

Porta  Switch[®]



New Features Guide

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Preface

This document describes new features found in PortaSwitch® Maintenance Release 27.

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/.

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 here.



Tips provide information that might help you solve a problem.

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Routing override

PortaSwitch® provides excellent capabilities for real-time routing (LCR, profit-guarantee routing, individual routing plans, etc.). The key factor for determining routing is that a rate in the vendor’s tariff contains the necessary attributes (such as cost, preference, etc.). During the routing calculation, PortaBilling® will automatically search for all available carriers and the applicable rates and then produce the optimal routing list. This allows the routing for any customer to react dynamically to even the slightest change in a vendor’s rate, so there is no need to “rebuild” the routing table or do any other manual operations after a new tariff for the vendor is uploaded. This is one of the features of PortaBilling® most appreciated by people who manage carriers/routing, since it significantly reduces the amount of manual work.

Sometimes, though, it is necessary to make a minor adjustment for a single route only (e.g. traffic to Vietnam-Mobile from customer A should always go to carrier XYZ).

Add Routing Plan

Name * EasyCall VN to GlobalNet

Route Categories * Enabled

Override Routes * Enabled

Destination Group Set * Retail

Selection Code

Description Route EasyCall traffic to Vietnam-Mobile to GlobalNet

Included Route Categories **Routing Override** Profit Guarantee Routing Filter

Click "Save" to enable adding routing records.

Edit Destination Group Routing Delete

Edit Routing Plan 'EasyCall VN to GlobalNet'

Name * EasyCall VN to GlobalNet

Route Categories * Enabled

Override Routes * Enabled

Destination Group Set * Retail

Selection Code

Description Route EasyCall traffic to Vietnam-Mobile to GlobalNet

Included Route Categories **Routing Override** Profit Guarantee Routing Filter

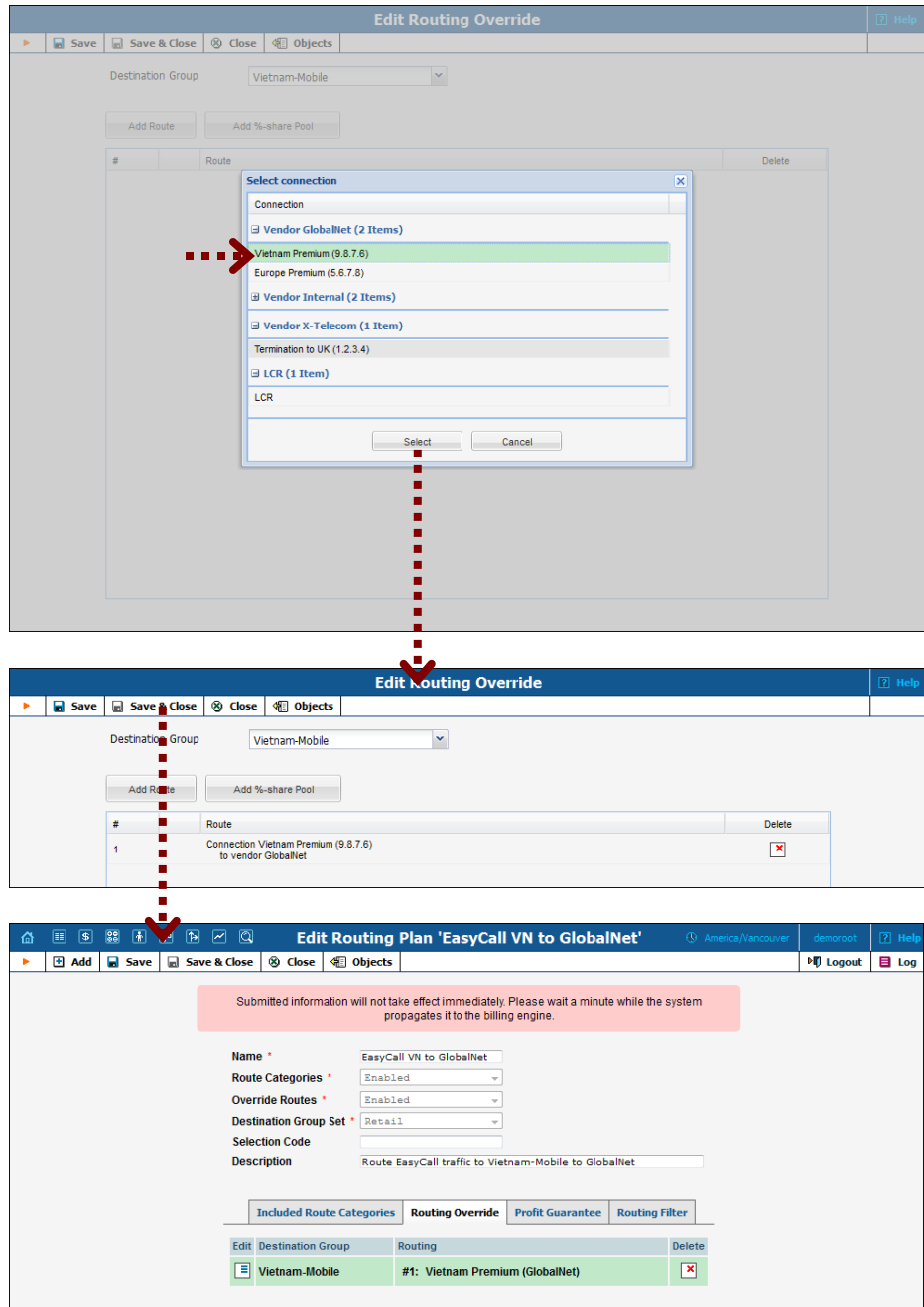
Edit Destination Group Routing Delete

Edit Routing Override

Destination Group Vietnam-Mobile

Add Route Add %-share Pool

#	Route	Delete



Another common example is percentage-based routing: for instance, when sending out calls to UK-Proper 20% of the traffic should go to carrier A, and 80% to carrier B.

Add Routing Plan

Name * Retail Customers

Route Categories * Enabled

Override Routes * Enabled

Destination Group Set * Retail

Selection Code

Description Retail, calls to UK: 20% to GlobalNet, 80% to X-Telecom

Included Route Categories **Routing Override** Profit Guarantee Routing Filter

Click "Save" to enable adding routing records.

Edit Destination Group Routing Delete

Edit Routing Plan 'Retail Customers'

Name * Retail Customers

Route Categories * Enabled

Override Routes * Enabled

Destination Group Set * Retail

Selection Code

Description Retail, calls to UK: 20% to GlobalNet, 80% to X-Telecom

Included Route Categories **Routing Override** Profit Guarantee Routing Filter

Edit Destination Group Routing Delete

Edit Routing Override

Destination Group UK-Propser

Add %-share Pool

#	Route	Delete
1	%-share pool Choose One <input checked="" type="radio"/> Re-arrange All <input type="radio"/> Add Route	<input type="checkbox"/>

Edit Routing Override

Destination Group UK-Propser

Add Route Add %-share Pool

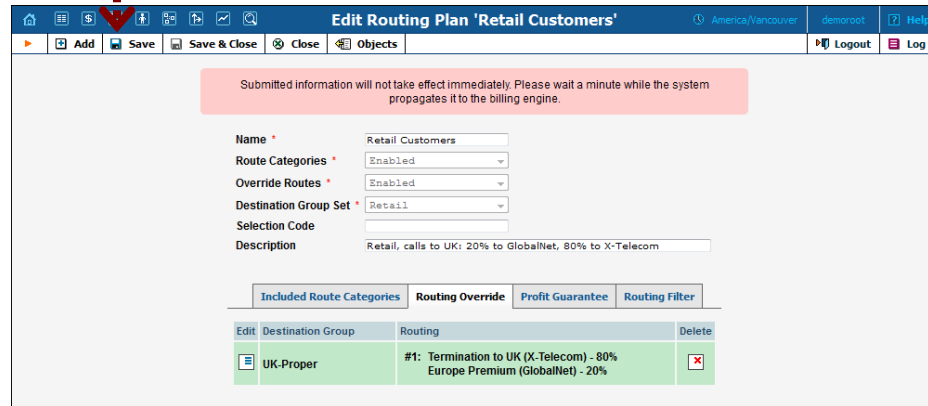
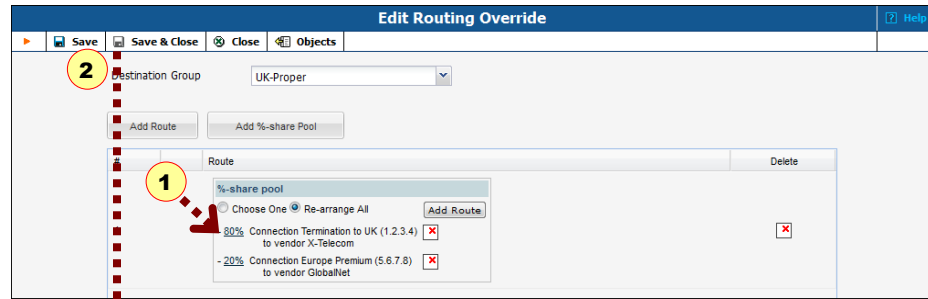
#	Route	Delete
1	%-sha Cho	<input type="checkbox"/>

Select connection

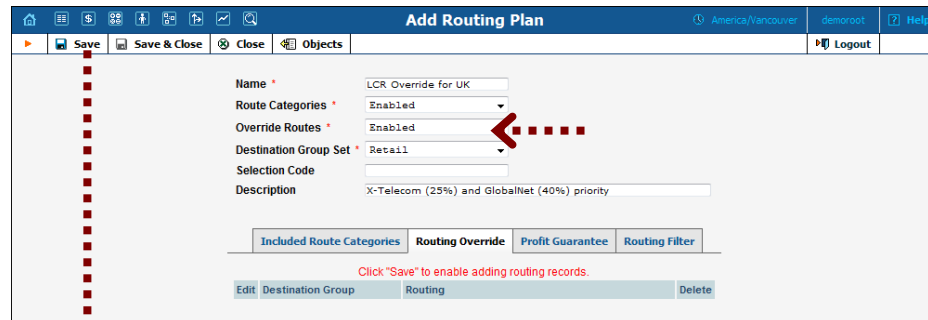
Connection

- [-] Vendor Globalnet (2 Items)
 - Vietnam Premium (9.8.7.6)
 - Europe Premium (5.6.7.8)
- [-] Vendor Internal (2 Items)
- [-] Vendor X-Telecom (1 Item)
 - Termination to UK (1.2.3.4)
- [-] LCR (1 Item)
 - LCR

Select Cancel



Configuration of these scenarios has now become easier with the LCR override functionality. The administrator can create a list of connections for a destination group in the desired routing order, and the call will be routed according to this sequence before (or instead of) applying “normal” LCR routing. An entry in the override list can be a percentage-share connection pool, where each connection has a chance to be the first route proportionate to the assigned percentage value.



Submitted information will not take effect immediately. Please wait a minute while the system propagates it to the billing engine.

Name * LCR Override for UK
 Route Categories * Enabled
 Override Routes * Enabled
 Destination Group Set * Retail
 Selection Code
 Description X-Telecom (25%) and GlobalNet (40%) priority

Included Route Categories Routing Override Profit Guarantee Routing Filter

Edit Destination Group Routing Delete

Destination Group UK-Propser

Add %-share Pool

#	Route	Delete
1	%-share pool Choose One Re-arrange All Add Route	X

Destination Group UK-Propser

Add Route

Select connection

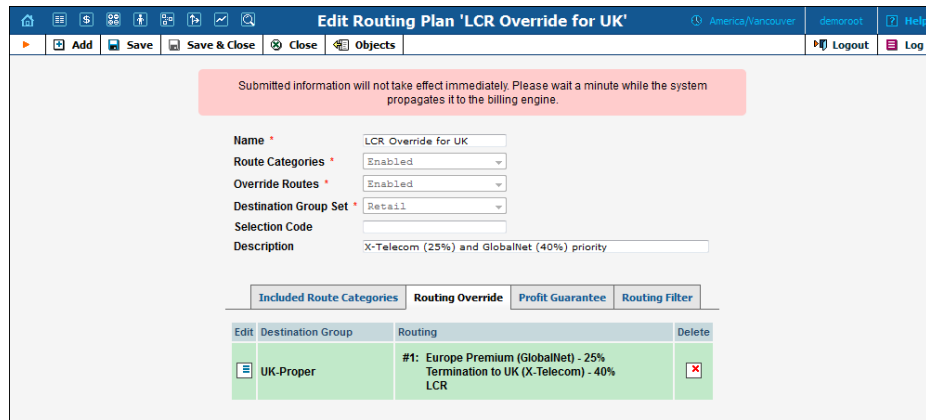
- Vendor GlobalNet (2 Items)
 - Vietnam Premium (9.8.7.6)
 - Europe Premium (5.6.7.8)
- Vendor Internal (2 Items)
- Vendor X-Telecom (1 Item)
 - Termination to UK (1.2.3.4)
- LCR (1 Item)
 - LCR

Select Cancel

Destination Group UK-Propser

Add Route Add %-share Pool

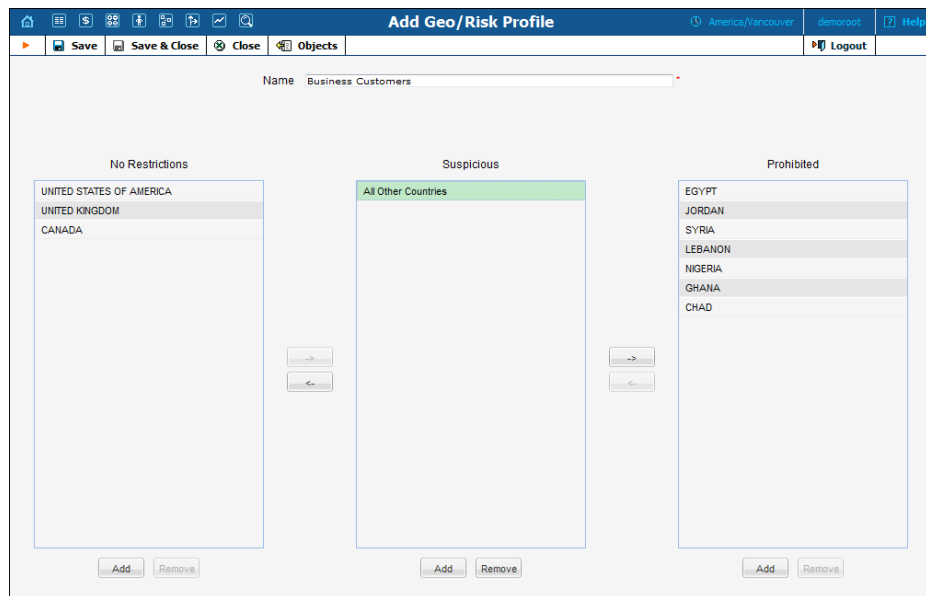
#	Route	Delete
1	%-share pool Choose One Re-arrange All Add Route	X
	25% Connection Europe Premium (5.6.7.8) to vendor GlobalNet	X
	-40% Connection Termination to UK (1.2.3.4) to vendor X-Telecom	X
	-35% LCR	X



This new tool will simplify some of the day-to-day routing configuration tasks and allow PortaOne customers to create even more flexible routing policies.

GUI for Geo profile management

This is an additional module for the VoIP Fraud Protection system introduced in MR26. It allows the administrator to conveniently create multiple profiles and then assign individual countries to a risk group inside each profile. This will be of great help to customers who provide products in different countries.



Integration with Asterisk RADIUS module

The PortaBilling engine includes a new interface plug-in module which allows real-time collection of CDR data from Asterisk (Asterisk v1.8 using the “native” RADIUS client).

This enables ITSPs to offer an “outsourced” billing service to those customers who not only deliver outgoing calls to the service provider via a SIP trunk, but also need to distinguish the activity of individual users inside their PBX.

Auto-provisioning for new phones

The list of IP phones which are auto-provisioned by PortaSwitch has been extended to include the Siemens A580IP phone.

Improved transaction types for manual adjustments

Sometimes the administrator needs to intervene in the billing process and amend charges automatically produced by the system (xDRs for voice calls or Internet sessions, subscription charges, etc.). PortaBilling Maintenance Release 27 offers an improved set of transactions for adjusting a customer’s bill. The main changes are:

- Reorganized set of transaction types for greater clarity;
- Ability to apply a transaction to a specific service for improved financial reporting;
- New “Refund” transaction type, which is the exact opposite of a “Payment” transaction, and is used to record an event that cancels out a previously made payment.

The screenshot shows the 'Edit Customer' interface for 'EasyCall Ltd.' with the following details:

- Customer ID:** EasyCall Ltd.
- Customer Class:** Default customer class
- Blocked:**
- Opening Balance:** 0.00000 USD
- Balance:** 153.10000 USD

The interface includes a navigation menu with options: Save, Save & Close, Close, xDRs, Batches, Sites, Accounts, E-Payments Log, Invoices, Terminate, Logout, and Log.

Below the menu, there are tabs for: Taxation, Abbreviated Dialing, Subscriptions, Notepad, Service Features, Permitted SIP Proxies, Address Info, Balance Adjustments, Web Self-Care, Dialing Rules, Additional Info, Payment Info, Extensions, and Huntgroups.

The 'Balance Adjustments' section is active, showing:

- Action:** Manual charge
- Service:** Voice Calls
- Amount:** 15 USD
- Date:** YYYY-MM-DD
- Visible Comment:** Tariff plan change
- Internal Comment:** 13.07.2012 - on den
- Action Description:** Use this transaction to manually charge an Customer for a specific service they used (increases the Customer's balance).

The currently available set of balance transaction types includes:

Transaction Type	Description	Effect On Customer's Balance	Opposite To
Manual Charge	Use this transaction to manually charge a customer for a specific service they used.	Increase	Manual Credit
Manual Credit	Use this transaction to manually give compensation related to a specific service.	Decrease	Manual Charge
Promotional Credit	Use this transaction to give the customer credit, for example, as a sales promotion. The difference between this and "Manual Credit" is that this transaction applies to a special "Credits / Promotions" service, and not to any actual service. Basically, it provides some "virtual" funds to the customer for future use.	Decrease	Manual Charge
Manual Payment	Use this transaction when receiving a payment (e.g. cash or check) directly from the customer.	Decrease	Refund
Refund	Use this transaction to refund an earlier payment received from the customer (e.g. a check returned by the bank).	Increase	Manual Payment
E-Commerce Payment	Use this transaction to charge the customer's credit card and apply the amount to the customer's balance as payment.	Decrease	E-Commerce Refund
E-Commerce Refund	Use this transaction to reverse a previous E-commerce payment. It withdraws funds from your company's merchant account and applies them as credit to the customer's credit card. The amount is	Increase	E-Commerce Payment

	added to the customer's balance.		
Authorization Only	Verifies that the customer's credit card is valid and reserves a given amount. Returns a transaction ID to be used in a Capture Payment transaction. Does not affect the customer's balance in PortaBilling or his credit card balance.	N/A	N/A
Capture Payment	Charges the customer's credit card and applies the amount to his balance as a payment (decreases the customer's balance). Requires a transaction ID from the Authorization Only transaction. The amount must be less than or equal to the amount of the corresponding Authorization Only transaction.	Decrease	E-Commerce Refund

Redesigned CDR import module

The CDR import tool has been redesigned to allow easy customization of the CDR data manipulation process.

Whereas previously tasks such as converting values of individual fields from one format to another, conditional processing of CDR data, or external mapping (e.g. between IP addresses and actual carrier names) required the creation of a dedicated plug-in module, now code “snippets” may be placed directly in the configuration file for a specific CDR import instance. This makes it possible to reduce the average time required for developing and troubleshooting a module to support a new CDR file format.

The collection of CDR processing plug-ins has been extended to include two new modules for parsing CDR files:

- BroadWorks (BroadSoft)
- Cisco Call Manager (Cisco)

These modules work in the same way as other CDR import plug-ins: the CDR files are uploaded from an external source to PortaBilling, where they are immediately processed and sent to the billing engine for rating. As a result, the customer's balance is updated and CDRs are produced practically in real time.