

Porta Switch[®]



New Features Guide

Copyright Notice & Disclaimers

Copyright © 2000-2012 PortaOne, Inc. All rights reserved

PortaSwitch: New Features Guide, June 2012
Maintenance Release 26
V1.26.1

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.

Preface

This concise document describes new features found in PortaSwitch® Maintenance Release 26. With the launch of the policy of agile software development having short release cycles as **announced in May 2012**, the number of new features per release has correspondingly decreased, allowing us to make this document shorter and easier to read.

You can access the latest copy of this guide at:

www.portaone.com/support/documentation/

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 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/.

Trademarks and Copyrights

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

Table of Contents

A New Cancellation Fee Mode	4
Selecting Tariff by the Class of Caller Number for Prepaid Service	4
Integration with Cisco (formerly Starent) ASN-GW for WiMAX services	5
New 'Accept Payment' Page for Distributor in Customer Self-care	5
Number Masking in Invoices and Statistics	6
Several New SOAP Methods Added	8
Working with Custom Fields	8
Auto-provisioning for New Models of IP Phones	9
UM Interface Link on the New Self-care Interface	9

A New Cancellation Fee Mode

In order to attract more new customers, many ITSPs have special promotional offers in which sign-up costs are low or almost non-existent. Naturally, in order to provide revenue assurance and compensation for initial expenses (such as the IP phones provided to customers), the service provider will use PortaBilling®'s "required subscription period" functionality to ensure that customers keep their service active for the required period. In addition to a "fixed" cancellation fee (which is always charged when a customer terminates the service prior to the defined terms), a more lenient "remaining subscription" fee has now been introduced. This fee is calculated as the amount of regular subscription fees until the end of the required subscription term, so that the fee is reduced as the customer gets closer to the end of the subscription period. For example, if the monthly fee is \$20 and the required subscription period is 12 months, a customer who cancels the service 1 month after activation will be charged \$220, while a customer who cancels the service 9 months after activation will only be charged \$80.

This early cancellation fee model still allows the ITSP to recover its initial costs, but is perceived by customers as fairer, thus increasing customer loyalty and reducing the churn rate in the customer base.

Selecting Tariff by the Class of Caller Number for Prepaid Service

Ordinarily, an ITSP incurs different costs for incoming calls to an IVR access number, based on where a call originates from. For example, an ITSP in Brazil will be charged 0.05 *real*/minute for an incoming call that originates in metropolitan areas of Sao Paulo or Rio de Janeiro, but for an incoming call to the same access number originating from a mobile phone, the cost is 0.10 *real*/minute. Naturally, the ITSP should pass that cost on to the end-user; this is done by applying different tariffs for the customer's outgoing calls (which include the added cost) based on where the call originated from.

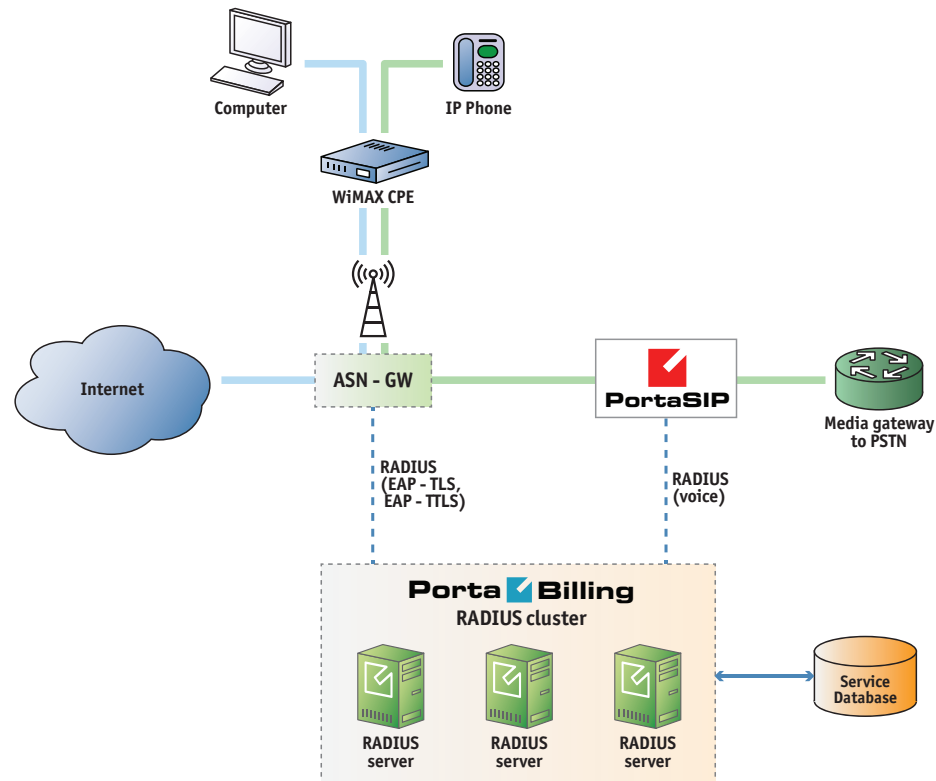
In the US and Canada, the OLI (originating line information) is usually used to distinguish between different classes of originating numbers. Unfortunately, that information is generally not available for ITSPs in the rest of the world, so a determination has to be made based on the caller's phone number (CLI).

Since the definition of a single “class” of numbers in some countries (e.g. Brazil) includes literally thousands of prefixes (e.g. Rio de Janeiro), PortaBilling® offers a convenient tool for managing these definitions: each class is defined as a destination group. The calling card IVR can look up the “class” for the caller’s number and then use the class name as the “access code” when selecting a specific tariff in a product.

This opens new possibilities for providers of prepaid or PIN-less dialing services in many countries.

Integration with Cisco (formerly Starent) ASN-GW for WiMAX services

This integration allows us to provide prepaid and postpaid WiMAX services by connecting Cisco ASN-GW directly to PortaBilling® via RADIUS.



New 'Accept Payment' Page for Distributor in Customer Self-care

When an end-user cannot make a payment online, payment can be brought directly to a Distributor, that is, a representative of the service

provider at a nearby location such as a convenience store. The Distributor does not have to be the same person or entity that originally sold the product to this particular end-user. Starting from now, *any* Distributor can process payments on behalf of *any* end-user of the same service provider. The end-user will provide identification information (e.g., their Customer/Account ID); the Distributor will look up the account's information online via self-care portal and replenish the end-user's account balance accordingly. For each payment collected from an end-user, Distributor will deliver the funds (minus his commission) to the service provider.

Accept Payment Europe/Prague John Distributor Help

Close Logout

Customer ID Account ID Phone Number
EasyCall Search

Customer ID	Customer's name or company	Address	Accounts	Balance, USD	Amount Due, USD	Due Date
EasyCall			*****7890	0	0.00	
			*****7890			

Amount* 20 USD
Visible Comment
Internal Comment
Transfer Funds

Accept Payment Europe/Prague John Distributor Help

Close Logout

Customer ID Account ID Phone Number
31011357890 Search

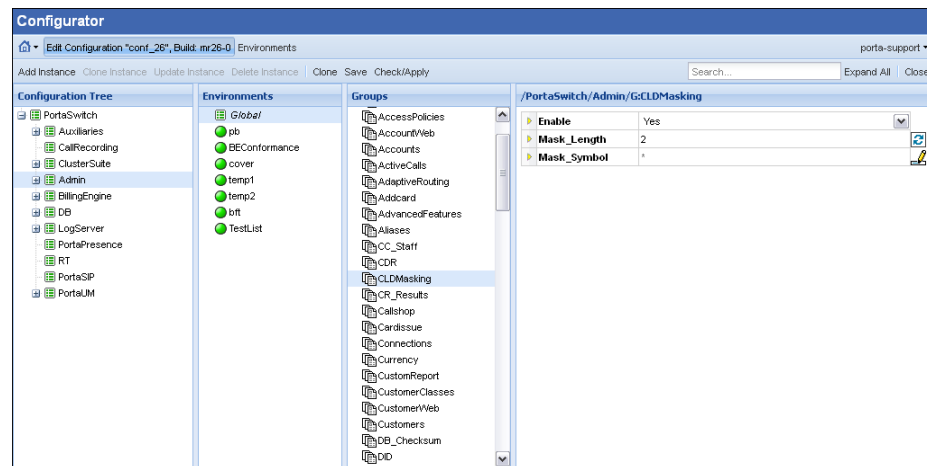
Account ID	Extra Pkts/CLIs	Product	Balance, USD
31011357890		EasyCall Product	10

Amount* 15 USD
Visible Comment
Internal Comment
Transfer Funds

Number Masking in Invoices and Statistics

Some organizations (e.g., Alcoholics Anonymous or adult entertainment providers) prefer that their numbers are not displayed on invoices and web interfaces. The standard practice is to mask the last several digits of the number (to make it look like +123456***).

This functionality is now available via the Configuration Server, which provides the ability to specify the number of digits to be covered and the masking symbol. The list numbers to be masked are country-specific and a service provider will need to first populate the dedicated “Masked_Numbers” table in the database with the list of the actual numbers.



Please note that although these numbers will be masked, both on the invoice and on the web interface, full CDRs of the numbers are kept in the system.

Close

Download

xDRs

Services Usage Details

Account499000311

From2012-05-11 00:00:01

To2012-05-31 15:32:43

Charged by'EasyCall' product

TypeCredit

Total Sessions2

Total Transactions2

Credits/Refunds0.00000 USD

Payments0.00000 USD

Subscriptions Charged0.00000 USD

Services Charged0.00000 USD

Total0.00000 USD

Show Totals By Services

Voice Calls

View	From	To	Country	Description	Date/Time	Charged Time, min:sec	Amount, USD	Refund
	4499000311	44990003**			2012-05-11 11:01:47	0:02	0.00000	
	4499000311	44990003**			2012-05-11 11:01:19	0:22	0.00000	
Subtotal						0:24	0.00000	

Several New SOAP Methods Added

Notably, SOAP API for retrieving account's service configuration, querying tariffs and managing delta tariffs is now available.

Method name	Description
add_override_tariff	Adds a new override tariff rule for customer
update_override_tariff	Updates an existing override tariff rule (i_customer, I_customer_override_tariff fields couldn't be updated)
get_override_tariff	Retrieves an override tariff rule by its unique rule id (i_customer_override_tariff)
delete_override_tariff	Deletes an override tariff rule
get_override_tariff_list	Retrieves override tariff rule list by i_customer
get_account_state	Returns account fraud state for an account
set_account_state	Sets account fraud state for particular account
get_service_features_list	Retrieves a dictionary list of all Service Features, optionally with their Service Attributes
match_destination_groups	Matches the best matches rate by a given number among all rates that belong to the given i_tariff
get_brand_pane_zip	Returns an archive of brandpane files by i_env (if empty, the default one is used), realm (if empty, the Admin realm is used)

Working with Custom Fields

Custom attributes is a frequently used feature of PortaBilling®, since it allows an administrator to extend the default data model for objects such as customer and account to include additional attributes required by the local market (e.g. taxpayer ID, driver's license number, or company identification number).

From MR 26 on, the fields for Custom attributes are listed in the order that they were added (they were previously ordered by name). It is now also possible to include the values of these fields in the PDF file that contains the customer's invoice.

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:

- SPA-8000

UM Interface Link on the New Self-care Interface

Now the users of the New Self-care interface can seamlessly switch to their UM interface. No additional reauthorization is required, the UM options and services are available after clicking on the relevant link.

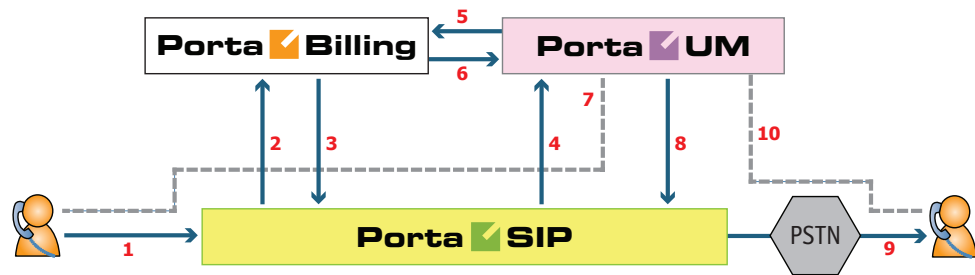
Voiceover announcements

Calling card services introduced many new enhancements compared to traditional home phone service, such as being able to hear your current balance, or how long you can talk for based on this balance, at the beginning of a call.

Residential VoIP initially followed the traditional telephony (POTS) service model: pick up the handset, dial, get connected, talk. To make the service even better, PortaSwitch now allows the introduction of prepaid card calling features to traditional residential VoIP service. Some of these are:

- announcing the maximum allowed call duration at the beginning of the call
- announcing that the call is about to be disconnected,
- asking the actual user for new authentication by PIN (so that the phone can be shared by several users); etc .

Call Flow



- User places an outgoing call to some destination from his IP phone, the call is received by PortaSIP (1) and then PortaSIP sends an authorization request to PortaBilling (2).
- PortaBilling determines that the call should be processed via a special IVR application on PortaUM (as opposed to sending the call directly to the destination) and informs PortaSIP that the call should be forwarded to PortaUM (3).
- Upon receiving a call (4) PortaUM launches the call control application, which sends additional authorization request to PortaBilling (5) and receives back the necessary information about the end-user, for instance the amount of currently available funds (6).
- Call control application establishes the media connection between the user's IP phone and media server, and performs required IVR actions - for instance announce the maximum allowed call duration or the current balance (7).
- The outgoing call is sent again to PortaSIP (8), where it is routed as any other outgoing call to the final destination using one of the available carriers (9).
- When the call is answered by the called party, the other portion of the media connection is established (10) and the call control application connects the caller and the callee. The media stream still travels via PortaUM, so it can intervene at any moment – for instance to announce that the call is about to be disconnected.