer software).

To control the amount of traffic that passes through the VoIP network, PortaSwitch® allows the enforcement of the calls per second (CPS) limitation. With the CPS limitation functionality you can restrict the number of dialing attempts that can be made by an endpoint (e.g. a call center PBX) each second. For example, the allowed rate for a call center PBX is defined as 10 CPS. It's possible that at some moment, the call center will send 100 calls per second. As a result, only 10 call initiation requests per second can be processed further, and therefore the other 90 are rejected.

Since the CPS limitation relies on the Limit Controller component – a part of the PortaSIP® cluster solution, this offers another advantage to upgrading to PortaSIP® cluster from the classic PortaSIP®.

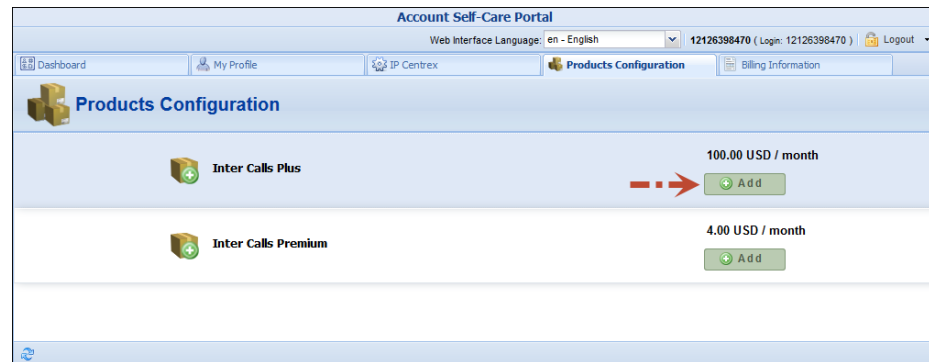
With CPS limitation functionality, ITSPs can effectively control the amount of traffic that passes through their VoIP network and sell the CPS quotas as a value-added service (i.e. customers who want higher CPS quotas will have to pay for this), thus boosting their sales revenue.


## Prepay Plan Self-management

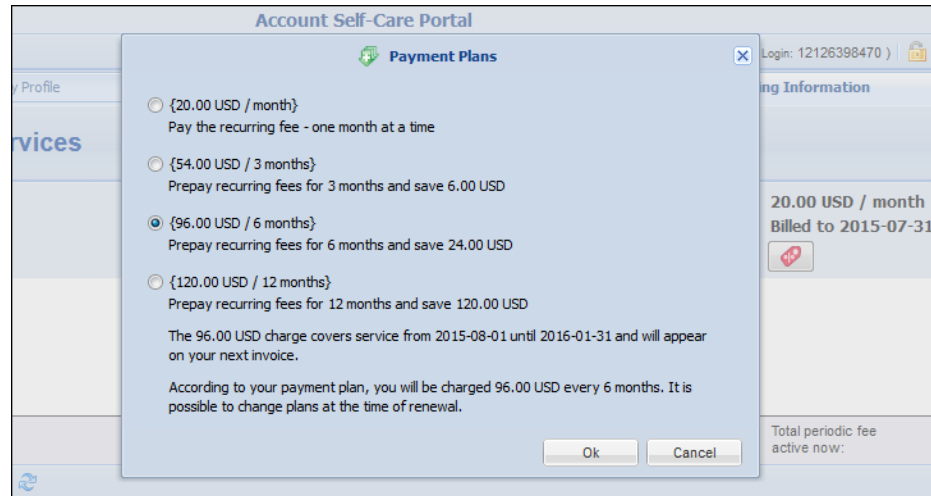
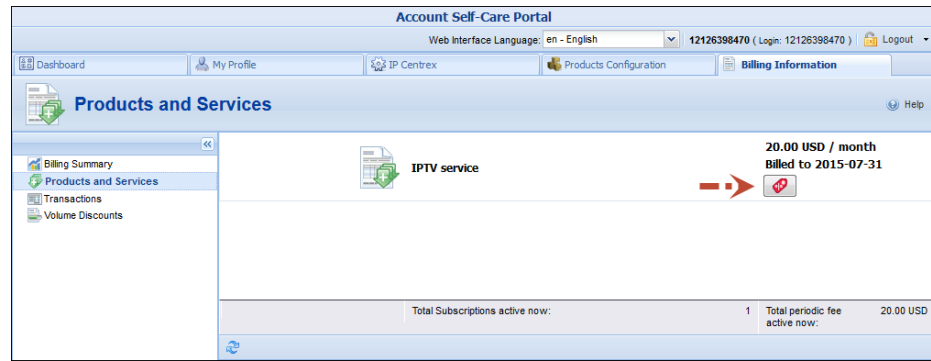
Starting with this release, end users can choose a prepay plan for subscriptions charged in advance or change the selected plan all by themselves.

This is done as follows:

- Selecting a prepay plan. When an end user signs up for a service via an add-on product which comes with bulk discounts, a dialog box opens that lists all of the available prepay plans. The end user selects the plan which best fits his needs.



- Changing a selected prepay plan. On the **Products and Services** page, an end user clicks the  **Discount** icon. A dialog box opens that lists all of the available prepay plans for the selected subscription. The end user selects his new prepay plan. Note that these changes will only take effect when the current prepay plan is over.



These enhancements allow end users to select a desired prepay plan for subscriptions charged in advance as well as change the selected plan later on. As all actions are performed without needing to involve an administrator, the administrator's workload is significantly reduced.

## Customer Statement Advanced Report

We have introduced a new report that reflects changes in a customer's balance for a given time period. It shows all transactions that influence customer balance (xDRs created for a customer), thus allowing you to trace balance changes.

The output data reflects the transactions sorted chronologically; balance totals are calculated as amount net (with no taxes considered), total taxes and amount due (the sum of the previous balance, amount net and total taxes).

Report results for "Easy Call report", "2015-06-26 10:49:45"

Close Download Objects

Report Type: Customer Statement Advanced  
 Currency: USD  
 Timezone: Europe/Prague  
 Input Values: Service as tax Customer From To  
 Credits / Adjustments EasyCall 2015-03-26 09:49:45 2015-06-26 10:49:46

Description  
 Prints out a list of changes of customer's balance for a given time interval  
 Input Parameters:  
 Service as tax, Customer, From, To  
 Output Fields:  
 #, Date, Description, Amount, Balance  
 Default ordering:  
 #, Date, Description, Amount, Balance

#	Date	Description	Amount	Balance
1	30-04-2015	Subscription Fee	100.00	2,839.19
2	31-05-2015	Subscription Fee	100.00	2,739.19
3	25-06-2015	CONFERENCE	-10.00	2,729.19
<b>Subtotal</b>			<b>Previous Balance</b>	<b>2,539.19</b>
<b>Subtotal</b>			<b>Total without tax</b>	<b>2,729.19</b>
<b>Subtotal</b>			<b>Tax</b>	<b>0.00</b>
<b>Subtotal</b>			<b>Total</b>	<b>2,729.19</b>
<b>Total</b>			<b>Amount Due</b>	<b>5,268.38</b>

Thus, the Customer Statement Advanced report provides a detailed analysis of balance changes and money flow for your customers. It can serve as an additional tool for your accounting department.

## Auto-provisioning for New Models of IP Phones

The list of IP phones that are auto-provisioned by PortaSwitch® has been extended to include the following phones:

- Yealink SIP-T21P E2
- Yealink SIP-T23G
- Yealink SIP-T23P
- Yealink SIP-T27P
- Yealink SIP-T29G
- Yealink CP860

## Other Features and Enhancements

- **Enhanced representation of DID costs and revenue for administrators and resellers** – With this release, administrators and resellers see their own DID costs and revenue on their DID inventory page. Thus, an administrator sees the outstanding costs owed to a DID provider as well as the revenue gained from DID provisioning to customers and resellers.

Did Number	Reseller	Vendor Batch	Owner Batch	Country	Status	Search	Advanced Search
ABC Shuttle	ANY	ANY	ANY	ANY	ANY	Search	Advanced Search

Edit	x	DID Number	Country Area	Recurring Revenue	Customer / Reseller Owner Batch	Recurring Cost	Vendor Vendor Batch	Status	Description	Del
<input type="checkbox"/>	<input type="checkbox"/>	12124254781		6.00 USD	ABC Shuttle Reseller	1.00 USD	DID Supplier USA DIDs	Free for 283 days	United States of America	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	17781225506		5.99 USD	ABC Shuttle Reseller	0.99 USD	DID Supplier Incoming Canada	Free for 192 days	Canada	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	17781225507		5.99 USD	ABC Shuttle Reseller	0.99 USD	DID Supplier Incoming Canada	Free for 192 days	Canada	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	17781225508		5.99 USD	ABC Shuttle Reseller	0.99 USD	DID Supplier Incoming Canada	Free for 192 days	Canada	<input type="checkbox"/>

The reseller DID inventory likewise reflects actual costs that a reseller owes to an administrator as well as revenue the reseller gains for DID provisioning to subcustomers. The reseller's costs are calculated as the sum of administrative costs plus the markup defined within an owner batch assigned to a reseller.

- **Time synchronization enhancement** – The PortaSwitch® servers can now synchronize time information with their own local servers. This insures the most accurate time for servers that might not have an Internet connection because of firewall settings or for other reasons.

PortaSwitch® servers can synchronize the time with the following local servers:

- the configuration server, and
- the PortaSIP® Switching server.

This enhancement ensures correct and accurate time representation for all PortaSwitch® servers.

- **The account self-care IVR application is now fully supported by the New Media Server** – Starting with this release a forwarding settings menu is available. As in the past, end users can also check their voicemail, account balances and manage their numbers and preferences by using the account self-care IVR application.
- **The callback engine operates only on the PortaSIP® Media server** – With this release, the support of the Cisco gateway-based callback engine has been discontinued. Now only the PortaSIP® Media server callback engine will process requests received from callback triggers. This simplifies service management and flow since all callback components are now part of PortaSwitch®.

Since the PortaSIP® Media server callback engine does not use callback-related options such as “Callback Engine” and “Callback Engine Host” during call processing, these options are left on the web interface for backward compatibility only. They are marked “deprecated” and will be removed from the web interface in a future release.

- **All callback triggers are now supported by the New Media Server** – An end user can inform the system of his desire to make a callback call in one of a variety of available ways – by using ANI, DNIS, PIN, SMS, Web or Email callback triggers.
- **Overdraft Protection is now applied to all account types by default** – This is important for every business in order to avoid overdrafts. Therefore, overdraft protection is now applied to all account types by default.

To simplify the web interface layout, overdraft protection now has a check box. As before, further configuration is performed in the **Advanced Configuration** dialog box.

For backward compatibility and if it was already configured for existing products, the **Debit accounts only** option is retained after a software upgrade.

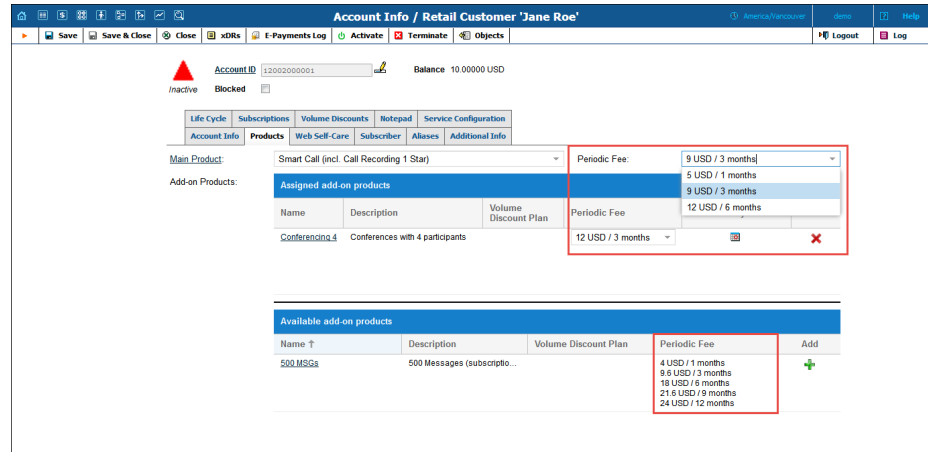
This enhancement adds security to your service provisioning.

- **Choose a payment plan for a subscription when you assign a product** – If a product includes a subscription with several payment plans (e.g. “1-month pre-paid subscription costs \$5, but 3-month pre-paid subscription costs \$9, and 6-month pre-paid



subscription costs \$12”), you can choose which payment plan to apply when you assign the product to the account. To do this, select the required payment plan in the **Periodic Fee** list.

This ensures that the subscription will be charged as desired.



- **Limit the length of call queues** – On the new Media Server you can limit the length of call queues. This will help avoid situations where, due to high call volume, one call queue alone consumes all of the Media Server capacity, or the wait time simply grows too long.

Use the **Maximum number of incoming calls on hold** option to define how many calls can be queued.

If a call queue doesn't have this option specified and you are going to start using the new Media Server, no limitation will apply to the number of calls that can be placed in the queue until you directly set it.

**NOTE:** The **Maximum number of outgoing calls to agents** option is used only by the previous generation Media Server and will become obsolete in the future. However, this option is currently mandatory for call queues being used on both previous generation and new Media Servers – this is done for backward compatibility. (This option defines the maximum number of calls that all agents can process simultaneously. You can think of it as a number of agents that answer calls arriving to the call queue, e.g. if you have 5 agents answering calls made to Sales, they process a maximum of 5 calls simultaneously).

The screenshot shows the 'Call Queue Edit' interface in the Customer Self-Care Portal. The top navigation bar includes 'Dashboard', 'My Profile', 'IP Centrex', 'Billing Information', and 'Trouble Tickets'. The left sidebar lists various system components, with 'Call Queues' highlighted. The main content area contains several configuration fields: a dropdown for 'Huntgroup' set to 'Sales', text input fields for 'Maximum number of outgoing calls to agents' (10), 'Maximum number of incoming calls on hold' (50), and 'Average handle time, minutes' (5). There are also checkboxes for 'Announce number of callers ahead' and 'Announce estimated wait time', both of which are checked. A 'Music on Hold' section includes a file selector showing 'Music on Hold 1.mp3' and a 'Browse...' button. At the bottom, there are 'Save' and 'Back' buttons.

- **Polish version of self-care interfaces** – We have now added the Polish language to the customer and account self-care interfaces. The translation has been provided and will be further maintained by the PortaOne customer community. We encourage PortaOne customers to make translations into other languages as we've witnessed that this kind of localization approach is very effective.

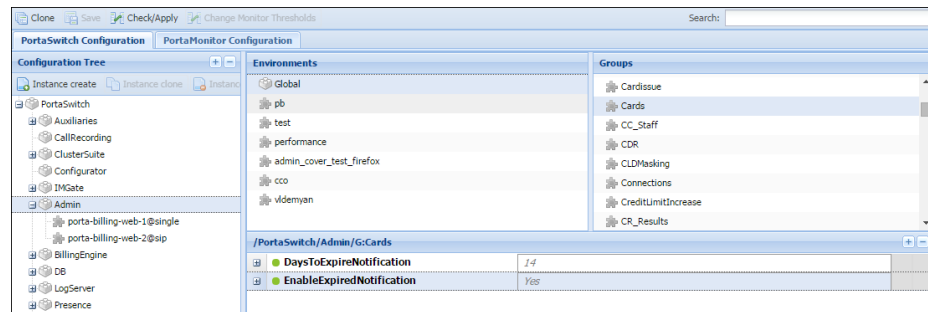
**NOTE: Billing Summary and Payment Info tabs in the Billing Information section were not translated into Polish language. If you need them in Polish, please send us the translation and we will add it to the following release.**

- **Number porting completion notification** – End users who requested a number from another telecom are now notified when number porting is complete. Notifications are sent by email and / or SMS. A PortaBilling® administrator can edit the text of the notifications on the **Customer Class** page. With these notifications your end users are quickly informed about when your telecom starts handling their calls.
- **Notification about a customer's credit card expiration** – You can notify your customers by SMS and / or email if their credit card is about to expire. This benefits both of you since it gives your customer time to update their credit card information so they can pay for services on time.



The PortaBilling® administrator defines the time for this notification in the **DaysToExpireNotification** field on the configuration server web interface. By default, customers are notified 14 days prior to credit card expiration.

**NOTE:** The credit card expiration date is specified as a month and a year (no exact day). PortaBilling® considers the exact expiration date to be the last day of the specified month. Consider this when you adjust the **DaysToExpireNotification** field.



The next time that our system notifies the customer by SMS and / or email that a credit card has already expired is when the expiration date has passed and the credit card information has not been updated.

**NOTE:** Notifications are only sent if you use non-tokenized payments, i.e. credit card data is stored in PortaSwitch®.

The default text of the SMS and email notifications can be edited on the Customer Class page. If you do not want to notify your customers regarding credit card expiration, disable the **EnableExpiredNotification** option on the configuration server which is enabled by default.

- Automated update of the SMS / MMS routing database for ported numbers** – PortaBilling® can now notify NetNumber when a port-in or port-out request is completed. North American telecoms use the NetNumber database for accurate SMS and MMS routing via North American MVNOs. To do this, PortaBilling® sends a file that contains ported phone numbers to NetNumber and informs them whether these numbers were ported-in or ported-out. Upon receiving a notification, NetNumber updates a corresponding number configuration in their database. This enables the efficient and accurate routing of SMS and MMS messages within the North American market thereby reducing message delivery costs.
- A new Huawei UGW9811 node has been added** – It enables a PortaBilling® adapter module that uses a set of Huawei RADIUS VSAs (Vendor-Specific Attributes). The Huawei UGW9811 gateway can function as a gateway GPRS support node (GGSN), a serving gateway (S-GW), or a PDN gateway (P-GW).

- Credit limit history** – The **Credit Limit History** table that shows changes made to the customer’s credit limit (e.g. increases, decreases, temporary increases, etc.) is now located on the **Balance & Credits** tab. This information will help you to decide how high this customer’s credit limit should be, select an appropriate term for the temporary credit increase, etc.

The screenshot shows the 'Edit Customer' interface for 'EasyCall Ltd.'. The 'Balance & Credits' tab is active. The 'Credit Limit History' table is highlighted with a red box and contains the following data:

Previous Credit Limit, USD	Current Credit Limit, USD	Valid Until	User	Timestamp	Comment
-	1000.00000	not limited by Date	demo	2015-07-14 05:05:20	Credit Limit set
1200.00000	-	not limited by Date	demo	2015-07-14 05:05:00	Credit Limit deleted
1100.00000	1200.00000	2015-07-15 00:00:00	demo	2015-07-14 04:57:20	Credit Limit increased
1000.00000	1100.00000	2015-07-15 00:00:00	demo	2015-07-14 04:54:16	Credit Limit temporarily increased

- Cloning custom reports** – Administrators and resellers can now create a new custom report as a clone of an existing one. The cloned report inherits all of the parameters from the original report and can also be modified later on as desired.

The screenshot shows the 'Edit Custom Report' interface for 'Cost/Revenue report'. The 'Clone' button is highlighted in the top toolbar. The 'Description' field contains the following text:

Cost / revenue statistics for corporate customers.

The 'Description' field on the right contains the following text:

Typically used to find each customer traffic through vendors per destination, ASR, ALOC and cost for any period of time

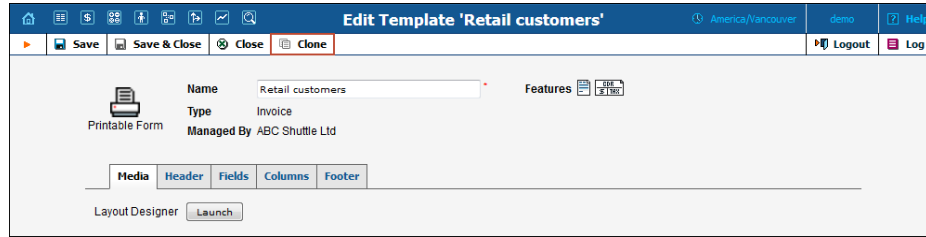
Input Parameters:  
Service, Customer Class, Customer, From, To

Output Fields:  
Service, Customer Class, Customer Name, Customer Registration, Destination, Country, Destination Description, Vendor Name, All Transactions, Successful Transactions, Used Quantity, Unit, Cost, Revenue, Gross Margin, Currency, ASR, ALOC

Default ordering:  
Customer Class, Customer Name, Destination, Service, Customer Registration

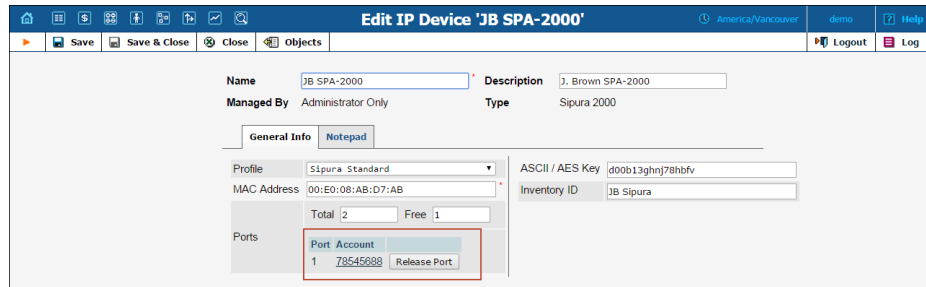
- Cloning templates** – The ability to clone templates (invoice and tariff download templates for administrators and invoice templates for resellers) has been made available with this release. Cloned

templates inherit all of the parameters from the original templates and can then be customized as desired.



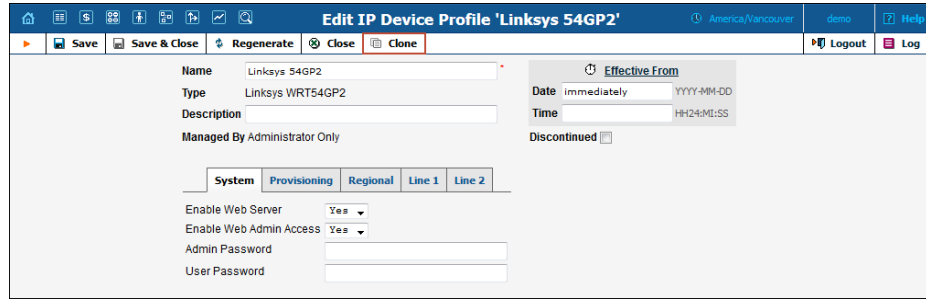
- **The list of assigned accounts for an IP device** – The **IP device** page has been enhanced and shows the list of accounts assigned to IP device ports (phone lines). You no longer need to perform an account search to find the account that the required IP device has been provisioned to – all information is available on a single page.

The **Release Port** option makes it possible to release the IP device’s port from the account it is currently assigned to with a single mouse click.

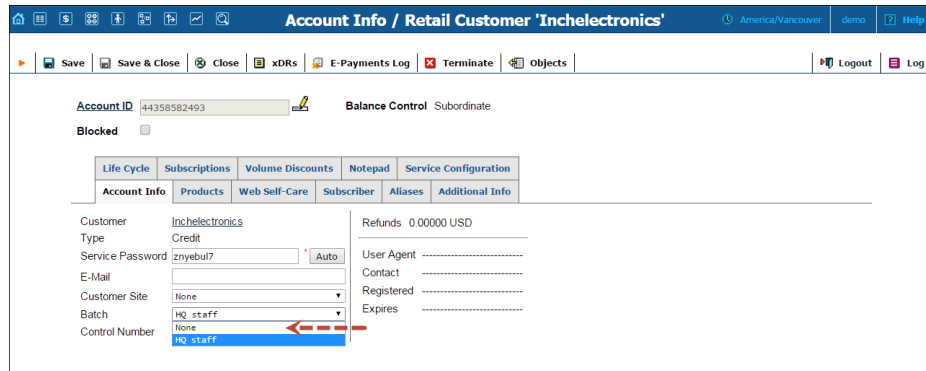


This simplifies the IP device management process significantly and decreases the administrative load.

- **Cloning IP device profiles** – IP device profiles that allow the auto-provisioning of a large number of IP phones without having to configure each unit individually can now be cloned by administrators and resellers. Cloned IP profiles inherit all of the parameters from the original IP profiles and can then be customized as desired.

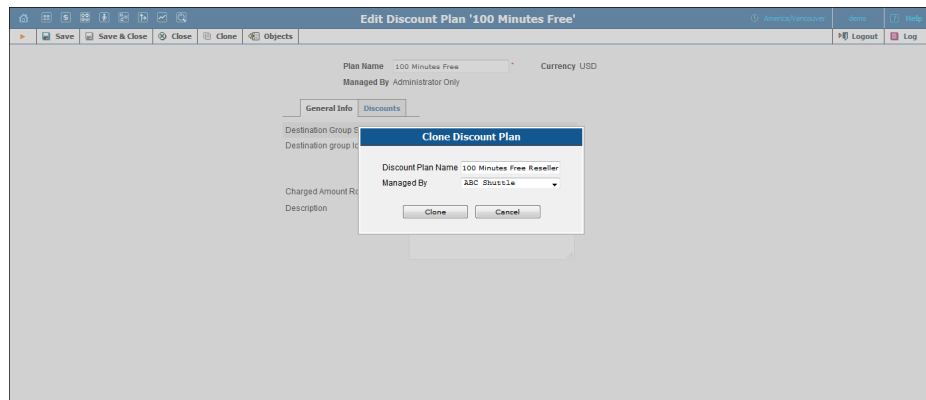


- **Option for releasing an account from a batch** – Now you can release an account from the batch it is currently assigned to with just a single mouse click. To do this, select **None** from the **Batch** list on the **Account Info** page.

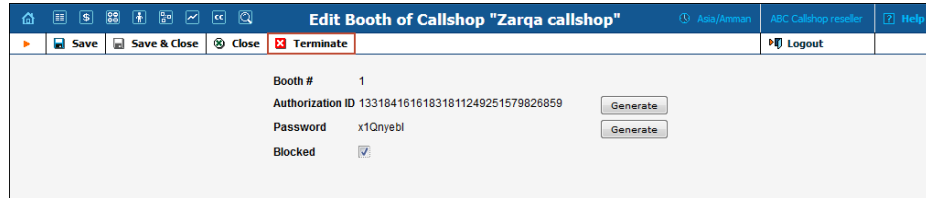


This enhancement simplifies the account management process and helps save time.

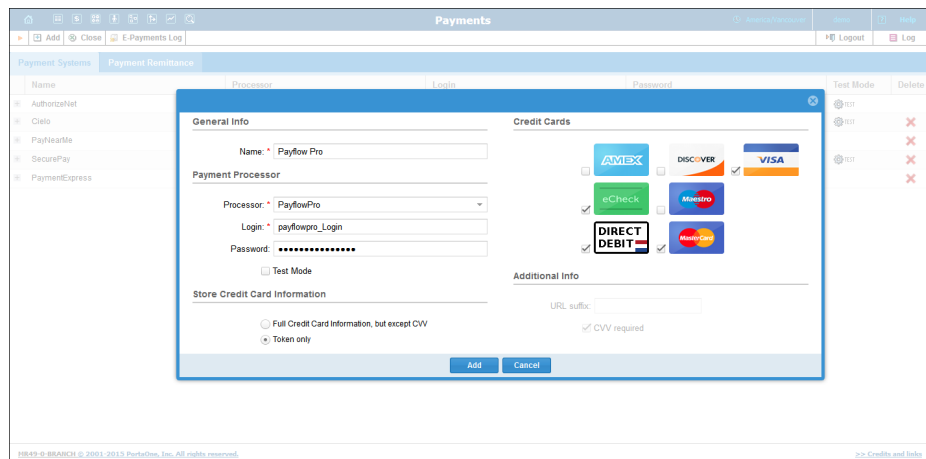
- **When you clone a discount plan you can name a reseller as its manager** – This option can significantly save administrator’s time and effort when identical discount plans are offered by several resellers. Configure the discount plan once and then clone it as many times as required assigning its management to another reseller each time.




- **Subscription plans for subresellers** – Starting with this release, resellers may assign subscription plans to their subresellers. With subscription plans, subresellers are charged recurring (e.g. monthly) fees for using the service or equipment rental. For example, the fee is \$500 per month for using the platform.
- **Booth termination** – When a callshop reseller no longer needs a booth in their callshop, they can now simply terminate it.

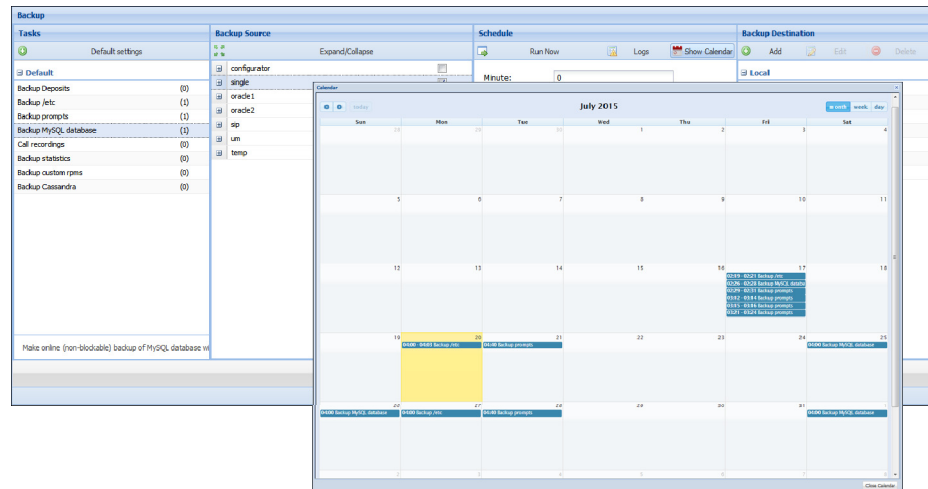


- **Support of tokenized transactions for Payflow Pro has been introduced with this release** – In case of token-based payments, a payment processor stores the credit card data (or other payment information) in its own storage space and issues a token instead. PortaSwitch® stores the token and uses it in place of actual credit card data when payments are made. Storing tokens, as opposed to storing credit card data, does not require you to obtain PCI DSS or similar security certification, so you can launch the service almost immediately.



- **Two new ways of controlling scheduled backup tasks have been added to Archivist functionality** – Archivist is a PortaSwitch® utility that helps you schedule backups. To make it more convenient to keep track of scheduled backup tasks we have introduced Calendar view. Use it to get an overview of forthcoming and finished backup tasks by month, week or day.

To open the Calendar view, click the  **Show Calendar** button at the top of the **Schedule** panel in Archivist.



There is another enhancement that helps you arrange a backup window. After several backup runs, you can now see how long it takes to back up selected types of data. Check the following performance characteristics:

- **Avg execution time** shows how long it takes to copy data to the final destination (if single destination is used) or to the Configuration server (used as an intermediary between a backup source and final destinations when you select more than one or an external destination).

This value is of higher importance because the source server is actively engaged in the backup procedure during this time.

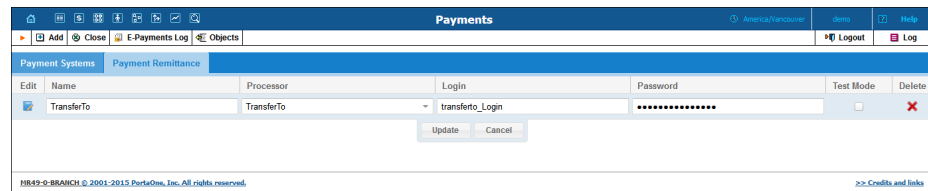
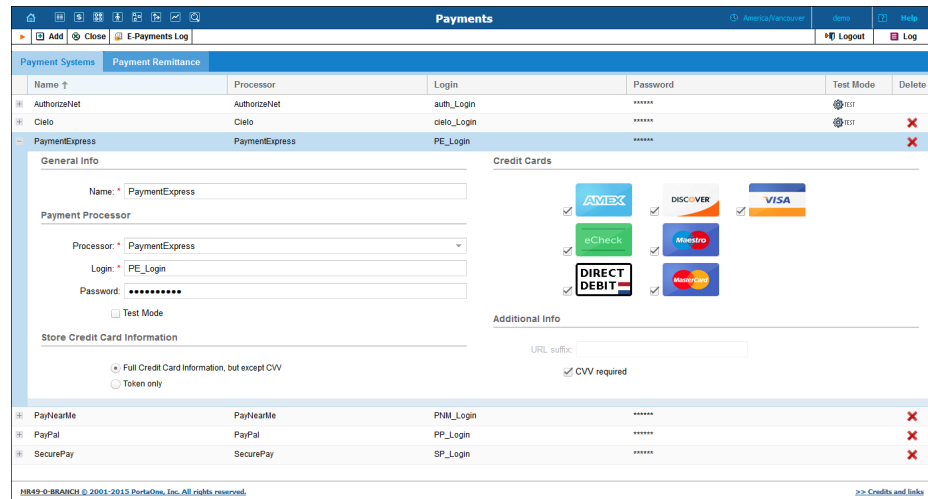
- **Avg upload time** shows how long it takes to copy data from the Configuration server to final destinations.

Utilize this information to adjust the time frames for backup procedures if required.

## Web Interface Changes

- **New Design of the Payments page** – We bring a new modern look and feel to the **Payments** page. It will provide a better and smoother experience for both new and advanced PortaBilling® users.





The **Payments** page retains a two-tab structure, with one tab devoted to payment systems and the second tab to payment remittance systems.

The changes on the **Payment Systems** tab are the most significant ones. When you open this tab, you see a simple, clear list of payment systems that contains only the basic details – the name of the payment system, processor and credentials used.

To see the full details, click the plus sign next to the payment processor name. In the expanded area you will see the payment system information, organized in sections by type of preference.

**NOTE:** Separate control for enabling auto payment functionality for a payment processor has been removed from the interface as being excessive. From now on, auto payment functionality is always enabled if payments for a particular payment processor are token-based or don't require verification of a card security code each time.

For more information about using the redesigned **Payments** page, please refer to the *Payments* section of the **PortaBilling Web Reference**.

- **Simplified E-Commerce Payment** – Starting from this release, when registering a payment by credit card, a PortaBilling® administrator inputs all the required information on a single page.

This can be useful for when customers call administrators wanting to pay their invoices by credit card.

To enable this, select **E-Commerce Payment** from the **Action** list on the **Balance Adjustment** tab, define the payment amount and click **Make a Payment**. A dialog box appears where the administrator can define and edit the cardholder's information.

**NOTE:** By default, the customer's address information is taken from the **Address Info** tab.

Additionally, the following prerequisites must be fulfilled:

- An online payment processor (such as Authorize.Net) must be configured.
- A required currency must be assigned for the payment processor.

The **Save Credit Card information for future use** check box makes it possible to apply a cardholder's information (with the exception of CVV) for future payments.

The screenshot displays the 'Edit Customer 'EasyCall'' web interface. The 'Action' dropdown is set to 'E-Commerce Payment', and the 'Amount' is '10 USD'. A 'Make a Payment' dialog box is open, showing the following details:

- Amount:** 10 USD
- Card Type:** Credit Card
- Cardholder name:** John Doe
- Credit Card No.:** 1234567890123456
- Exp. Date:** 06 / 2018
- CVV:** 000
- Country:** CANADA
- Address Line 1:** Green st., 24
- Address Line 2:**
- City:** Vancouver
- Province/State:** BC - British Columbia
- Postal Code:** V5K 2B9
- Billing Phone:** 16045550001
- Save Credit Card information for future use:**  (replace the current Payment Method)

Displaying the e-commerce payment on a single page simplifies the data collection process and its **input** for payments by credit card, thus also saving time and helping to avoid mechanical errors.

- **The Customer Class page is now better organized** – We are very pleased that our configuration process is now more

streamlined and intuitive for you, with our new **Customer Class** page structure that serves this purpose. The following main improvements have been made:

- We singled out all the invoicing options to a separate tab. This tab doesn't overload the interface as it appears only when you turn on invoice generation.
- The invoice and statistics generation on / off controls are more noticeable now.
- The selection of a taxation method is now performed on the **General Info** tab, as it is important to select a taxation method before configuring invoice options.
- More information is available about taxes included in rates (please see the **Check what taxes are included in rates** feature announcement in this guide).

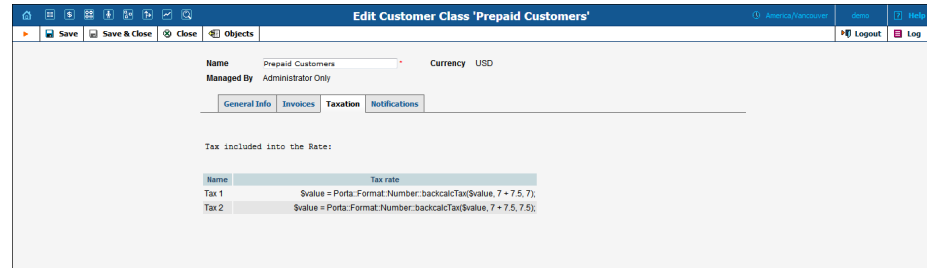
The screenshot shows the 'Edit Customer Class' page for 'Prepaid Customers'. The 'General Info' tab is active. The 'Invoicing' section includes the following options:

- Invoice Generation:  On  Off
- Taxation Method: Fixed VAT Rate
- Statistics Generation:  On  Off
- Send statistics via email: Automatically
- Billing period is closed: No
- Suspend On Insufficient Funds For Subscriptions: 14 Days after Provisional Termination
- Close customer's account: 14 Days after Provisional Termination

The screenshot shows the 'Edit Customer Class' page for 'Prepaid Customers' with the 'Invoicing' tab active. The 'Invoice Template' section includes the following options:

- Invoice Template: Prepaid customers
- Send invoices via email:  Automatically  After review and approval by admin
- Hold for review for: 3 Days
- Auto-charge invoice balance to credit card:  Never
- Invoice routing: XXXXX.XXXXX
- Payment is expected within: 7 Days after invoice generation
- Do not charge if the amount due is less than: 5 USD
- Notify customer about upcoming due date: 5, 3, 1 Days before due date
- Re-send unpaid invoice: 1, 3, 6 Days after due date
- Charge credit card if invoice is unpaid: 7 Days after due date
- Send suspension warning if invoice is unpaid: 10 Days after due date
- Suspend customer's services if invoice is unpaid: 14 Days after due date
- Send closing warning if invoice is unpaid: 17 Days after due date
- Close customer's account if invoice is unpaid: 21 Days after due date

- **Check what taxes are included in rates on the Customer Class page** – If taxes are included in rates, PortaBilling® can back calculate them based on tax percentages listed in the invoice template. From now on, you can easily check which formula is used for back calculating taxes because you can see it on the **Taxation** tab of the **Customer Class** page once you have assigned the corresponding invoice template to this customer class.



**NOTE:** To see tax formulas you need to save the customer class after you have selected the invoice template.

- **The Call Handling page now displays autogenerated rules for Nodes** – By default, IP authentication is applied to all nodes in a given environment. Now the corresponding rules are also being added to the call handling screen. You can still override an autogenerated rule by creating your own one; for example, if you need to do authorization based on CLI / DNIS for calls coming from your PSTN gateway. Since the manually specified rule is ranked higher, it takes precedence.
- The **Breakage** option has been moved to the **Usage Charges** tab of the **Product** configuration. Thus, the overdraft protection configuration can be performed on a single tab.

## Important Upgrade Notes

- **Support for the Cisco gateway-based callback engine has terminated** – Starting with this release, only the PortaSIP® Media server callback engine is used for callback applications. After the software upgrade, no actions are required from your side since callback call processing will be automatically switched to the PortaSIP® Media server callback engine.
- **Separate control for enabling auto payment functionality for a payment processor has been removed** from the interface as being excessive. From now on, auto payment functionality is always enabled if payments for a particular payment processor are token-based or don't require verification of a card security code each time.