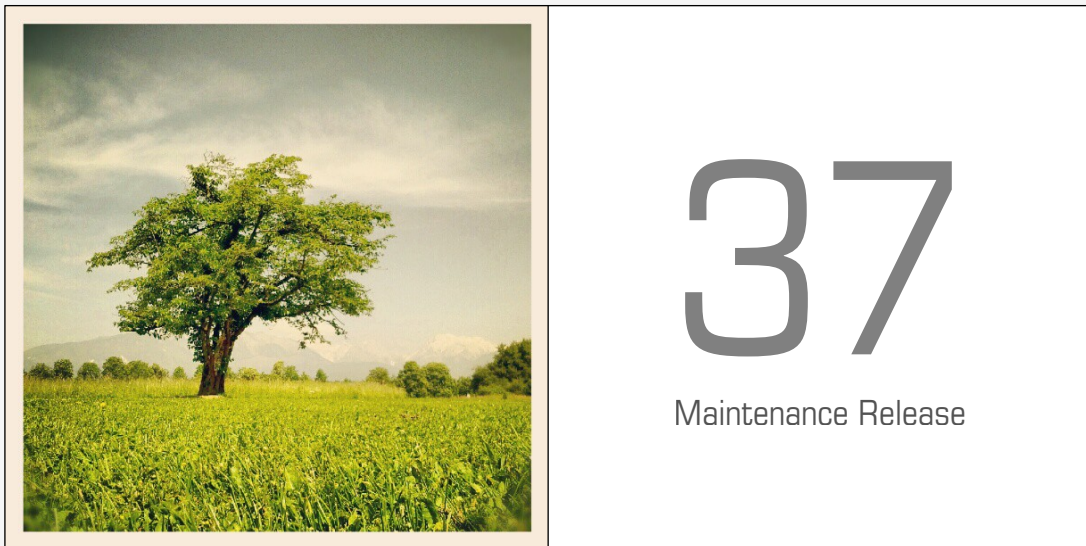


Porta  Switch[®]



New Features Guide

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Maintenance Release 37
V1.37.6

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Table of Contents

Preface	4
Non-registering SIP User Agents	5
Delayed Billing Period Closure	5
Dialing Rules Functionality Improvement	7
Limiting Per-account Simultaneous Calls on a Product	9
Customized Suspension Mode	10
SIP Log Viewer Improvements	10
Billing by Trunk Group ID	11
External Invoice Template Example	11
Extended xDR Import	13
Simplified Call Pickup Interface	13
Several New API Methods Added	13

Preface

PortaSwitch® Maintenance Release 37 is the next leap-forward release, consistent with our “fast releases, precisely on time” ideology introduced in 2012.

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**



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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Non-registering SIP User Agents

Previously, if your customer owned an IP PBX which could not perform SIP registration to PortaSwitch®, the customer had to assign a static IP address to the IP PBX. At that time, PortaSwitch® was configured so an incoming call to that customer’s DID would be forwarded to the IP PBX via a “SIP URI forward.” This had certain drawbacks, e.g. treating such calls as having been forwarded created two XDR records (one for the incoming call, one for the forwarded one), which was confusing for end users.

The new “SIP Static Contact” functionality has the ability to imitate the registration of an IP PBX (by supplying its IP address and port), so any call to a DID is delivered to the IP PBX as a “normal” incoming call.

You can enable this feature and specify the host name of the user agent in the **Incoming Calls** section of the **Service Features** tab of the account.

The screenshot shows the 'Account Info / Retail Customer 'EasyCall Ltd.' configuration page. The 'Service Features' tab is active, and the 'Incoming Calls' sub-tab is selected. The 'SIP Static Contact' feature is enabled (Yes), and the 'Host' field is populated with '193.503.28.34'. Other visible settings include 'Forward Mode' set to 'Simple Forwarding', 'Maximum Forwards' set to 3, and 'Timeout, sec' set to 33. The 'Default Answering Mode' is set to 'Ring, Forward, Voicemail'.

Using this functionality simplifies the configuration of SIP trunking services and the intuitive xDR presentation enhances the user experience, thus decreasing the support assistance required by end-users. This also permits your customers to use IP Centrex features that are dedicated to incoming calls and use forwarding or voicemail if the call fails.

Delayed Billing Period Closure

To improve the process of invoicing customers in complex environments, PortaBilling® offers the option of postponing the closing of the billing period to make sure all the data has been imported or entered into the system. Let’s consider this example for when you have large enterprise customers and the invoices for them should include charges (xDRs)

calculated within another system. Previously, if you received such xDRs with a delay when the billing period would already be closed, and these charges were pushed to the next billing period which confused end users. Now you can delay the billing period closure. For example, xDRs for August 31st that are imported into PortaBilling® on September 2nd will still be included on the invoice for August.

New options available on the **Edit Customer Class** page allow you to define whether a billing period closes automatically or upon administrator's approval. When the latter is selected, it is possible to set the maximum number of days for the administrator to approve the billing period closure in order to avoid a situation where a customer doesn't receive the invoice because an administrator forgot to approve it. If the administrator doesn't manually close the billing period within these days, it is closed by PortaBilling® automatically.

The screenshot shows the 'Edit Customer Class' page for 'ABC Shuttle'. The page has a blue header with navigation icons and the title 'Edit Customer Class 'ABC Shuttle''. Below the header, there are tabs for 'General Info', 'Taxation', and 'Notifications'. The 'General Info' tab is active. The page contains several configuration options:

- Name: ABC Shuttle
- Currency: Not set
- Managed By: ABC Shuttle
- Send statistics via email: Do Not Send
- Invoice Template: CustInvoice
- Send invoices via email:
 - Automatically
 - After review and approval by admin
 - Hold for review for: 7 Days
 - Never
- Auto-charge invoice balance on credit card:
- Payment is expected within: Days after invoice generation
- Do not charge if the amount due is less than:
- Notify customer about upcoming due date: Days before due date
- Re-send unpaid invoice: Days after due date
- Charge credit card if invoice is unpaid: Days after due date
- Send suspension warning if invoice is unpaid: Days after due date
- Suspend customer's services if invoice is unpaid: 30 Days after due date
- Send closing warning if invoice is unpaid: Days after due date
- Close customer's account if invoice is unpaid: 90 Days after due date
- Billing period is closed:
 - Upon Administrator's Approval
 - But no later than: 7 days after the period is over
- Description:

On the customer page it is possible to view information about the open billing period and the timestamp of its closure.

This new functionality may be useful for the following situations:

- Importing xDRs from the external switch** – A large enterprise customer has a monthly billing period. The administrator enables the delayed billing period closure functionality and sets the maximum days allowed for approval to 7. When the administrator views the customer information on September 1st, he sees that the billing period for August is still open. On September 2nd the xDRs are delivered to the ITSP and imported into the system. On September 3rd the administrator reviews the customer info, confirms that all the xDRs are already imported and approves the

billing period closure. On the night of September 4th an invoice is generated that includes all the charges for the period between August 1st and August 31st.

- **Extra time for adding manual charges** – There is a company, your business partner, which provides your customers with additional services such as hardware configuration. At the end of the month they send you a list of customers (with monthly billing periods) who were visited by technicians and specific amounts to charge for the services rendered. These data should be added into PortaBilling® to be reflected on the customer invoice. Administrator enables the delayed billing period closure functionality and sets the maximum days allowed for approval to 7. When the administrator views customers' information on September 1st he sees that the billing period for August is still open and not all charges have been applied. On September 2nd the administrator receives a list of customers to be charged for additional services provided by the partner and then inserts manual charges for certain customers into the billing period for August. Then the administrator approves the billing period closure. On the night of September 3rd an invoice is generated that includes all of the charges for the period between August 1st and August 31st.

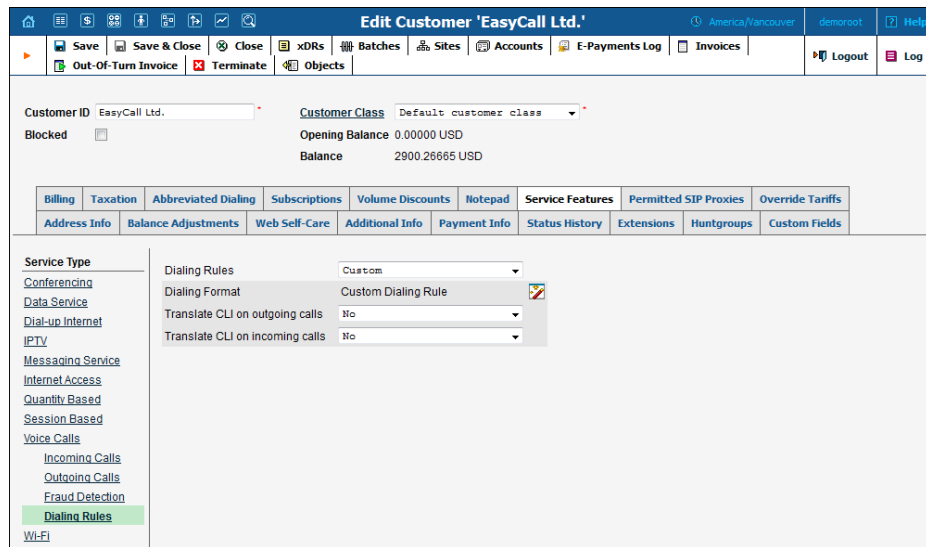
This functionality is useful in case not all the billing data is available when the billing period ends, or if an administrator needs to re-check the xDRs, or insert manual transactions before issuing an invoice to the customer.

Dialing Rules Functionality Improvement

The Dialing Rules functionality has been improved. Now in addition to the dialing rules that are created by the administrator and assigned to a large group of customers, there are custom dialing rules that can be created by each customer for their own use.

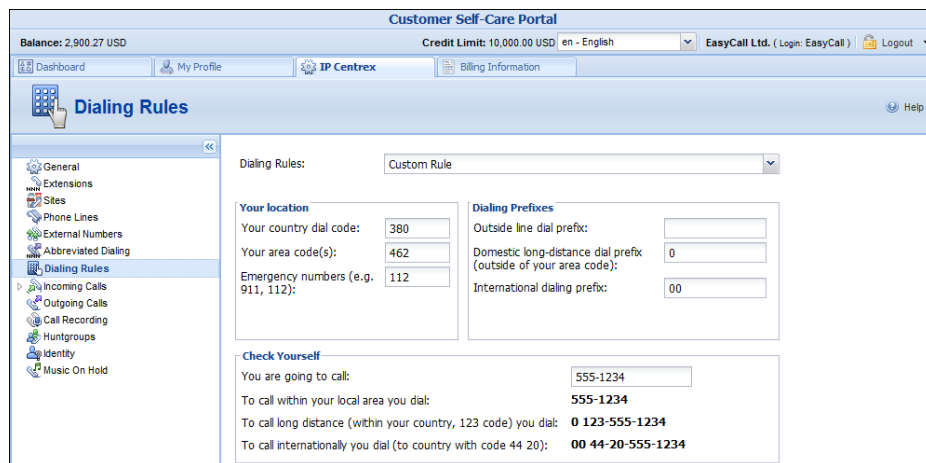
There are two types of dialing rules:

- Dialing rules that are created by the administrator and assigned to a group of customers. These rules can be modified only by administrative users.
- Custom dialing rules that can be created and modified by customers.



The **Dialing Rules** tab is also added for the Customer and Account Self-care web interfaces. If an administrator defines dialing rules as being restricted for customer / account, then they cannot modify them or select other dialing rules.

If the user doesn't have restricted dialing rules assigned, they may select dialing rules from the list (without the option of modifying them), or they may create their own custom rules.

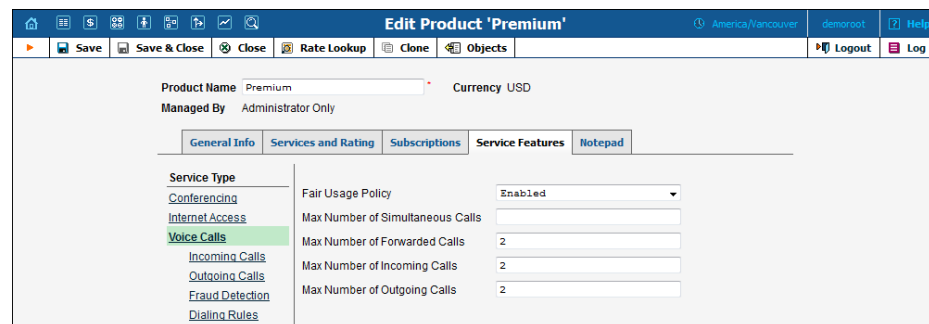


Now your customers can create and modify their own custom rules and dial numbers the way they're used to.

Limiting Per-account Simultaneous Calls on a Product

Fair usage policy is very important for every ITSP. Let's assume that you have a product that supplies your residential customers with an unlimited number of minutes of free calls to the USA. If you don't want someone to use these free minutes through their PBX by making many simultaneous calls, you can set limit for two simultaneous calls.

Fair usage policy is configured on the Product's **Service Features** tab, where you can enable this functionality and define the limits for simultaneous, incoming, outgoing and forwarded calls.



Service Type	Configuration
Conferencing	Fair Usage Policy: Enabled
Internet Access	Max Number of Simultaneous Calls: 2
Voice Calls	Max Number of Forwarded Calls: 2
Incoming Calls	Max Number of Incoming Calls: 2
Outgoing Calls	Max Number of Outgoing Calls: 2
Fraud Detection	
Dialing Rules	

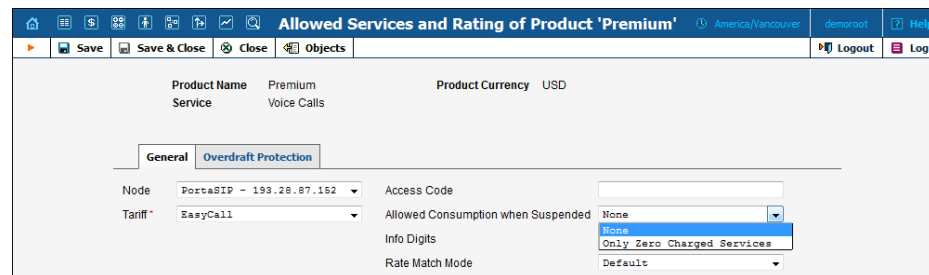
This functionality can be useful for the following situations:

- You have a SmartCall product that supplies your customers with free domestic calls. There is a new customer who buys this product from you. You supply them with credentials to use the services. To ensure that services are for personal use only and that nobody can use them with an office PBX (to send hundreds of calls from their call center free of charge), the administrator can set the **Maximum Number of Simultaneous Calls** for the SmartCall product to 2.
- The administrator sets the **Maximum Number of Outgoing Calls** to 100 for the SmartCall product. This product is assigned to the customer who has his own call center. If the customer needs more simultaneous outgoing calls he can buy another product that offers that.

This functionality can help you prevent fraud and service abuse of the products that provide your customers with free calls.

Customized Suspension Mode

Now it is possible to allow end users to use certain services when their accounts are suspended. For example, when one of your customers' accounts is suspended and you want to allow them to continue receiving incoming calls (since they are free), you can enable this feature. To do this, the **Allowed Consumption when Suspended** option was added to the **General** tab for the **Services and Rating** items of the product. You can select the **Only Zero Charged Services** value to allow your customers to continue using free services.



The screenshot shows a web interface for configuring 'Allowed Services and Rating of Product'. The product is 'Premium' and the service is 'Voice Calls'. The 'General' tab is selected. The 'Allowed Consumption when Suspended' dropdown menu is open, showing the following options: 'None', 'Only Zero Charged Services', and 'Default'. The 'Only Zero Charged Services' option is highlighted.

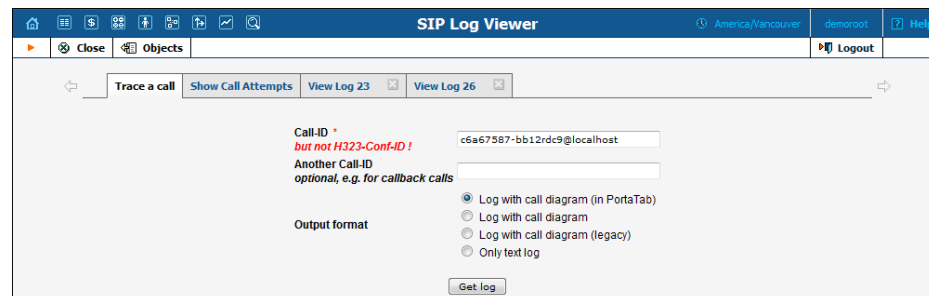
This functionality can help you to meet the requirements of local authorities and the expectations of your customers.

SIP Log Viewer Improvements

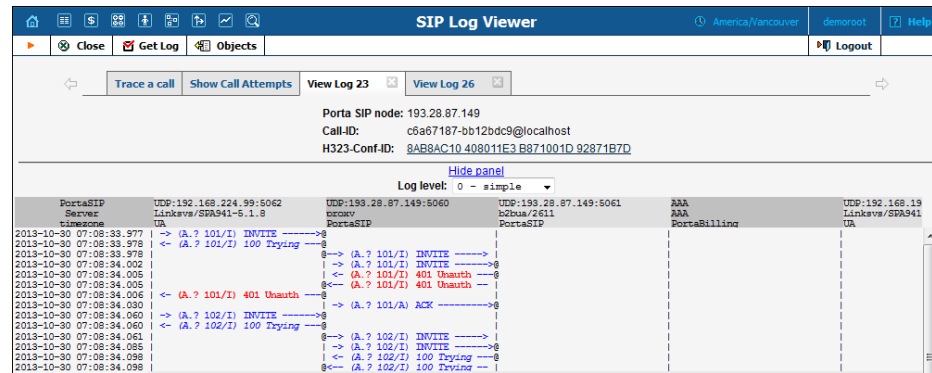
Call troubleshooting is easier now with the improved **SIP log viewer**. It consists of two tabs that:

- Trace a call by the Call-ID;
- Search calls made within a specified time interval.

You don't need to select a PortaSIP® node on which the searched call was made since now the search is performed on all PortaSIP® nodes. If a call matching the specified call-ID is found, the SIP log for the corresponding call opens in a separate tab within the **SIP Log Viewer** page.



The screenshot shows the 'SIP Log Viewer' interface. The 'Trace a call' tab is active. The 'Call-ID' field contains 'c6a67587-bb12rdc9@localhost'. The 'Output format' section has radio buttons for 'Log with call diagram (in PortaTab)', 'Log with call diagram', 'Log with call diagram (legacy)', and 'Only text log'. The 'Log with call diagram (in PortaTab)' option is selected.



With the improved interface for **SIP log viewer**, it is now easier to find certain call and more practical to view (and maybe compare) several SIP logs within one tab of your browser.

Billing by Trunk Group ID

A new call handling rule has been added, allowing authorization based on the “tgrp” part of the “Contact” SIP header.

For example, the INVITE request, which arrives to PortaSIP® from an SBC (Session Border Controller) or VoIP gateway, may contain the following header (based on the trunk group used on that SBC or VoIP gateway):

```
Contact: <sip:8077260441@193.22.11.84:5060;tgrp=TG1-1>
```

If the **Trunk Group ID (tgrp)** method is used, then *TG1-1* will be used as the User-Name attribute to authorize this call.

This is useful if you do a wholesale traffic exchange based on an external SBC without any routing possibility. Then using this SBC in conjunction with PortaSIP®, you can configure wholesale services with routing, LCR, authorization and other functionalities.

External Invoice Template Example

An improved external invoice template is now available and can be downloaded from www.portaone.com:

```
http://portaone.com/resources/invoice_template.zip
```

This is a TML/CSS file that can be adjusted according to your requirements and then uploaded into the system.



@ contact@portaone.com
 ☎ 1-866-SIP VOIP

Dave Ming Chang

Account #: 12345678910

17815 80TH AVE NE APT C1
 KENMORE, WA 98028-1832

Invoice Number 22
 Billing Date 2013-04-05



STATEMENT PERIOD	
From	2013-04-05
To	2013-05-06
Terms	Pay in full
Due date	2013-05-06

STATEMENT SUMMARY	
Previous Balance	10.00
Payments	-5.00

NEW CHARGES	
Usage charges	7.00
Subscription charges	12.00
Credits / Refunds	-3.00
Taxes	0.00
Total new charges	16.00
Amount Due	21.00 USD



Account number 12345678910
Total due 21.00 USD

DAVE MING CHANG
 17815 80TH AVE NE APT C1
 KENMORE, WA 98028-1832

PortaOne
 1234 North Pole ave,
 Seattle, WA 54321



Pay now - scan this code

Please consult the [PortaBilling Templates Guide](#) for more information about creating, uploading and managing external invoice templates.

This template is provided as an example of how you can simplify the template design process if the invoice template is created by an external design agency (without access to PortaBilling®). External invoice template functionality allows for advanced template customizations (e.g. arrangement of data to exactly match “legacy” invoices or insertion of dynamic content such as banners) by third-party developers.

Extended xDR Import

Historically, the CDR import utility in PortaBilling® was used to import the data about calls processed via external switch or telco operator. Now, the import framework includes templates for importing xDRs for any other types of services, for instance, both mobile and broadband data transfer or messaging.

Simplified Call Pickup Interface

To answer the demand from end-users who migrate to hosted IP PBX services provided on PortaSwitch®, it is now possible to use short (1 or 2 digit) call pickup codes. This allows end-users to migrate to PortaSwitch® while maintaining exactly the same user experience as on another system.

Several New API Methods Added

Notably, API for managing product's services and rating information, correcting a vendor's balance.