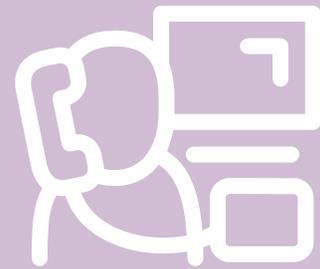




# PortaSwitch



# New Features Guide

Maintenance  
Release

51



Documentation

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**PortaSwitch® New Features Guide, November 2015**  
**Maintenance Release 51**  
**V1.51.17**

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## Preface

PortaSwitch® Maintenance Release 51 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`.



**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.

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## Translation Rule Classes

With this release, all rules of number translation are divided into two main classes:

- Customer-specific *dialing rules*, used for converting numbers dialed by end users to the PortaSwitch® format – E.164 format;
- Vendor-specific *connection rules*, used for converting numbers from the E.164 format to one defined by a particular vendor for further call processing.

Both translation rule classes are created using different sets of options, therefore their division leads to the optimization and simplification of their configuration.

### Dialing Rules

Since dialing rules define how numbers dialed by end users are converted into E.164 format, they are either specified for the entire IP Centrex environment (provisioned as customer in PortaBilling®) or for an individual phone line (provisioned as account).

To simplify the dialing rule configuration, they are divided into the following types:

- **Residential** – This is the simplest dialing rule type since it emulates the dialing habits of residential customers. In this dialing rule you define the international and national codes plus the special prefixes that residential customers must dial to access the network and make a call (e.g. when making calls from an IP Centrex environment).
- **PBX** – This is a more extensive dialing rule. It includes the dialing parameters of the residential type plus the service codes (e.g. \*70 for call parking) used within the IP Centrex environment.
- **Custom** – This type allows you to define your own dialing rules by using Perl regular expressions.

Since dialing rules in North America are different from those in other countries and contain either 7- or 10-digit numbers, a separate **North America** dialing rule subtype exists that allows the administrator to easily configure and manage dialing rules for North American customers.

### Connection Rules

Likewise, connection rules are applied to vendor connections and define how numbers are converted from E.164 format to that of a vendor.

There are two types of connections:

- Outgoing connections via which calls leaving your network are sent to the vendor and
- Incoming connections via which calls to DID numbers are delivered from the vendor to your network.

The screenshot shows the 'Connection Rules Wizard - Call to Vendor' interface. It features a top navigation bar with 'Save', 'Save & Close', and 'Close' buttons. The main form is divided into several sections:

- Name:** 'Calls to T-Mobile'
- Description:** 'Calls to T-Mobile'
- Type:** Radio buttons for 'Use Wizard settings' (selected) and 'Create your own custom regular expression'.
- Translation Rule:**
  - International:** 'Country Code' field with '49' and 'Add International Dialing Prefix (e.g. 011, 00)' field with '00'.
  - National:** Radio buttons for 'Remove Country Code (e.g. 1)' and 'Replace Country Code (e.g. 44) with Prefix (e.g. 0)' (selected), with a '0' in the adjacent field.
- Check the result:** A 'Test' button and a text area showing 'Translation to Vendor format: 0018185554125' and 'Translation to E.164: 18185554125'.

Connection rules differ depending on connection type and consequently, contain different sets of options. Therefore, when creating a connection rule, the administrator needs to specify only those options relevant for a particular connection type. This significantly simplifies the rule creation process and eliminates configuration errors.

As previously, administrators can create their own connection rules using Perl regular expressions.

Thus, the division of translation rules into classes significantly decreases the workload on administrators during rules configuration and management.

## Enhanced SIP Log Viewer

When troubleshooting unsuccessful calls, the administrator needs to have the ability to quickly and efficiently filter a particular call log to find the root of the issue.

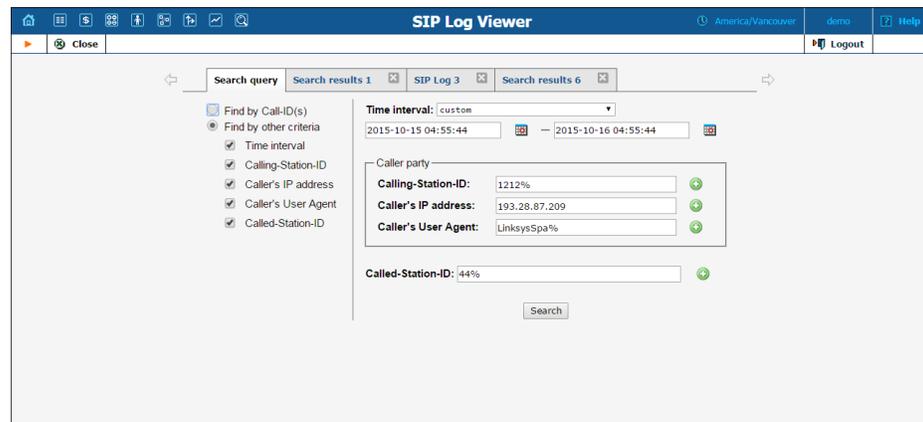
This can easily be done with enhanced SIP log viewer functionality, which now works with Elasticsearch storage and features an enhanced web interface.

Apart from the default search by Call-ID, it now contains a set of additional search criteria by which a call can be traced. When necessary, several search criteria can be combined into a single search query, thus narrowing the search of a particular call log.

**NOTE:** To perform an extended SIP log search, configure the LogServer and the Elasticsearch instances on the configuration server.

The search criteria available are as follows:

- **Call-ID(s)** – This is the default search criterion. When defined, a call is filtered by its unique ID. If a call consists of several parts (e.g. a callback call), it is possible to define several Call-IDs which will be merged into a single call log. The number of Call-IDs is limited to 5.
- **Time interval** – Filters all call attempts performed within the specified time interval;
- **Calling-Station-ID** – Filters calls in which the originating number (ANI number) is a particular phone number. If a calling number in an incoming call leg was delivered to PortaSwitch® in a local format (e.g. 02065550236), specify it in the same format when tracing the call or use the % pattern to substitute unknown symbols (e.g. %02065550236, 206555% or %0206555%);
- **Caller's IP address** – Filters calls that originated from the specified IP address;
- **Caller's User Agent** – Filters calls made from a SIP phone or a dialer application of a particular brand;
- **Called-Station-ID** – Filters calls dialed to a particular number. If an end user dialed a destination number in a local format (e.g. 02065550236), specify it in the same format when tracing the call or use the % pattern to substitute unknown symbols (e.g. %02065550236, 206555% or %0206555%).



You can perform several call searches at a time by creating several search queries with different search criteria. The results of each query are displayed in a separate tab and contain the specified criteria.

Setup Time	Caller's Protocol:IP:Port	CLI	CLD	Call-ID	Caller's User Agent	Node
2015-10-15 07:09:16	SIP-193.28.87.209:5060	12129876541	44898712657	OnagyDZv5-4LRXg169LqA_ (log only)	Zoiper r33688	193.28.87.209
2015-10-11 23:58:48	SIP-193.28.87.209:5060	12129876541	44898712657	86dmwQY5G8DC6765rCYohw_ (log only)	Zoiper r33688	193.28.87.209
2015-10-11 23:47:59	SIP-193.28.87.209:5060	12129876541	44898712657	Ce0BlwvKmcG0I5h1BgMHQ_ (log only)	Zoiper r33688	193.28.87.209

The extended SIP log viewer functionality speeds up the call log search and improves the troubleshooting process in whole, and log analysis in particular.

## DID Provisioning for Multi-level Resellers

In order to expand the DID provisioning network and boost sales, DIDs are now provisioned by resellers of all levels.

Subresellers can access the DID pool and perform the same actions as top-level resellers when provisioning DID numbers via the DID inventory.

**NOTE:** Subresellers access the DID pool only if they and their top-level resellers have pricing batches assigned to them.

These actions include:

- Definition of the pricing strategy for DID number provisioning;
- Distribution of DIDs retrieved from the DID pool to pricing batches with respective DID markups;
- Assigning DID numbers to subcustomers;
- Releasing DID numbers to the DID pool.

### The DID pricing strategy definition

As a preparatory step, a reseller defines the revenue he wants to receive as the DID markup after provisioning this or that DID number within a pricing batch. To associate a DID markup with a DID number, add the number to the corresponding pricing batch.

Another pricing strategy is to define the same DID markup for any type of DID number provisioned to the same customer (e.g. 10% to be added to the DID recurring cost). This is done by assigning a default pricing batch to a customer. Then, after a DID number is provisioned to the customer, add it to their pricing batch and the defined DID markup will be applied. Such a model is frequently used when DID costs are at first unknown (on-demand DID provisioning).

### Retrieval of DID numbers from the DID pool

To manage DID numbers, a reseller retrieves them from the DID pool by assigning them to respective pricing batches. Once a DID number is retrieved from the DID pool, it is owned by the reseller and is therefore unavailable for provisioning by other resellers. Though the DIDs may not yet be provisioned to customers, charges for them are already applied to their owners: the resellers.

**NOTE:** If a top-level reseller exceeds their credit limit, their subreseller will not be able to retrieve a DID number from the DID pool.

### DID provisioning to customers

When a DID number is provisioned to a subcustomer, the charges are calculated for each party involved and are distributed as follows:

- A top-level reseller is charged a DID number cost plus additional fees defined in the pricing batch assigned to this reseller;
- A subreseller is charged the top-level reseller's costs plus additional fees as defined in the pricing batch assigned to this subreseller;
- A subcustomer is charged the subreseller's costs plus the DID markup as defined by the subreseller in the pricing batch associated with this number.

### Release of DID numbers to the DID pool

Any DID number managed by a reseller can be released by this reseller back to the DID pool. While in the DID pool, the DID number is again visible to all other resellers and available for provisioning.



Please note that if a reseller un-assigns a DID number from a pricing batch, this number is not released to the DID pool. The reseller still owns this number and still bears the charges for its usage.

Thus, reseller DID provisioning has become more flexible and means less work for administrators. The involvement of subresellers in the DID provisioning process expands your sales chain and leads, in turn, to increased revenue.

## Initial Invoice

Sometimes you need to create a customer and immediately generate an invoice containing the activation fee, service charges for the current billing period, etc. **Initial invoice** makes it possible to apply and calculate these charges once the customer has been created. Initial invoice improves client service by saving customers' time while providing you with a tool for generating early payments.

**NOTE:** A subscription can be included in the Initial invoice only if its **Subscription Charges Applied** option is set to *In Advance*.

Consider the following example. Jane Doe goes to the Internet service provider (ISP) office and signs a contract for Internet usage. Jane Doe wants to immediately pay the activation fee and the current billing period's service charge in order to avoid payment issues in the future. The

ISP generates an Initial invoice wherein all charges are immediately applied and calculated and Jane Doe can pay on the spot. The customer saves time and the ISP receives money right away.

Initial invoice is an efficient tool that optimizes the subscription process for new customers and improves the company's cash-flow.

## Invoice Wizard

The new Invoice wizard is used to easily create, adjust and generate customer invoices. The wizard makes it possible to finalize the following actions:

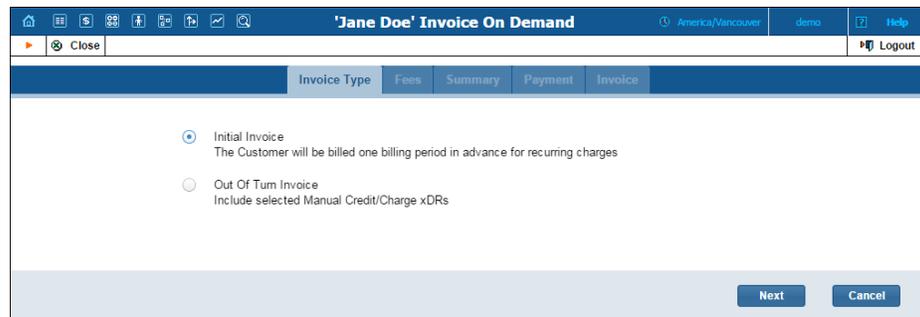
1. Invoice type selection
2. Fee control
3. Summary review
4. Payment (optional)
5. Invoice generation.

Let's consider these stages in more detail.

1. Three invoice types are available for selection:

- **Initial** – this invoice is generated for the customer shortly after customer creation and includes charges for the first billing period.
- **Out of turn** – this invoice is usually used to cover only a few specific items on demand.
- **Midterm** – this invoice is generated in the middle of a billing period and includes all charges generated by the time of invoice generation.

**NOTE:** The Initial invoice option is only available when you generate the first invoice during the first billing period. Otherwise, use the Midterm invoice.



The screenshot shows a web browser window titled "Jane Doe Invoice On Demand". The browser address bar shows "America/Newyork", "demo", and "Help". The page has a blue header with "Close" and "Logout" buttons. Below the header is a navigation bar with tabs: "Invoice Type", "Fees", "Summary", "Payment", and "Invoice". The "Invoice Type" tab is selected. The main content area contains two radio button options:

- Initial Invoice  
The Customer will be billed one billing period in advance for recurring charges
- Out Of Turn Invoice  
Include selected Manual Credit/Charge xDRs

At the bottom right of the form, there are two buttons: "Next" and "Cancel".

2. At the second stage, an administrator can review the recurring and usage fees that are included in an Out of turn invoice. To apply the usage

fees for Initial and Midterm invoices, click the **Assess the Fees** button. Note that this click also activates the subscription charges for the Initial invoice.

**NOTE:** A subscription can be included in the Initial invoice only if its **Subscription Charges Applied** option is set to *In Advance*.

If necessary, more custom charges or credits may be added by applying them manually. To do this, click the **Add Fee** button.



3. Then do a final review of the total sum that includes fees, taxes and subscriptions.



4. On the next screen it is possible to assign payment for this sum. The payment can be made by cash, cheque or credit card.

**NOTE:** Payment by credit card (the **Saved Payment Method** option) is only available if a credit card has been previously defined for the given customer on the **Payment Method** tab on the **Customer Managements** page.

If a customer prefers to pay later, the **None** option is also available.

Amount: 25.00 USD

None  
 Cash / Cheque  
 Saved Payment Method

Cardholder name:	JaneDoe	Country:	UNITED STATES C AMERICA
Credit Card No.:	4007xxxx0027	Address:	925 West Chicago / Suite 300
Card:	VISA	City:	Chicago
Exp. Date:	1 / 2017	Province/State:	Illinois
CVV: *	<input type="text"/>	Postal Code:	60642
		Billing Phone:	13124324300

Back Next Cancel

5. Clicking on the **Next** button will generate the invoice. Once the invoice has been generated, it can be downloaded from the \*.pdf file on the following screen.

Download invoice

Invoice No.:	25	Amount Due:	0.00 USD
Date:	2015-10-22	Payments:	25.00 USD
Due date:	2015-10-22	Outstanding Balance:	N/A

Done

The new invoice wizard is the convenient solution for your business, as it provides an opportunity to immediately assess subscription fees, add custom charges, execute payments, and generate and download invoices in a timely and organized fashion.

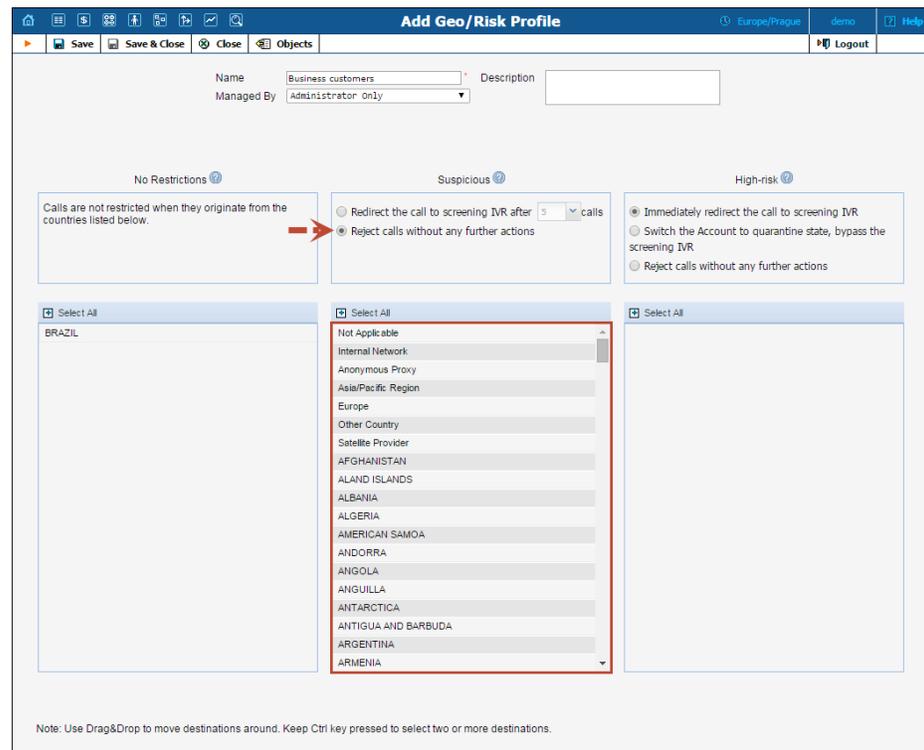
## Country Blacklist

If the service provider wants to block calls originating from countries known for high fraud potential and the screening of calls by means of IVR is unacceptable, the Country blacklist functionality is the one to use.

This new functionality immediately drops calls that come from blacklisted countries. While fraudulent calls are rejected, calls originating from trusted countries come through without restrictions.

Consider the following example. A customer who is a wholesale provider is located in Brazil. He wants to allow calls only originating from Brazil and deny calls originating from any other country. As many calls are sent simultaneously, screening calls by means of IVR is not optimal.

For this customer, an administrator configures the Country blacklist to include all countries except Brazil. After a while, a Chinese hacker hacks this customer's account and attempts to send calls to expensive destinations. PortaSwitch® detects that the account is attempting to send calls from a Chinese IP address and since China is present in the Country blacklist, these fraudulent calls are rejected, although calls from Brazil come through without any restrictions.



With Country blacklist functionality, service providers can offer more enhanced fraud protection to their customers – including the ability to consistently drop calls that originate from countries with a high fraud risk and to continue sending calls from trusted countries only.

## OLI-based Charging for Calls via SIP

When service providers rent incoming toll-free lines from vendors, they may find themselves charged differently for calls that arrive to a toll-free number, depending on whether the call originated from a payphone or a mobile phone, etc. With PortaSwitch®, service providers can now take

call origination into account when charging their customers, thereby reimbursing prime costs and providing more diverse services.

For example, a service provider can charge \$0.10/minute for calls to 18001112233, and an additional \$0.05 per call if the call comes from a payphone.

So a 5-minute call will cost:  
 $\$0.10 * 5 = \$0.50$  if the call is made from a mobile phone, and  
 $\$0.10 * 5 + \$0.05 = \$0.55$  if the call is made from a payphone.

As an alternative to this additional fee, a service provider can apply an additional per-minute charge of \$0.08/minute for calls made from a pay station, and then a 5-minute call will cost:  $\$0.10 * 5 + \$0.08 * 5 = \$0.90$ .

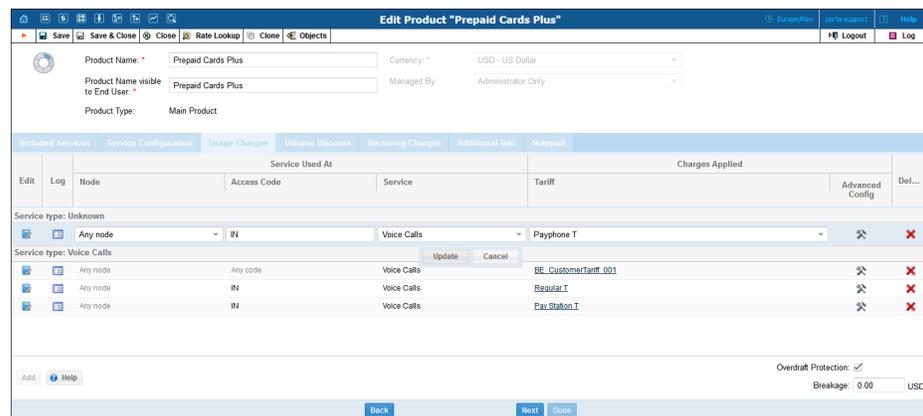
Call origination is determined based on the Origination Line Information (OLI) parameter supplied in the call information.

Note that this feature extends existing functionality. In previous releases, OLI-based charging was available for calls for which an authorization request came to PortaBilling® directly from a PSTN gateway (and if there was, for example, IVR for prepaid cards involved, it also ran on that gateway). And now it is being implemented for VoIP calls that arrive to PortaSIP® (IVR runs on the Media Server in this case).

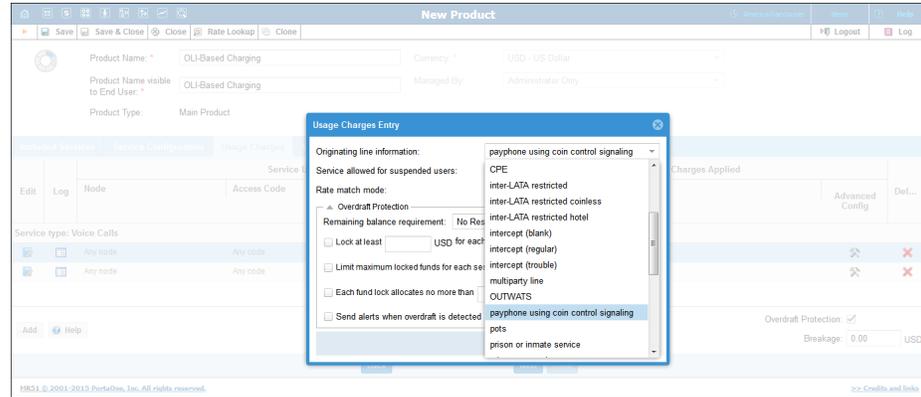
To configure OLI-based charging, an administrator first creates a separate tariff for each call origination that the service provider wants to charge for differently, and then connects the tariffs to the OLI values while configuring the user charges for the product.

To connect the tariffs to the OLI values, complete the following steps:

1. On the **Edit Product** page, under the **Usage Charges** tab, click **Add**.
2. Select the Voice Calls service, the required node, access code and tariff and then click **Update**.



3. Click the **Advanced Config** button.
4. In the **Usage Charges Entry** dialog box, select the required OLI value from the **Originating Line Information** list, and then click **Save**.



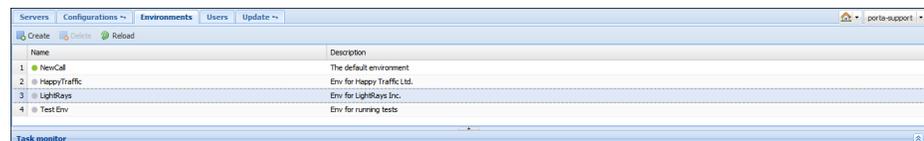
## Auto-provisioning for RCA Telefield IPX500

This model of IP phone is now auto-provisioned by PortaSwitch®. RCA Telefield IPX500 is a touchscreen IP phone that is integrated with Google Apps, supports transfer functionality for its users and even more.

## Other Features and Enhancements

- **A new customer ID format provisioned to Minerva IPTV platform** – With this release, a combination of a PortaBilling® account ID and a billing environment index number can be used as a customer ID for Minerva. That is, the customer ID will appear as follows: `{account_id}_{i_env}`.

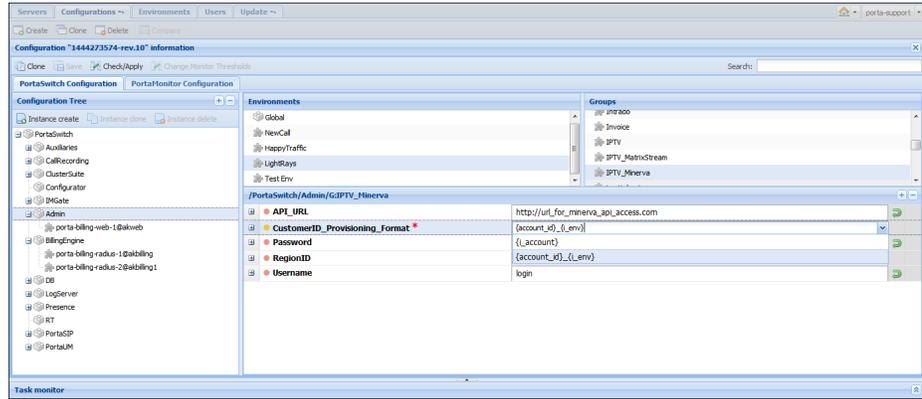
For example, account 1234567 is in the LightRays virtual billing environment. The index for the LightRays billing environment is 3, so the 1234567\_3 will be passed and the corresponding customer ID will be created within the Minerva platform.



This way, a Minerva customer ID can be easily recognized visually and associated with a particular PortaBilling® user, thus simplifying management and data processing. Taking into account

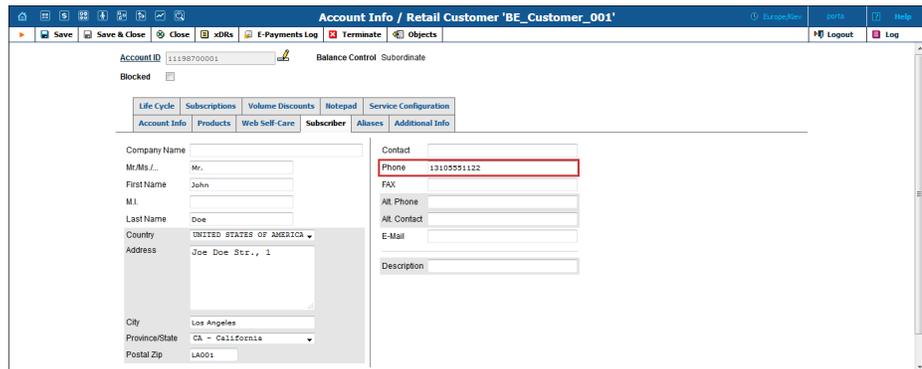
this described advantage, we expect this format for Minerva customer IDs to become the default in the near future.

Use the **CustomerID\_Provisioning\_Format** option on the configuration server web interface to control how the Minerva customer ID must be provisioned.

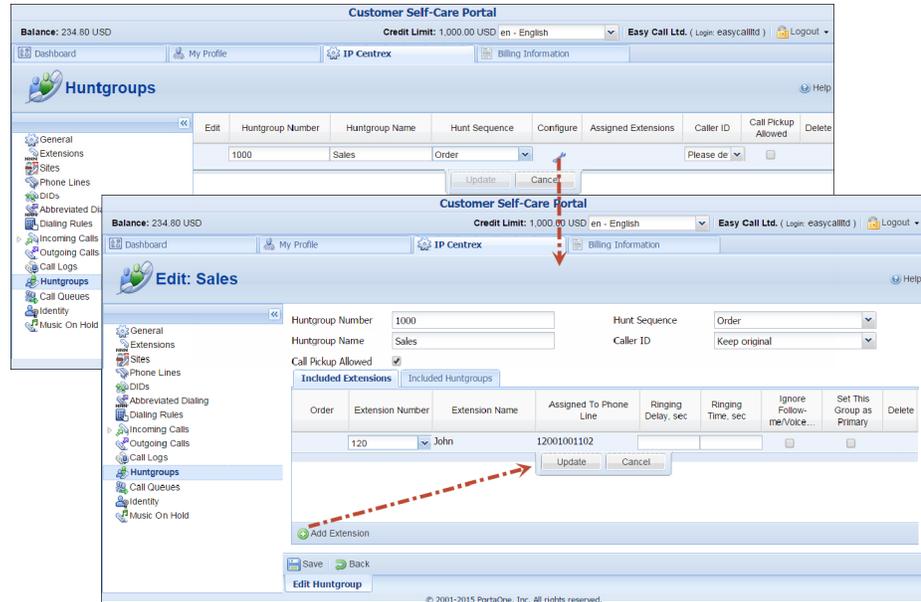


- **A phone number is automatically sent to the Minerva IPTV platform** – In Minerva, phone numbers can be used as activation codes for the auto provisioning of set-top boxes (STB). By sending an end user’s phone number to Minerva, we ensure that everything required for the activation of IPTV services can be configured within PortaBilling®.

To provision the phone number to Minerva on the PortaBilling® admin interface, go to the **Account Info** page, to the **Subscriber** tab, enter the phone number in the **Phone** field and save the configuration. This phone number will then be sent to Minerva’s homePhone field.



- **Improved huntgroup creation** – Starting with this release extensions are assigned to a huntgroup during huntgroup creation. Just specify all necessary huntgroup parameters, click the  **Configure** icon and add the required extensions.



This enhanced performance makes the huntgroup configuration process more user-friendly and eliminates human error.

- **The conferencing IVR application is now supported by the New Media Server** – This application’s functionality enables customers to access voice-conferencing services. Note that video-conferencing services are expected for future releases.
- The behavior of the **Active** option was improved and now it can be configured for the **Calls from Vendor** connection type as well.
- **Tokenized transactions for Ingenico Payment Services** (formerly known as Ogone) 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.
- **Standardized 10-digit length of control number in the \*.csv files** – In order to simplify printing control numbers on cards, their length is now standardized to 10 digits. While generating a new batch with accounts, PortaBilling® adds the required number of zeros prior to the actual control number to reach the 10-digit length. This enhancement assures that all generated control numbers are uniformly formatted even if a batch consists of

thousands of accounts. For example, the 1 and 101 control numbers will be written in the \*.csv file as ABC0000000001 and ABC0000000101 respectively, where ABC is the batch's name.



This 10-digit number length control can be enabled globally or individually for an environment in the **ControlNumberFixedLength** field on the Configuration server.

This simplifies the work for administrators who can now send \*.csv files with generated batch names, control numbers and PINs directly to a printing company.

- **Configuration of the MTU network interface parameter** – The maximum transmission unit (MTU) size can now be adjusted on the **Network** tab on the Configuration server for any network interface. An administrator can assign a new MTU value if the system requires this adjustment.

**NOTE:** The default MTU size for Ethernet is 1500 bytes.

This enhancement makes it possible to easily view and change MTUs. This is especially relevant for Oracle-based installations that often have higher than default value requirements for MTU size.



**NOTE:** Incorrect MTU value can be critical for the system. Please consult the PortaOne® support team before applying changes.

- **Resellers can now see the unique call ID (H323-conf-id)** – The **H323-conf-id** field is added to:
  - the **Active sessions** page – where resellers view active sessions;
  - the **Trace Session Result** page – where resellers view completed sessions. Resellers can only get to the **Trace Session Result** page by clicking **View** on **xDR Browser**.

**NOTE:** For business reasons the **Vendors** table is not visible to resellers on the **Trace Session Result** page.

This enhancement makes it possible to investigate any issue regarding a specific call with a top-level administrator and share it with the PortaOne® support team, if necessary.

- **Support for Canadian addresses has been added to the E911 Intrado module** – This allows ITSPs to provide emergency services to both US and Canadian users. Thus, VoIP telephony

can be used as a replacement for a traditional PSTN one and that increases the customer base.

- **DID groups and pricing batches** – Starting with this release, the owner DID batch has been divided into two entities:
  - **DID group** – The only purpose of DID groups is to arrange DID numbers into categories (for example, by geographic location).
  - **Pricing batch** – This is solely intended for defining the pricing policy for DID number provisioning.

For example, the service provider wants to distribute a group of North American DID numbers free of charge, a group of Canadian and Western European DID numbers at \$3 per month and a group of DID numbers from other countries at a 20% markup.

For this scenario, an administrator creates three DID groups and distributes the DID numbers among them. The administrator then creates three pricing batches with different pricing schemes and assigns the corresponding pricing batch to each DID group. The DID numbers are now ready to be distributed to customers.

DID Number	Reseller	Customer	Vendor Batch	Group	Pricing Batch	Country	Status	Description	Del
12065559921				UNITED STATES OF AMERICA		UNITED STATES OF AMERICA	Frozen	North America	X
12065559922				UNITED STATES OF AMERICA		UNITED STATES OF AMERICA	Frozen	North America	X
12065559923				UNITED STATES OF AMERICA		UNITED STATES OF AMERICA	Frozen	North America	X
12065559924				UNITED STATES OF AMERICA		UNITED STATES OF AMERICA	Frozen	North America	X
12065559925				UNITED STATES OF AMERICA		UNITED STATES OF AMERICA	Frozen	North America	X

This enhancement offers flexible and more convenient DID number management.

- **Endpoint redirection on IP phones that ring simultaneously** – Now an IP phone that belongs to a particular ring group can forward calls to another phone number that an end user directly enters into their phone.

For example, there are three IP phones that ring at once: phone A, phone B and phone C. Staff member John Doe, who usually answers phone C, wants to receive calls on his own mobile phone. So John Doe enters his mobile phone number directly into the phone as the “forward to” number.

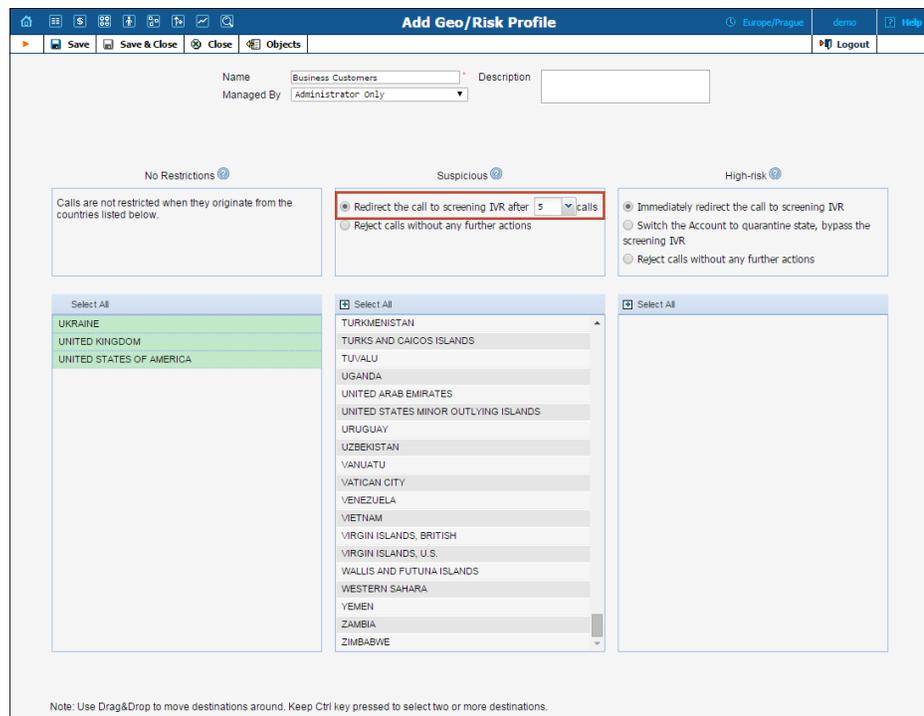
When a call comes to the ring group, phone A, phone B and John Doe's mobile phone begin to ring. The system connects the call to the phone that is picked up first. The other phones stop ringing.

- **Credit card verification without charging funds** – As soon as a customer adds a new credit card to PortaBilling®, the credit card is verified.

Now during the credit card verification process, the system performs an Authorization only transaction instead of an actual charge. The Authorization only transaction reserves an amount of money on the customer's credit card for a certain time period. This does not affect the customer's balance in PortaBilling® or change his credit card balance.

- **Max\_Suspicious\_Calls option is no longer present on the Configuration server** – Now the number of suspicious calls that can be made without screening is individually configured for each Geo / Risk profile. The possible values are 3, 5 and 10.

This permits the tailoring of call screening settings for different customer groups.



- **Representatives for resellers / subresellers** – Resellers are now able to add their own representatives. To provide an easier

configuration experience, resellers are also able to add representatives for their subresellers.

Representatives are people who represent the company, selling the company's services and earning commissions for the sales they make.

- **Sharing Internet quotas among multiple devices** – With this release, several devices belonging to the same account can have their own static IP address. This makes it possible to share a single Internet quota among several devices.

To configure this, an administrator creates a main account (e.g. *JohnDoe*) for product assignment, quota tracking and usage charges. To add devices that have *dynamic* IP addresses, the administrator creates **aliases** on the main account page for each such device in the *Account\_ID@MAC\_Address* format (e.g. *JohnDoe@07693876C900*). When one of these devices starts a session, PortaBilling® locates the alias and authorizes NAS to assign a dynamic IP to the device.

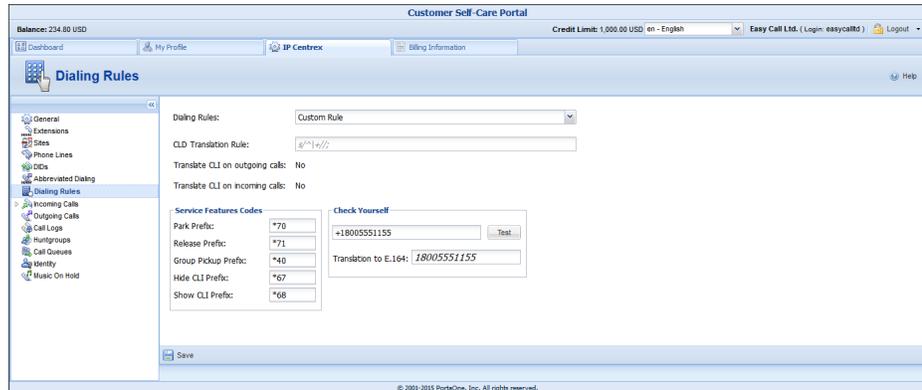
For devices requiring their own *static* IP address, an administrator creates separate ad hoc **accounts** in the *Account\_ID@MAC\_Address* format under the same customer (e.g. *JohnDoe@07693876C901*) and configures the static IP address for each ad hoc account. An administrator can assign any product to this account – all existing settings will be ignored by PortaBilling® (and bypassed). These are auxiliary accounts with one single purpose – to supply the main account's devices with static IP addresses. Therefore, when one such device starts a session, it assumes the static IP address from the ad hoc account. When the session ends, the main account is billed.

Please contact the PortaOne® support team for detailed guidance about how to configure this scenario.

- **Check Yourself for end users covers more dialing rules** – End users can now check how a dialed number will be translated when the dialing rule is defined with a Perl regular expression. While end users are not enabled to create such dialing rules, the Check Yourself translation tool can help an end user verify that a particular dialing rule was correctly defined by the service provider and at the same time, they can carry out basic troubleshooting.

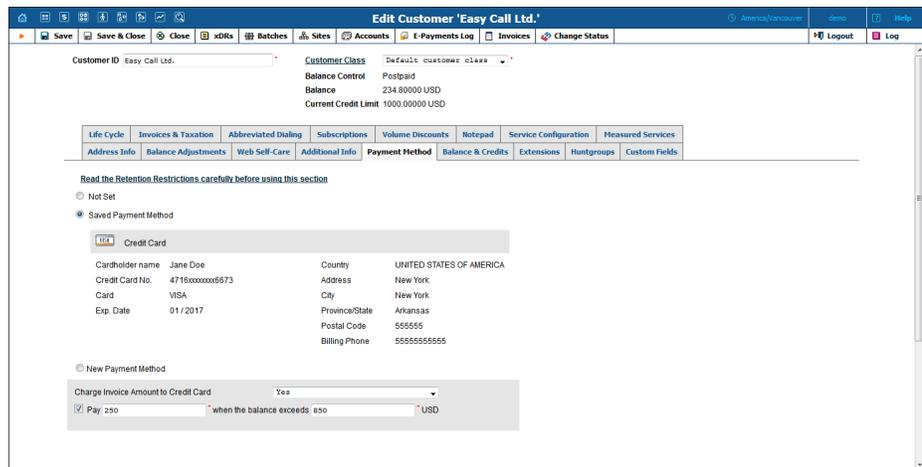
To check a number translation, end users type in the phone number in the format they are accustomed to and click **Test**.

In addition, they can review whether a caller's number will be translated according to this rule for both incoming and outgoing calls.

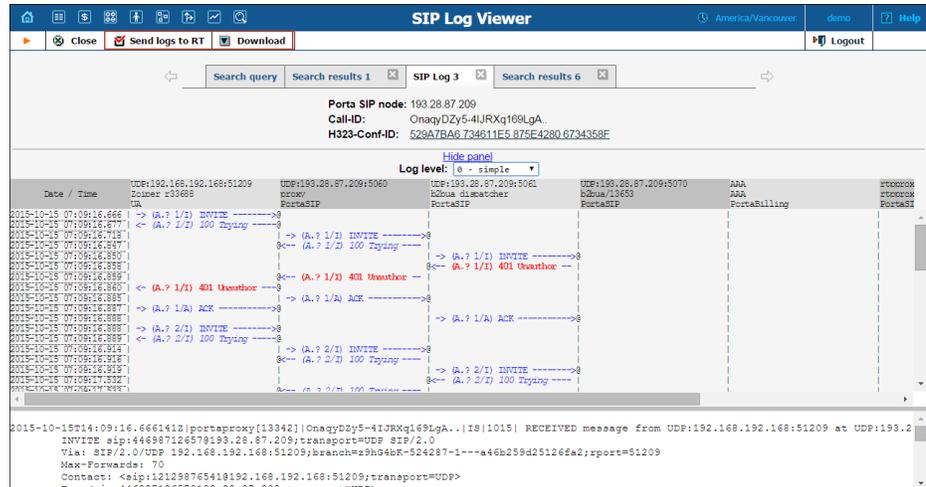


## Web Interface Changes

- A new **Payment Method** tab has incorporated the content of the **Payment Info** and **Auto-Payments** tabs, making the payment options configuration more convenient. The payment method section has also been redesigned to match the look and feel of other payment-related sections.



- **Improved SIP log viewer web interface** – Instead of the **Trace a call** and the **Show call attempts** tabs, the SIP log viewer now has a single **Search query** tab that contains all available search criteria. Search results and selected SIP logs are opened in subsequent tabs.

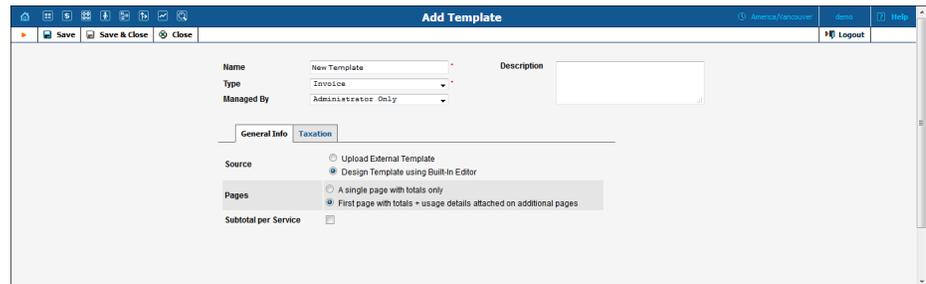


The Get log button has been replaced by the Send logs to RT and Download buttons. This makes log retrieval more intuitive.

- The **Active option and status indicator** have been removed from connections whose information is used only for billing purposes. The **Active** option controls whether a connection is included in routing and is therefore redundant for the aforementioned connection types.

Both the option and the indicator remain for Voice Calls and Messaging Service connection types.

- **Renovation of the Add Template page** – The redesigned page is now more convenient to use. It is structured the same way as the majority of the PortaBilling pages with central information at the top of the page and all other options arranged in tabs.



## Important Upgrade Notes

- **Extended SIP log viewer** – Starting with this release, the Elasticsearch instance has become an integral component of the PortaSwitch® LogServer and is the only supported call log storage. Therefore, the LogServer and Elasticsearch instances must be present in the system configuration; if they have not been previously configured, they will be added to the configuration during a software upgrade.

Also, after a software upgrade, make sure you have 10% more storage space on the Elasticsearch instance for log storage. This is the recommended amount of storage space for the default log rotation configuration (4 compressed and 3 uncompressed logs). If your configuration differs from the default one, please contact the Support team for an evaluation of the required storage space.

To access logs written before the upgrade via the web interface, they must be transferred to Elasticsearch storage. To do this, the requirement is to temporarily have two times more storage space available on the LogServer during a software upgrade.

- **The time zone in the number porting feature has changed** – With this release, the port-in request date is displayed in the PortaBilling® user's time zone. In previous releases this date was displayed in the UTC time zone.